

# Working Capital and Investment Financing in the MSME Sector: Impact on the Profitability of Islamic Commercial Banks in Indonesia

#### Afdhal Yaman 1\*, Arizal Hamizar 2

<sup>1</sup> Sharia Financial Management, Faculty of Islamic Economics and Bussiness, Institut Agama Islam Negeri (IAIN) Ambon, Ambon, Indonesia

<sup>2</sup> Sharia Business Management, Faculty of Islamic Economics and Bussiness, Institut Agama Islam Negeri (IAIN) Ambon, Ambon, Indonesia

\*afdhalyaman@iainambon.ac.id

#### **Abstract**

**Introduction to The Problem:** MSMEs face several conservative challenges, such as financing constraints. This opportunity can be the primary concern of how working capital financing and investment financing in the MSME sector benefit Islamic Commercial Banks.

**Purpose/Objective Study:** This study examines the impact of working capital and investment financing in the MSME sector on Islamic Commercial Banks' profitability in Indonesia.

**Design/Methodology/Approach:** The quantitative research method uses the EViews 10 application. The data used in this study is data on Islamic Commercial Banks in Indonesia from June 2014 - February 2023. Observations were made on 105 time series data observations.

**Findings:** Working capital financing in the MSME sector does not significantly impact the profitability of Islamic Commercial Banks in Indonesia. However, investment financing for the MSME sector has a positive and significant impact on the profitability of Islamic Commercial Banks in Indonesia at a significance level of 1%. Thus, the more investment financing provided to the MSME sector, the higher the profitability level of Islamic Commercial Banks. Therefore, Islamic Commercial Banks in Indonesia should be more focused on providing investment financing to the MSME sector to increase the profitability and growth of Islamic Commercial Banks in Indonesia.

Paper Type: Research Article

Keywords: Working Capital Financing; Investment Financing; Profitability; Islamic Commercial

Banks.

#### Introduction

The banking sector plays an essential role in the growth of the financial system (Khan et al., 2020). However, currently, the banking industry faces many challenges, such as regulation (Zetzsche et al., 2020), liquidity requirements (Begenau & Landvoigt, 2021), and working capital that can significantly affect the banking industry (Islam et al., 2020). The banking sector must be stable and profitable in its operating activities to carry out its role and contribute to economic growth and development. Banks that have poor performance or even in the event of bankruptcy can negatively impact the economy and the owners and managers of the bank itself (Le & Ngo, 2020). Commercial banks, with one of their primary roles, act as financial intermediaries that channel funds from

# Jurnal Ekonomi Syariah Vol. 8. No. 2. November 2023 P-ISSN 2548-5032 e-ISSN 2714-769X

Doi: https://doi.org/10.37058/jes.v8i2.8094

depositors to borrowers (Takon et al., 2020). With the availability of lending services from commercial banks, lenders and borrowers can save on search, transaction execution, liquidity risk assessment, and monitoring costs.

Islamic Commercial Banks in Indonesia present financial institutions based on Sharia principles in providing financial products and services (Aziz & Amanda, 2021). Islamic Commercial Banks offer products and services that follow Sharia principles, such as buying and selling, leasing, and profit sharing. The products and services presented by Islamic Commercial Banks can include savings, deposits, financing, and investment. In financing, Islamic Commercial Banks, in principle, do not use the interest system but adopt a profit-sharing system. In this system, the customer and the Islamic Commercial Bank share the profits from the business funded by the Islamic Commercial Bank.

There are two main sectors for financing for Islamic Commercial Banks: the micro, small, and medium enterprises (MSMEs) and the non-MSME sectors. The MSME sector is the focus of financing provided by Islamic Commercial Banks to customers due to the need for capital and business continuity (Nastiti & Kasri, 2019). MSME growth continues to face several conservative challenges, such as constrained financing. Access to external financing is crucial for the survival and development of MSMEs that depend on bank financing. Thus, it is necessary to make it easy for MSMEs to obtain financing (Maghfirlana & Sulaeman, 2021). Especially in the provision of financial services, Islamic banking plays an essential role in efforts to boost MSMEs in Indonesia.

At Islamic Commercial Banks, productive financing can be utilized by MSMEs (Sulaeman et al., 2019). Productive financing is one type prepared by Islamic Commercial Banks to support the productive economic sector. This financing usually supports micro, small, and medium enterprises to meet their business capital needs (Afandi & Amin, 2019). Financing in the MSME sector includes working capital and investment financing.

Working capital financing is one type of financing Islamic banks provide to assist businesses in meeting their working capital needs. In working capital financing, Islamic Commercial Banks provide financing to businesses to finance daily operational activities, such as purchasing machinery, purchasing raw materials, and other needs related to operational activities. This financing aims to increase business production and productivity to contribute positively to the economy.

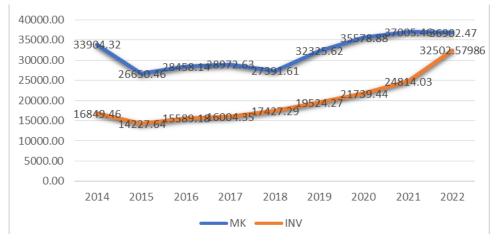
In the context of this research, the main concern is how working capital financing and investment financing in the MSME sector bring profits to Islamic Commercial Banks. This research is essential to know because the profitability of Islamic Commercial Banks is one of the leading indicators of the success of these financial institutions in providing good financial services and gaining public trust (Fatwa, 2019). Many previous studies have examined the relationship between financing and the performance of Islamic Commercial Banks. However, this study tries to examine working capital financing and investment financing more deeply, especially in the MSME sector, and its impact on the profitability of Islamic Commercial Banks.

Financing is essentially one of the products and services of various kinds of distribution of funds in Islamic banking. In Islamic banking, financing is based on Islamic Sharia principles (Fakhri & Darmawan, 2021). Four categories of Islamic financing products are divided based on their intended use: financing with the principles of buying and selling, leasing, profit sharing, and financing contracts as a complement (Yusuf & Kholik, 2019). Financing with the principle of buying and selling is used to obtain products, while financing with the principle of rent is used to obtain financial services or services.

The use of these financing contracts is intended for cooperation and for the business of acquiring products and services. For the first and second categories, the bank's profit level is determined in advance and is included in the price of the product/service sold or leased. Included in this group are products that use the principle of sale and purchase, such as Murabahah, Salam, and Istishna', as well as products that use the principle of lease, namely Ijarah and Ijarah Muntahiyah Bittamlik (IMBT). As for the third category, the profit level of Islamic banking is determined by how high the business profits are following the principle of profit sharing, and the profit sharing ratio has been previously agreed upon request. Islamic banking products that fall into this category are Mudharabah and Musyarakah. Meanwhile, the financing contract as a complement facilitates the financing process accompanying the abovementioned contracts.

Financing from Islamic banking has a crucial role in encouraging growth and development, especially in the MSME sector. As a sharia-based financial institution, Islamic banking has different principles from conventional banking in financing MSMEs (Amien & Zulkarnaen, 2022). Financing allocated by Islamic banking to MSMEs prioritizes the principles of justice and sustainability rather than profitability alone. Financing for MSMEs is usually carried out using the principle of profit sharing, either Mudharabah or Musyarakah, where banks and customers share risks and profits in running the business.

In addition, Islamic banking also provides working capital financing and productive financing products to MSMEs (Manggala Putri et al., 2023). Working capital financing is intended to support the daily operational activities of MSMEs, such as purchasing supplies or inventory of merchandise, as well as replacing existing capital in accounts receivable (Harfandi & Ilahi, 2022). Meanwhile, investment financing is intended to support the business development of MSMEs, such as purchasing production machinery, equipment, and other uses to increase production capacity (Hakeem, 2019). Through financing MSMEs, Islamic banks can help increase the productivity and competitiveness of the MSME sector so that it can contribute to national economic growth. In addition, financing to MSMEs can also provide access to finance for small business actors who are often difficult to access from conventional financial institutions.



**Figure 1.** Development of Working Capital and Investment Financing Source: Sharia Banking Statistics (SPS), 2023

The quality of financing provided by Islamic Commercial Banks to the MSME sector has experienced significant growth. However, working capital financing has fluctuated in value in recent

years. The allocation to working capital financing is higher than the allocation to investment financing. However, it can be seen that there is an increasing phenomenon in investment financing compared to working capital financing.

#### Methodology

The object of this study is Islamic Commercial Banks recorded in Indonesia. This research uses a quantitative approach to acquire secondary data as time series data in a monthly form from June 2014 to February 2023. The data used in this study comes from Sharia Banking Statistics (SPS), which can be accessed through the website <a href="www.ojk.go.id">www.ojk.go.id</a>. Then the variables in this study are working capital financing (WC) and investment financing (INV) in the MSME sector. The statistical tool used is EViews 10 software.

Table 1. Operational Definition of Variables				
Variable Definition		Data Source		
Working Capital	Financing in the fulfillment of additional production	www.ojk.go.id		
Financing	needs and forms of trade needs of an item.			
Investment	Financing fulfills the needs of capital goods and	www.ojk.go.id		
Financing	facilities related to it.			
Profitability	The ratio explains the company's performance in	www.ojk.go.id		
Ratio	earning profits with all its capacities and resources.			

**Table 1.** Operational Definition of Variables

Inferential statistical analysis was used in this study to obtain answers to the problems that have been formulated. The advantage of inferential statistics is that it creates a process in which scientific assumptions are made in the form of inferences drawn from processing sample data from the population (Amrhein et al., 2019). This statistic is used to conduct a correlational analysis that examines the effect of the independent variables, namely working capital financing and investment financing in the MSME sector, on the dependent variable, the profitability of Islamic Commercial Banks.

In analyzing this study, researchers processed data with multiple linear regression models. Before running the test, a regression equation was first made, which was arranged in the following model:

$$ROA = \alpha_0 + \beta_1 WC + \beta_2 INV + \epsilon$$

Description:

ROA: profitability ratio of Islamic Commercial Banks.

WC: working capital financing for the MSME sector of Islamic Commercial Banks.

INV: investment financing of the MSME sector of Islamic Commercial Banks.

ε: error term.

#### Working Capital Financing

Working capital financing is a form of short-term financing financed by Islamic Commercial Banks to fund the company's working capital needs per Sharia principles (Maghfirlana & Sulaeman, 2021). The term of working capital financing does not exceed one year and has an extension option as needed. Working capital financing products can be channeled to all promising economic sectors and sub-sectors as long as they are not contradictory to Sharia principles and do not violate the laws and

regulations that have been implemented. The provision of working capital financing by Islamic Commercial Banks aims to reduce risk and optimize bank profits.

**H1.** Working capital financing in the MSME sector has a positive and significant impact on the profitability of Islamic Commercial Banks in Indonesia.

#### **Investment Financing**

Investment financing can be explained as a form of capital investment invested by Islamic Commercial Banks to obtain future rewards or benefits. Investment financing has an extended period in implementing its investment. Investments are often related to the construction of new projects, restoration and renewal of machinery, business expansion, and project relocation. Investment financing is also financing intending to invest in business locations and capital, or other production facilities that do not violate sharia principles such as buying production equipment, building warehouses, enlarging factories, buying/renting equipment, and other utilization to expand production capacity, which is still in a relatively small portion (Soekarni, 2014). The role of Islamic Commercial Banks in supporting the development and development of MSMEs is also a concern because of their involvement in every investment project they undertake.

**H2.** Investment financing in the MSME sector has a positive and significant impact on the profitability of Islamic Commercial Banks in Indonesia.

#### **Results and Discussion**

#### A. Descriptive Statistical Analysis

The population data that has been collected is managed using the EViews 10 application through multiple linear regression to get answers to the hypotheses that have been built. Before analyzing the processing results of the regression, the authors will analyze descriptive statistics first in order to obtain an explanation of the general description of the statistical data of the variables used in this study. These descriptive statistics include the mean or average value, maximum or highest value, minimum or lowest value, and the standard deviation of each variable entered. These values can provide information about the distribution of variable data in each period and observation unit.

**Table 2.** Descriptive Statistics of Research Variables

	ROA (%)	WC (Billion Rp.)	INV (Billion Rp.)
Mean	1.26	31863.03	19433.63
Maximum	2.15	40286.48	32502.58
Minimum	0.16	23924.33	11366.7
Std. Dev.	0.55	4363.62	5034.31
Observations	105	105	105

Source: Data processed (2023)

Based on table 2 above displays the results of the descriptive statistical analysis of the variables tested in this study. The dependent variable in this study is ROA or the level of profitability,

which has an average value of 1.26% with a standard deviation value of 0.55% or smaller than the average value, which indicates less varied data. The independent variable in this study is WC, namely, working capital financing. This variable has an average value of 31,863.03 in billion and a standard deviation of 4,363.62, or smaller than the average value, indicating less varied data. While the other independent variable in this study is INV, namely investment financing, this variable has an average value of 19,433.63 in billion with a standard deviation value of 5,034.31 or smaller than the average value, indicating data that is also less varied.

#### **Classical Assumption Test**

#### 1. Normality Test

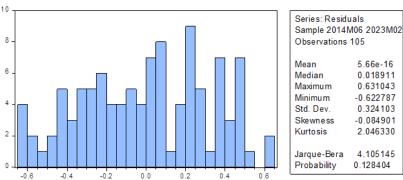


Figure 2. Normality Test Results

The results of the classical assumption test for data normality, based on the results of the normality test above, the data used is normal, characterized by a probability value higher than 0.05.

#### 2. Autocorrelation Test

Since the data used in this research is time series, there must be an autocorrelation element. It is necessary to make a formula to overcome the autocorrelation element to resolve this element. Therefore the author uses the Breusch-Godfrey formula with the formula:

NROA = ROA - (1-DW/2)\*ROA-1NWC = WC - (1-DW/2)\*WC-1

NINV = INV - (1-DW/2)\*INV-1

The new data that has been formed is tested to see whether it is free from autocorrelation. The test results are as follows:

**Table 3.** Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:					
F-statistic	1.217821	Prob. F(2,99)	0.3003		
Obs*R-squared	2.497217	Prob. Chi-Square(2)	0.2869		
Test Equation:					

Dependent Variable: RESID Method: Least Squares Sample: 2014M07 2023M02 Included observations: 104

Variable Coefficient Std. Error t-Statistic Prob.

C NWC NINV RESID(-1)	0.005694 1.50E-06 -3.87E-06 -0.015384	0.067619 1.36E-05 1.45E-05 0.104634	0.084201 0.110521 -0.267217 -0.147025	0.9331 0.9122 0.7899 0.8834
RESID(-2)	0.156638	0.101673	1.540603	0.1266
R-squared Adjusted R-squared F-statistic Prob(F-statistic)	0.024012 -0.015422 0.608911 0.657159	Durbin-Watson sta	ut	2.029219

Source: Data processed (2023)

Based on Table 6 of the autocorrelation test results above, the model has passed autocorrelation as evidenced by the Obs \* R-squared number and the probability of each variable is above 0.05, the Durbin-Watson stat value equals 2, and all t and F values are not significant, so the model built in this study is valid.

### 3. Linearity Test

**Table 4.** Linearity Test Results

Ramsey RESET Test Equation: UNTITLED

Specification: NROA C NWC NINV

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.475594	100	0.6354
F-statistic	0.226190	(1, 100)	0.6354
<u>Likelihood ratio</u>	0.234972	1	0.6279

Source: Data processed (2023)

Based on the linearity test results in Table 3 above, the model used in this study meets the linearity criteria as evidenced by the Probability F-statistic value higher than 0.05.

#### 4. Multicollinearity Test

 Table 5. Multicollinearity Test Results

Variance Inflation Factors Sample: 2014M06 2023M02 Included observations: 104

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF

# Jurnal Ekonomi Syariah Vol. 8. No. 2. November 2023 P-ISSN <u>2548-5032</u> e-ISSN <u>2714-769X</u>

Doi: https://doi.org/10.37058/jes.v8i2.8094

С	0.004156	13.88406	NA
NWC	1.79E-10	23.09195	1.665894
NINV	2.03E-10	11.12998	1.665894

Source: Data processed (2023)

Based on Table 4, the multicollinearity test results above show that the model is non-multicollinearity characterized by the number of variance inflation factors below 10.

## 5. Heteroscedasticity Test

**Table 6.** Heteroscedasticity Test Results

Heteroskedasticity Test: Breu	sch-Pagan-Godfrey		
F-statistic	0.246807	Prob. F(2,101)	0.7818
Obs*R-squared	0.505805	Prob. Chi-Square(2)	0.7765
Scaled explained SS	0.934741	Prob. Chi-Square(2)	0.6266

Source: Data processed (2023)

Based on Table 5 of the heteroscedasticity test results above, the model built in the study is non-heteroscedasticity or homoscedasticity, evidenced by the Prob—Chi-Square (2), higher than 0.05.

#### **Multiple Regression Test**

**Table 7.** Multiple Regression Test Results

Dependent Variable: NROA Method: Least Squares

Sample (adjusted): 2014M07 2023M02 Included observations: 104 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C NWC NINV	0.112483 -8.52E-06 5.00E-05	0.064469 1.34E-05 1.42E-05	1.744754 -0.637353 3.514602	0.0841 0.5253 0.0007
R-squared Adjusted R-squared F-statistic Prob(F-statistic)	0.140689 0.123672 8.267981 0.000473	Durbin-Watson stat		2.043589

Source: Data processed (2023)

The regression results above can be interpreted that if the working capital financing and investment financing variables are equal to zero, the profitability value is 0.112483 with a significance level at the 10% level.

# Jurnal Ekonomi Syariah Vol. 8. No. 2. November 2023 P-ISSN <u>2548-5032</u> e-ISSN <u>2714-769X</u>

Doi: https://doi.org/10.37058/jes.v8i2.8094

Hypothesis 1 hypothesizes the effect of working capital financing on the profitability of Islamic Commercial Banks. The statistical test results of the WC variable in Table 7 show that working capital financing has a negative and insignificant effect, so hypothesis 1 is not supported.

Hypothesis 2 hypothesizes the effect of investment financing on the profitability of Islamic Commercial Banks. The INV variable statistical test results in Table 7 show that the INV or investment financing coefficient is 5.00 and significant at the 1% level. An increase in investment financing by 1% will result in an increase in the level of profitability by 5%. So that the greater the amount of investment financing will increase the level of profitability of Islamic Commercial Banks. The results of this test state that investment financing has a positive effect on profitability, so hypothesis 2 is supported.

#### **Discussion**

Financing in the MSME sector through investment financing positively affects the profitability of Islamic Commercial Banks in Indonesia. This result indicates that any financing provided through investment brings positive value to the level of profitability because, with the help of these investments, it can improve the quality and quantity of the MSME sector's business.

Investment financing, periodically long-term financing by Islamic Commercial Banks, can make working capital management efficient and reuse resources that have not been maximally used for higher-value utilization, improving company performance (Aktas et al., 2015). The results of this study also support existing research which explains that the increase in the growth rate in investment financing is faster than the growth rate in working capital financing (Kasmiati, 2021). This study's findings can impact MSMEs that use financing facilities and become a priority for Islamic Commercial Banks in offering these facilities. The author suggests that Islamic Commercial Banks can develop investment financing options based on the findings of the study in order to encourage increased profitability of Islamic Commercial Banks and increase the growth of MSMEs in Indonesia. In addition, MSMEs are also encouraged to get a higher priority in obtaining investment financing, as suggested. MSMEs still need financial assistance to maintain their operations, especially in unstable economic conditions due to the crisis.

#### Conclusion

Based on the research results, the first hypothesis hypothesizing the effect of working capital financing on Islamic Commercial Banks' profitability is not supported. This result makes it clear that the working capital financing variable is not significant in influencing the level of profitability of Islamic Commercial Banks in Indonesia. However, the second hypothesis hypothesizing the effect of investment financing on Islamic Commercial Banks' profitability was positive and significant. The results of this statistical test indicate that an increase in the amount of investment financing has a positive effect on the level of profitability of Islamic Commercial Banks. Investment financing that increases by 1% can result in a 5% increase in profitability. Therefore, the greater the amount of investment financing, the more it increases the profitability level of Islamic Commercial Banks. The results of this study can provide suggestions for Islamic Commercial Banks to design a more effective financing strategy to increase their profitability level.

#### References

Afandi, M. A., & Amin, M. (2019). Islamic Bank Financing and Its Effects on Economic Growth: A Cross Province Analysis. *Signifikan: Jurnal Ilmu Ekonomi*, 8(2), 243–250. <a href="https://doi.org/10.15408/sjie.v8i2.10977">https://doi.org/10.15408/sjie.v8i2.10977</a>

- Aktas, N., Croci, E., & Petmezas, D. (2015). Is Working Capital Management Value-Enhancing? Evidence from Firm Performance and Investments. *Journal of Corporate Finance*, 30(1), 98–113. https://doi.org/10.1016/j.jcorpfin.2014.12.008
- Amien, N. N., & Zulkarnaen, W. (2022). The Role of Sharia Banking on MSMEs That Implied on Indonesian Economic Growth. In *KOMITMEN: Jurnal Ilmiah Manajemen* (Vol. 3, Issue 1).
- Amrhein, V., Trafimow, D., & Greenland, S. (2019). Inferential Statistics as Descriptive Statistics: There Is No Replication Crisis if We Don't Expect Replication. *American Statistician*, 73(sup1), 262–270. https://doi.org/10.1080/00031305.2018.1543137
- Aziz, R. M., & Amanda, D. N. (2021). Analysis the Level of Efficiency of Sharia Commercial Bank and Sharia Business Unit in Indonesia with Data Envelopment Analysis Method. *Jurnal Organisasi Dan Manajemen*, 17(1), 89–98. https://doi.org/10.33830/jom.v17i1.834.2021
- Begenau, J., & Landvoigt, T. (2021). Financial Regulation in a Quantitative Model of the Modern Banking System. <a href="http://www.nber.org/papers/w28501">http://www.nber.org/papers/w28501</a>
- Fakhri, U. N., & Darmawan, A. (2021). Comparison of Islamic and Conventional Banking Financial Performance during the Covid-19 Period. *International Journal of Islamic Economics and Finance (IJIEF)*, *I*(2), 19–40. <a href="https://doi.org/10.18196/ijief.v4i0.10080">https://doi.org/10.18196/ijief.v4i0.10080</a>
- Fatwa, N. (2019). The Development of National Islamic Foreign Exchange Bank in Indonesia. *Journal of Strategic and Global Studies*, 2(2), 1–17. <a href="https://doi.org/10.7454/jsgs.v2i2.1019">https://doi.org/10.7454/jsgs.v2i2.1019</a>
- Hakeem, M. M. (2019). Innovative Solutions to Tap "Micro, Small and Medium Enterprises" (MSME) Market. *Islamic Economic Studies*, 27(1), 38–52. <a href="https://doi.org/10.1108/ies-05-2019-0002">https://doi.org/10.1108/ies-05-2019-0002</a>
- Harfandi, H., & Ilahi, I. (2022). The Strategies for Optimizing Islamic Bank Financing in Developing Micro, Small And Medium Enterprises (MSMEs) in Indonesia. In *Journal of Positive School Psychology* (Vol. 2022, Issue 6). <a href="http://journalppw.com">http://journalppw.com</a>
- Islam, M. T., Talukder, A. K., Siddiqui, M. N., & Islam, T. (2020). Tackling the Covid-19 Pandemic: The Bangladesh Perspective. In *Journal of Public Health Research* (Vol. 9).
- Kasmiati. (2021). Dinamika Pembiayaan Perbankan Syariah dalam Mengembangkan Dunia Usaha. *LABATILA: Jurnal Ilmu Ekonomi Islam*, 5(1), 140–151. <a href="https://doi.org/10.33507/lab.v4i01">https://doi.org/10.33507/lab.v4i01</a>
- Khan, M. A., Siddique, A., & Sarwar, Z. (2020). Determinants of Non-Performing Loans in the Banking Sector in Developing State. *Asian Journal of Accounting Research*, *5*(1), 135–145. https://doi.org/10.1108/AJAR-10-2019-0080
- Le, T. D., & Ngo, T. (2020). The Determinants of Bank Profitability: A Cross-country Analysis. *Central Bank Review*, 20(2), 65–73. https://doi.org/10.1016/j.cbrev.2020.04.001
- Maghfirlana, M. R., & Sulaeman, S. (2021). Determining Factors of Working Capital Financing of Micro, Small, and Medium Enterprises (MSMEs) in Islamic Banking: An Empirical Evidence from Indonesia. *Ijtimā Iyya Journal of Muslim Society Research*, 7(1), 45–58. <a href="https://doi.org/10.24090/ijtimaiyya.v7i1.6898">https://doi.org/10.24090/ijtimaiyya.v7i1.6898</a>
- Manggala Putri, S. A., Rahayu Firmansyah, E. J., & Hayati, S. R. (2023). Islamic Microcredit-based Financing Analysis: A Study of Islamic Banking in the Special Region of Yogyakarta. *AL-FALAH*: *Journal of Islamic Economics*, 8(1), 65–82. <a href="https://doi.org/10.29240/alfalah.v8i1.6842">https://doi.org/10.29240/alfalah.v8i1.6842</a>
- Nastiti, N. D., & Kasri, R. A. (2019). The Role of Banking Regulation in the Development of Islamic Banking Financing in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(5), 643–662. <a href="https://doi.org/10.1108/IMEFM-10-2018-0365">https://doi.org/10.1108/IMEFM-10-2018-0365</a>

- Sulaeman, H. S. F., Moelyono, S. M., & Nawir, J. (2019). Determinants of Banking Efficiency for Commercial Banks in Indonesia. *Contemporary Economics*, 13(2), 205–218. https://doi.org/10.5709/ce.1897-9254.308
- Takon, S. M., John, J. I., Ononiwu, E., & Mgbado, M. (2020). Determinants of the Cost of Financial Intermediation in Nigeria's Pre-Consolidated and Post-Consolidated Banking Sector. *International Journal of Economics and Financial Management*, 5(1), 30–41. www.iiardpub.org
- Yusuf, D., & Kholik, K. (2019). The Effect of Buy and Sell Financing (Murabahah), Profit Share Financing (Mudarabah), Equity Capital Financing (Musyarakah) and Non-Performing Financing Ratio on Profitability Level of Sharia Commercial Banks in North Sumatera. *Britain International of Humanties and Social Sciences (BIoHS) Journal*, 1(1), 81–88. <a href="https://doi.org/10.33258/biohs.v1i1.18">https://doi.org/10.33258/biohs.v1i1.18</a>
- Zetzsche, D. A., Arner, D. W., & Buckley, R. P. (2020). Decentralized Finance. *Journal of Financial Regulation*, 6(2), 172–203. <a href="https://doi.org/10.1093/jfr/fjaa010">https://doi.org/10.1093/jfr/fjaa010</a>