



## The Effect of Internal and External Factors on Non-Performing Financing at Islamic Commercial Banks in Indonesia

### *Pengaruh Faktor-Faktor Internal dan Eksternal terhadap Pembiayaan Bermasalah pada Bank Umum Syariah di Indonesia*

Muhammad Nasir<sup>1)</sup>, M. Yazid AR<sup>2)</sup>, Mustika Amri<sup>3)</sup>, Cut Fitri Handayani<sup>4)</sup> Aryati Aryati<sup>5)</sup>

Department of Commerce, Politeknik Negeri Lhokseumawe, Kota Lhokseumawe

e-mail korespondensi: [nasiraceh@pnl.ac.id](mailto:nasiraceh@pnl.ac.id)

Article Info	Abstract
<p><i>Article History :</i> Received: 15 March 2021 Accepted: 22 July 2022 Published: July 2022</p>	<p>The purpose of this study was to determine the effect of internal and external factors on non-performing financing in Islamic commercial banks and Islamic business units in Indonesia. Data is collected from publications of Bank Indonesia, the Central Statistics Agency, and the Financial Services Authority. Samples were taken from January 2010 to December 2017. Data were analyzed using Fisher's exact test, Student's t-test, and multiple linear regression analysis. The results identify that Finance to Deposit Ratio (FDR), Capital Adequacy Ratio (CAR), inflation, and BI rate have a significant effect on non-performing financing. Based on the results, this study recommends that Islamic commercial banks and Islamic business units need to stabilize their financial ratios.</p> <p><b>Keywords:</b> Finance to Deposit Ratio, Capital Adequacy Ratio, Inflation, BI Rate, Non-Performing Financing.</p>
<p><i>DOI Number :</i> 10.33059/jseb.v13i2.3342</p>	
<p><i>How to cite :</i> Nasir, M., Yazid AR, M., Amri, M., Handayani, C. F., &amp; Aryati, A. (2022). The effect of internal and external factors on non-performing financing at Islamic commercial banks in Indonesia. <i>Jurnal Samudra Ekonomi dan Bisnis</i>, 13(2), 267-276. doi: 10.33059/jseb.v13i2.3342.</p>	

Info Artikel	Abstrak
<p><i>Riwayat Artikel :</i> Diterima: 15 Maret 2021 Disetujui: 22 Juli 2022 Dipublikasikan: Juli 2022</p>	<p><i>Tujuan dari penelitian ini adalah untuk mengetahui pengaruh faktor internal dan eksternal terhadap pembiayaan bermasalah pada bank umum syariah dan unit usaha syariah di Indonesia. Data dikumpulkan dari publikasi Bank Indonesia, Badan Pusat Statistik, serta Otoritas Jasa Keuangan. Sampel diambil dari bulan Januari 2010 sampai Desember 2017. Data dianalisis menggunakan uji Fisher, uji Student, dan analisis regresi linier berganda. Hasil penelitian ini mengidentifikasi bahwa Finance to Deposit Ratio (FDR), Capital Adequacy Ratio (CAR), inflasi, dan BI rate berpengaruh signifikan terhadap non performing financing. Berdasarkan hasil tersebut, penelitian ini merekomendasikan bank umum syariah dan unit usaha syariah perlu menstabilkan rasio-rasio keuangannya.</i></p> <p><b>Kata Kunci:</b> Finance to Deposit Ratio, Capital Adequacy Ratio, Inflasi, BI Rate, Pembiayaan Bermasalah.</p>
<p><i>Nomor DOI</i> 10.33059/jseb.v13i2.3342</p>	
<p><i>Cara Mensitasi :</i> Nasir, M., Yazid AR, M., Amri, M., Handayani, C. F., &amp; Aryati, A. (2022). The effect of internal and external factors on non-performing financing at Islamic commercial banks in Indonesia. <i>Jurnal Samudra Ekonomi dan Bisnis</i>, 13(2), 267-276. doi: 10.33059/jseb.v13i2.3342.</p>	



## INTRODUCTION

The rapid growth of conventional banks in Indonesia has become challenge for Islamic banks to improve their performance to attract investors and customers.. However, the distribution of financing that is too high causes the bank to be unable to carry out its functions properly, so that the bank's performance becomes poor and fails The condition is known as non-performance financing (NPF) (Boumparis *et al.*, 2019; Kauko, 2012; Tarchouna *et al.*, 2017).

An increase in NPF in Islamic banks is often referred to as a failure of financing policies, and an increase in NPF is the main reason for a decrease in bank profits by comparing non-performing financing with the amount of financing disbursed (Nurrochman, 2016; Hejazziey, 2014)). The occurrence of NPF in Islamic banks is influenced by two factors, namely internal and external factors of the bank. Internal factors are the influence that comes from operational activities in Islamic banking itself which is contained in its financial performance. The financial performance of an Islamic bank can be seen through financial ratios as a measuring tool to predict the level of profit that will be generated. Meanwhile, external factors include macroeconomic factors that are formed from monetary policy and macro fiscal policy by the state government which can seriously affect the bank performance.

Seen from internal factors, financial ratios such as the The FDR and Capital Adequacy Ratios (CAR) have an important effect in Islamic banking on the probability of NPF. The FDR is a ratio in measuring the composition by public funds and capital spent of the amount of financing provided. In the meantime, CAR is a measure of how well Islamic banks' capital is sufficient to cover their liabilities, channeled financing defaults and all the risks facing the bank.

Further, the potential for an increase in the NPF of Islamic banks is also severely affected by external factors. Inflation and the Bank Indonesia interest rate (BI Rate) are two macroeconomic variables to consider. A high inflation rate reduces the community's income, which results in people being unable to repay conventional loans, and may present an opportunity to switch to Islamic banking.

### Islamic Bank Financing

Islamic banks, as defined in Article 1(7) of the Islamic Banking Act No. 21 of 2008, are banks that conduct business in accordance with sharia principles and are classified as Islamic commercial banks or Islamic public financing banks (Kuncoro & Suhardjono, 2011:71). A sharia bank is defined as one that operates According to the Qur'an and Hadith concepts of Islamic Sharia. Sharia rules, in other words rules of agreement (contract) between banks and other parties (customers), are based on law that follows the sharia rules and standards. Islamic banking activities are guided by sharia principles. These Islamic rules and standards include a usury prohibition, a ban on maysir and a ban on gharar (Rivai, 2007).

Financing is a very important activity for Islamic banks, because with financing, the main sources of funding will be obtained that support the sustainability of the business of Islamic banks (Hejazziey, 2014). According to Rivai (2010), financing is funding provided by related parties. Other benefit is to support investments that have been planned either by themselves or by an institution.

The ratio between total non-performing financing and total debtor funding is known as non-performing financing (NPF) ratio. The NPF demonstrates the bank's collectability in reclaiming distributed financing. If the non-performing financing exceeds the limit, it becomes a serious issue that jeopardizes the

profitability of Islamic banks, resulting in their closure (Firmansyah, 2014). The NPF value reflects the risk of financing. The greater the NPF value, the greater the risk of financing for the bank. According to Bank Indonesia Regulation 6/9/PBI/2004, bad credit or financing refers to credit that is substandard, suspect, or of low quality in accordance with applicable Bank Indonesia regulations on earning asset quality.

Non-performing financing at Islamic banks is more caused by several things, including the amount in terms of fundraising and financing that is not well controlled from the management side (Nurrochman, 2016). Following the accumulation of bad lending and its possible negative effects on bank loans and the economy in the context of the global financial crisis is received a lot of attention. In general, a higher credit rate, when combined with another variable, results in a slower rate of credit growth (Serrano, 2021). This effect holds true across a variety of econometric specifications and is particularly pronounced for banks with slower credit growth rates.

### **Finance to Debt Ratio**

FDR is the ability of a bank to immediately fulfill customer requests or return funds withdrawn by customers and rely on the liquidity provided by the funds (Rivai & Arifin, 2010). In other words, the extent to which provision of funds to customers can offset bank obligations. Due to the amount of funds required for financing is increasing, the higher this ratio is, the lower the bank's liquidity capacity (Dendawijaya, 2009).

Previous study of Setiawan & Putri (2013) has shown that the positive and significant impact of FDR on NPF. Unlike Auliani's (2016), the results showed the effect of FDR on NPF is positive and minor. The studies carried out by Akbar (2016) and Vanni & Rokhman (2017) showed the FDR

had a substantial negative impact on NPF. Based on the reviews that have been described, the following first hypothesis is:

**H1:** FDR has a significant effect toward NPF.

### **Capital Adequacy Ratio**

A bank's probability of failure is addressed through the capital adequacy ratio (CAR). According to Kuncoro & Suhardjono (2011), CAR refers to a bank's ability to preserve capital adequacy as well as management's ability to recognise, calculate, supervise, and monitor risks that can affect the amount of bank capital.

According to the empirical results that found by Lidya (2016), Alissanda (2015), and Asnaini (2014) studies, the effect of CAR on NPF is significantly negative. On the other hand, the empirical findings of Firdaus (2015) and Putri (2014) researchs, the impact of CAR on NPF is positive and significant. Based on the reviews that have been described, the following second hypothesis is:

**H2:** CAR has a significant effect toward NPF.

### **Inflation**

Inflation can be considered a monetary phenomenon due to a decrease in the calculated unit value of a commodity. According to Firdaus & Ariyanti (2011) and Wahiddudin (2018), inflation is defined as the tendency to increase the price of goods in general continuously due to the fact that the amount of money in circulation is in comparison to the available goods and service, the price is far too high.

Auliani (2016) and Mutamimah & Chasanah (2012) both found empirically that inflation has a detrimental effect on NPF that is statistically important. In contrast to research by Vanni & Rokhman (2017), who

found that inflation has a positive but insignificant impact on NPF. Firdaus' (2015) study identified the inflation has a negative but negligible effect on NPF. Based on the reviews that have been described, the following third hypothesis is:

**H3:** Inflation has a significant effect toward NPF.

### BI Rate

BI Rate is the reference interest rate determined by Bank Indonesia through the Board of Governors' Meeting every month. Once determined, the BI Rate will be announced to the public as a reference for credit reference rates (Fauzukhaq *et al.*, 2020; Naibaho & Rahayu, 2018). The BI Rate is considered to have influenced the probability of non-performing financing in commercial financial institutions.

The results of the research by Nugrohowati & Bimo (2019) found that the BI Rate had a positive and significant effect toward the NPF of BPRS in Indonesia. The results of the study courtesy of Aryani *et al.* (2016) also found that the BI rate has a significant positive effect on non-performing financing at Indonesian Islamic commercial banks. Based on the reviews that have been described, the fourth hypothesis is:

**H4:** BI Rate has a significant effect toward NPF.

### METHOD

The purpose of this study was to determine the influence of internal and external factors on non-performing loans in Islamic commercial banks and Islamic business units in Indonesia. In this study, non-performing financing served as the dependent variable; while the independent variables are the ratio of financing to savings, capital adequacy ratio, inflation, and BI rate.

Secondary data were gathered for this study from publications by Bank Indonesia and the Central Bureau of Statistics. The data was collected using monthly releases from Bank Indonesia and the Central Bureau of Statistics, as well as Islamic banking statistics published by the Financial Services Authority from January 2010 to December 2017.

Data analysis used Fisher's exact test and Student's t-test, as well as multiple linear regression analysis with quadratic equations to analyze data (Bungin, 2017; Hardani *et al.*, 2020; Bind & Rubin, 2020). Using the SPSS version 20, perform normal least squares (NLS) or ordinary least squares (OLS).

### RESULTS

The results of data processing using the multiple linear regression method are summarized in Table 1. Based on the table, it can be analyzed the magnitude of the influence of each independent variable on the dependent variable, as well as the results of hypothesis testing.

Table 1 shows that the four independent variables analyzed in this study, there are three variables that have a negative effect and one variable that has a positive effect on non-performing financing. Three independent variables that have a negative effect are FDR ( $B = -0.068$ ), CAR ( $B = -0.172$ ) and Inflation ( $B = -0.089$ ). This means that if one of the independent variables increases in value, it causes the NPF value to decrease; or vice versa, if one of the independent variables decreases in value, it causes the NPF value to increase; assuming that the other independent variables do not change in value.

One independent variable that has a positive effect on NPF is the BI Rate ( $B = 0.483$ ). This means that if the BI Rate increases in value, it causes the NPF value to also increase, or vice versa; assuming other variables are constant in values.

**Table 1. Results of Multiple Linear Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	9.993	0.936		10.679	0.000
FDR	-0.068	0.012	-0.430	-5.722	0.000
CAR	-0.172	0.021	-0.519	-8.099	0.000
INF	-0.089	0.041	-0.172	-2.152	0.034
BIR	0.483	0.063	0.588	7.679	0.000

Source: Secondary data processed, 2021.

**Table 2. Simultaneous Test Results**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	46.881	4	11.720	56.032	0.000
Residual	19.035	91	0.209		
Total	65.916	95			

Source: Secondary data processed, 2022.

Next, the results of the t-test in Table 1 show that the FDR variable has a t-value of -5.722 with Sig. t is 0.000. Because the value of Sig. t is smaller than the value of ( $= 0.05$ ), it is stated that FDR has a significant partial effect on NPF. Thus, the first hypothesis (H1) can be proven.

The results of the t-test (t-test) in Table 1 also show that the CAR variable has a t-value of -8.099 with Sig. t is 0.000. Because the value of Sig. t is smaller than the value of ( $= 0.05$ ), it is stated that CAR has a significant partial effect on NPF. Thus, the second hypothesis (H2) can also be proven.

Furthermore, Table 1 shows the results of the t-test (t-test) that the inflation variable has a t-value of -2.152 with Sig. t is 0.034. Because the value of Sig. t is smaller than the value of ( $= 0.05$ ), it is stated that inflation has a significant partial effect on NPF. Thus, the third hypothesis (H3) can also be proven.

Finally, the results of the t-test (t-test) in Table 1 show that the BI Rate variable has a t-value of 7.679 with Sig. t is 0.000. Because the value of Sig. t is smaller than the value of ( $= 0.05$ ), it is stated that the BI Rate has a

significant partial effect on the NPF. Thus, the fourth hypothesis (H4) can also be proven.

The results of simultaneous hypothesis testing, as shown in Table 2, found that the four variables analyzed had an F value of 56,032 with Sig. F of 0.000. Because the value of Sig. F is smaller than the value of ( $= 0.05$ ), it is stated that the four independent variables, namely FDR, CAR, Inflation and BI Rate, have a significant simultaneous effect on NPF.

## Discussion

FDR in this study is a ratio used to measure the ability of islamic banks to meet consumer demands who need funds immediately or who withdraw funds from deposits. FDR refers to the liquidity capacity of the bank for the funding needs of its customers (Dendawijaya, 2009; Rivai & Arifin, 2010). The results obtained in the study prove that the FDR value has a significant effect on NPF, and the effect is negative. The results of the study are in line with the findings of Akbar (2016) and Vanni & Rokhman (2017) which showed the FDR



had a substantial negative impact on NPF; but it is different from the findings of the study of Setiawan & Putri (2013) and Auliani (2016) which shown that FDR has a positive and significant impact on NPF.

Non-performing financing (NPF) is the amount of financing whose collectability category is included in the criteria for substandard financing, doubtful financing, and non-performing financing. The customer's inability to pay the principal installments and the profit sharing (margin) of financing causes the collectability of financing (Lafuente *et al.*, 2019; Partovi & Matousek, 2019). The results of this study prove that there is a negative but significant relationship path between FDR and NPF. Thus, if the management of Islamic banks through various policies produces a higher FDR value, the lower the NPF value that the bank must deal with. NPF or non-performing financing is one of the key indicators to assess bank performance. If non-performing financing increases, the risk of a decline in profitability is greater, and further reduces the ability of banks to expand financing and the rate of financing decreases (Fauzokhaq *et al.*, 2020; Karadima & Louri, 2021; Yurtadur, *et al.*, 2019). If this happens, the management of the Islamic bank concerned must immediately anticipate this problem and look for solutions that can turn a problem into an opportunity that benefits the company's business.

In managing the CAR ratio, bank management must be able to periodically calculate, monitor and monitor internal and external risks that can affect the amount of capital adequacy (Kuncoro & Suhardjono, 2011; Wan, 2018). The adequacy of the model can affect the amount of non-performing financing. The results of this study found that CAR had a significant and negative effect on NPF, in line with previous findings from research belonging to Lidya

(2016), Alissanda (2015), and Asnaini (2014). However, the results of this study are different from previous research by Firdaus (2015) and Putri (2014) which found that the effect of CAR on NPF is positive and significant.

CAR is defined as a ratio that measures the ability of a bank to maintain its capital adequacy, which in the long term can affect the prospects for the sustainability of its financial services activities. This research proves that CAR has a negative impact on non-performing financing, which means that an increase in the CAR ratio will encourage a decrease in the value of NPF which must be handled by the bank's management. In the context of Islamic banking institutions, an increase in the value of the capital adequacy ratio owned by a bank will enhance the bank's performance because it will be able to reduce the number of uncollectible or non-performing financing (Wahiddudin, 2018; Nugrohowati & Bimo, 2019; Serrano, 2021). The decrease in the number of NPF can also encourage an increase in the profitability aspect of the bank concerned, and further support efforts to create a sustainable financial services business from the bank.

Inflation is a situation of an increase in commodity prices in general, due to an imbalance between the level of demand and supply of these commodities. The value of inflation that occurs in the economy is considered to also affect the value of non-performing financing that must be managed by the banking sector (Firdaus & Ariyanti, 2011; Wahiddudin, 2018). The results of this study find that inflation has a significant and negative effect on NPF, in line with previous findings from research belonging to Auliani (2016), Firdaus (2015) and Mutamimah & Chasanah (2012). However, the results of this study are different from previous research by Vanni & Rokhman (2017) which found that

the effect of inflation on NPF was positive but not significant.

The increase in commodity prices known as inflation occurs because the amount of money (demand) is more than the amount of commodities available (supply). The growth in the amount of money that exceeds the growth in the real sector causes inflation because it causes the purchasing power of money to always decline. The results of this study identify that inflation has a negative effect on NPF. This condition means that when there is an increase in inflation, it will cause a decrease in people's desire to seek loans or credit from banks, so that the funds available at banks become unproductive or not optimally distributed to the public (Wahiddudin, 2018; Naibaho & Rahayu, 2018; Bellotti *et al.*, 2021). The bank management therefore needs to find a strategy that encourages the absorption of funds by the public in accordance with expectations, but still takes into account the risks that must be faced, such as non-current installment payments or traffic jams in the community due to inflationary conditions.

BI Rate is a reference for determining the interest rate on loans and deposits by banking financial institutions. BI Rate is determined through the monthly meeting of the Board of Governors at Bank Indonesia as an instrument of monetary stability in the national economy (Fauzukhaq *et al.*, 2020; Naibaho & Rahayu, 2018). BI Rate is considered to be able to affect the condition of non-performing financing that must be managed by bank management. The results of this study obtained evidence that the BI Rate has a positive and significant effect on banking NPF. These results are in line with the findings of studies by Nugrohowati & Bimo (2019) and Aryani *et al.* (2016) that the BI rate has a significant and positive effect on

non-performing financing at Indonesian Islamic commercial banks.

Non-performing financing is financing that is problematic because the installment process is not jammed or uncollectible. Non-performing financing can also arise due to the imposition of interest on loans provided by banks, or profit sharing provisions in the context of Islamic banks, to borrowing consumers. The determination of the loan interest is strongly influenced by the BI Rate policy by Bank Indonesia (Auliani, 2016; Boumparis *et al.*, 2019; Fauzukhaq *et al.*, 2020). The results of this study prove that the BI Rate has a positive and significant effect on the level of NPF experienced by Islamic banks. Thus, if Bank Indonesia as the representative of the Indonesian government sets the BI Rate which is higher than the previous value, it will cause an increase in the number of NPF or non-performing loans which are the burden of the management of Islamic commercial banks. This condition occurs because the high interest rate on credit will lead to a large installment interest burden for the borrower, while he does need the credit for the development or sustainability of his business. This needs special attention for bank management to maintain relationships with borrowers in order to minimize the possibility of non-performing loans.

## CONCLUSION

The results of this study conclude that either partially or simultaneously, FDR, CAR, inflation and the BI Rate have a significant effect on non-performing financing. Furthermore, the results of the study identify that FDR, CAR and Inflation have a negative effect on NPL, while the BI Rate has a positive effect on NPL.

This conclusion states the important role of the four independent variables on the management of NPLs. The management of a

sharia commercial bank or sharia business unit should pay more attention to these four factors related to efforts to minimize the number of NPLs that must be managed. Management's ability to anticipate the prospects of these four factors will support the sustainability of the business of Islamic commercial banks and sharia business units.

The limitation of this research is that it does not take into account unexpected events such as the current pandemic, which will affect the FDR or CAR situation of the company or the degree of inflation or the government's BI Rate policy, which in turn affects the probability of NPL owned by financial institutions. sharia. It is also recommended for future researchers to include more factors into the research formulation, so that the empirical results obtained can better describe the actual conditions that exist for NPL management.

## REFERENSI

- Akbar, D. A. (2016). Inflasi, gross domestic product (GDP), capital adequacy ratio (CAR), dan finance to deposit ratio (FDR) terhadap non performing financing (NPF) pada bank umum syariah di Indonesia. *I-Economics: A Research Journal On Islamic Economics*, 2(2), 19-37. Retrieved From <http://Jurnal.Radenfatah.Ac.Id/Index.Ph p/Ieconomics/Article/View/1021>.
- Alissanda, D. G. (2015). Pengaruh CAR, BOPO dan FDR terhadap non performing finance (NPF) pada bank umum syariah tahun 2011-2013. *Universitas Islam Bandung Repository*. Retrieved from <http://repository.unisba.ac.id/handle/123456789/4514>.
- Aryani, Y., Anggraeni, L., & Wiliasih, R. (2016). Faktor-faktor yang mempengaruhi non performing financing pada bank umum syariah indonesia periode 2010-2014. *Al Muzara'ah*, 4(1), 44-60. doi: 10.29244/jam.4.1.44-60.
- Asnaini, S. W. (2014). Faktor-faktor yang mempengaruhi non performing financing (NPF) pada bank umum syariah di Indonesia. *Jurnal TEKUN*, 5(02), 264-280. doi: 10.22441/tekun.v5i2.301.
- Auliani, M. M. (2016). Analisis pengaruh faktor internal dan faktor eksternal terhadap tingkat pembiayaan bermasalah pada bank umum syariah di Indonesia periode tahun 2010-2014. *Diponegoro Journal of Management*, 5(3), 1-14. Retrieved from <https://ejournal3.undip.ac.id/index.php/djom/article/view/14644/14168>.
- Bank Indonesia. [www.bi.go.id](http://www.bi.go.id). Jakarta.
- Bellotti, A., Brigo, D., Gambetti, P., & Vrins, F. (2021). *Forecasting recovery rates on non-performing loans with machine learning*. *International Journal of Forecasting*, 37(1), 428-444. doi: 10.1016/j.ijforecast.2020.06.009.
- Bind, M. -A. C., & Rubin, D. B. (2020). When possible, report a Fisher-exact P value and display its underlying null randomization distribution. *PNAS*, 117(32), 19151-19158. doi: 10.1073/pnas.1915454117.
- Boumparis, P., Milas, C., & Panagiotidis, T. (2019). *Non-performing loans and sovereign credit ratings*. *International Review of Financial Analysis*, 64 (February), 301-314. doi: 10.1016/j.irfa.2019.06.002.
- Bungin, B. (2017). *Metodologi penelitian kuantitatif*, Edisi Kedua. Kencana Prenada Media.
- Dendawijaya, L. (2009). *Manajemen perbankan*. Ghalia Indonesia.
- Fauzukhaq, M. F., Sari, D., & Wiranata, S. (2020). Pengaruh inflasi, BI rate, kurs, CAR dan FDR terhadap non performing financing Bank Syariah Mandiri. *Media Ekonomi*, 28(2), 129-140. doi: 10.25105/me.v28i2.7338.
- Firdaus, R. & Ariyanti, M. (2011). *Manajemen perkreditan bank umum: Teori, masalah, kebijakan dan aplikasinya lengkap dengan analisis kredit*.



Alfabeta.

- Firdaus, R. N. (2015). Pengaruh faktor internal dan eksternal yang mempengaruhi pembiayaan bermasalah pada bank umum syariah di Indonesia. *El-Dinar Jurnal Keuangan dan Perbankan Syariah*, 3(1), 82-108. doi: 10.18860/ed.v3i1.3339.
- Firmansyah, I. (2014). Determinant of non performing loan: The case of Islamic bank in Indonesia. *Buletin Ekonomi Moneter dan Perbankan*, 17(2), 241-258. doi: 10.21098/bemp.v17i2.51.
- Hardani, Auliya, N. H., Andriani, H., Fardani, R. A., Ustiawaty, J., Utami, E. F., Sukmana, D. J., & Istiqomah, R. R. (2020). *Metode penelitian kualitatif & kuantitatif*. CV. Pustaka Ilmu.
- Hejazziey, D. (2014). *Perbankan syariah dalam teori dan praktek*. Deepublish.
- Karadima, M., & Loury, H. (2021). Economic policy uncertainty and non-performing loans: The moderating role of bank concentration. *Finance Research Letters*, 38(1), 101458. doi: 10.1016/j.frl.2020.101458.
- Kauko, K. (2012). External deficits and non-performing loans in the recent financial crisis. *Economics Letter*, 115(2), 196-199. doi: 10.1016/j.econlet.2011.12.018.
- Kuncoro, M. & Suhardjono. (2011). *Manajemen perbankan: Teori dan aplikasi*. BPF.
- Lafuente, E., Vaillant, Y., & Vendrell-Herrero, F. (2019). Conformance and performance roles of bank boards: The connection between non-performing loans and non-performing directorships. *European Management Journal*, 37(5), 664-673. doi: 10.1016/j.emj.2019.04.005.
- Lidya, R. (2016). Dampak inflasi, BI rate, capital adequacy ratio (CAR), biaya operasional pendapatan operasional (BOPO), terhadap non performing financing (NPF) pada bank umum syariah di Indonesia. *Jurnal I-Finance*, 2(1), 1-19. doi: 10.19109/ifinance.v2i1.1006.
- Mutamimah & Chasanah, S. N. Z. (2012). Analisis eksternal dan internal dalam menentukan non-performing financing bank umum syariah di Indonesia. *Jurnal Bisnis dan Ekonomi*, 19(1), 49-64. Retrieved from <https://media.neliti.com/media/publications/24170-ID-analisis-eksternal-dan-internal-dalam-menentukan-non-performing-financing-bank-u.pdf>.
- Naibaho, K., & Rahayu, S. M. (2018). Pengaruh GDP, inflasi, BI rate, nilai tukar terhadap non performing loan bank umum konvensional di Indonesia (Studi pada bank umum konvensional yang terdaftar di Bursa Efek Indonesia periode 2012-2016). *Jurnal Administrasi Bisnis*, 62(2), 25-36. Retrieved from <http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/2678>.
- Nugrohowati, R. N. I., & Bimo, S. (2019). Analisis pengaruh faktor internal bank dan eksternal terhadap non-performing financing (NPF) pada bank perkreditan rakyat syariah di Indonesia. *Jurnal Ekonomi & Keuangan Islam*, 5(1), 42-49. doi: 10.20885/jeki.vol5.iss1.art6.
- Nurrochman, I., & Mahfudz, M. (2016). Analisis faktor-faktor yang mempengaruhi pembiayaan pada bank umum syariah (Studi pada bank umum syariah tahun 2012-2015). *Diponegoro Journal of Management*, 5(3), 863-878. Retrieved from <https://ejournal3.undip.ac.id/index.php/djom/article/view/14675>
- Otoritas Jasa Keuangan. [www.ojk.go.id](http://www.ojk.go.id).
- Partovi, E., & Matousek, R. (2019). Bank efficiency and non-performing loans: Evidence from Turkey. *Research in International Business and Finance*, 48(December), 287-309. doi: 10.1016/j.ribaf.2018.12.011.
- Radivojević, N., Cvijanović, D., Sekulic, D., Pavlovic, D., Jovic, S., & Maksimovic, G. (2019). Econometric model of non-performing loans determinants. *Physica A: Statistical Mechanics and its Applications*, 520, 481-488. doi: 10.1016/j.physa.2019.01.015.

- Rivai, V., Veithzal, A. P., & Idroes, F. N. (2007). *Bank and financial institution management: Conventional and syar'i system*. RajaGrafindo Persada.
- Rivai, Veithzal., & Arifin, A. (2010). *Islamic banking: Sebuah teori, konsep, dan aplikasi*. PT. Bumi Aksara.
- Serrano, A. S. (2021). The impact of non-performing loans on bank lending in Europe: An empirical analysis. *North American Journal of Economics and Finance*, 55(2), 101312. doi: 10.1016/j.najef.2020.101312.
- Setiawan, C., & Putri, M. E. (2013). Non performing financing and bank efficiency of islamic banks in Indonesia. *Journal of Islamic Finance and Business Research*, 2(1), 58-76. Retrieved from [https://www.academia.edu/9975972/Non\\_Performing\\_Financing\\_and\\_Bank\\_Efficiency\\_of\\_Islamic\\_Banks\\_in\\_Indonesia](https://www.academia.edu/9975972/Non_Performing_Financing_and_Bank_Efficiency_of_Islamic_Banks_in_Indonesia).
- Tarchouna, A., Jarraya, B., & Bouri, A. (2017). How to explain non-performing loans by many corporate governance variables simultaneously? A corporate governance index is built to US commercial banks. *Research in International Business and Finance*, 42, 645–657. doi: 10.1016/j.ribaf.2017.07.008.
- Vanni, K. M., & Rokhman, W. (2017). Analisis faktor-faktor yang mempengaruhi non performing financing pada perbankan syariah di Indonesia tahun 2011-2016. *Equilibrium: Jurnal Ekonomi Syariah*, 5(2), 306-319. doi: 10.21043/Equilibrium.V5i2.2776.
- Wahiddudin, M. (2018). Pengaruh inflasi, non performing financing (NPF) dan BI rate terhadap pembiayaan usaha mikro kecil dan menengah (UMKM) pada bank umum syariah 2012-2017. *Al Amwal*, 1(1), 76-89. Retrieved from <https://media.neliti.com/media/publications/280235-pengaruh-inflasi-non-performing-financing-54a9c72a.pdf>.
- Wan, J. (2018). Non-performing loans and housing prices in China. *International Review of Economics and Finance*, 57, 26–42. doi: 10.1016/j.iref.2018.02.011.
- Yurttadur, M., Celiktas, E., & Celiktas, E. (2019). The place of non-performing loans in the Turkish banking sector. *Procedia Computer Science*, 158, 766–771. doi: 10.1016/j.procs.2019.09.113.