

# ANALYSIS OF NON-PERFORMING FINANCING IN MEDIATING THE INFLUENCE OF INCOME DIVERSIFICATION, INFLATION, GROSS DOMESTIC PRODUCT, AND SIZE OF THE BANK ON STABILITY

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## ABSTRACT

The purpose of this research is to see the effect of income diversification, inflation, gross domestic product, and bank size on stability with using Non-Performing financing as a mediating variable at the Bank General Sharia in Indonesia. The type of research is descriptive qualitative with the regression model is panel data. This research uses secondary data obtained from the financial reports of Sharia Commercial Banks for the 2012-2021 period. Data processing uses E-Views software with purposive techniques sampling. From the results of the tests carried out it shows that diversification income (DP) has a significant positive effect on stability and inflation positive and insignificant effect on stability, gross domestic product (GDP) has a positive and insignificant effect on stability and bank size significant negative effect on stability, Non-Performing financing (NPF) has a significant negative effect on stability. Non-Performing financing (NPF) is able to mediate the effect of inflation on stability. Non-Performing financing (NPF) is unable to mediate the influence of income Diversification, Gross Domestic Product, dan Size of The Bank terhadap Stability.

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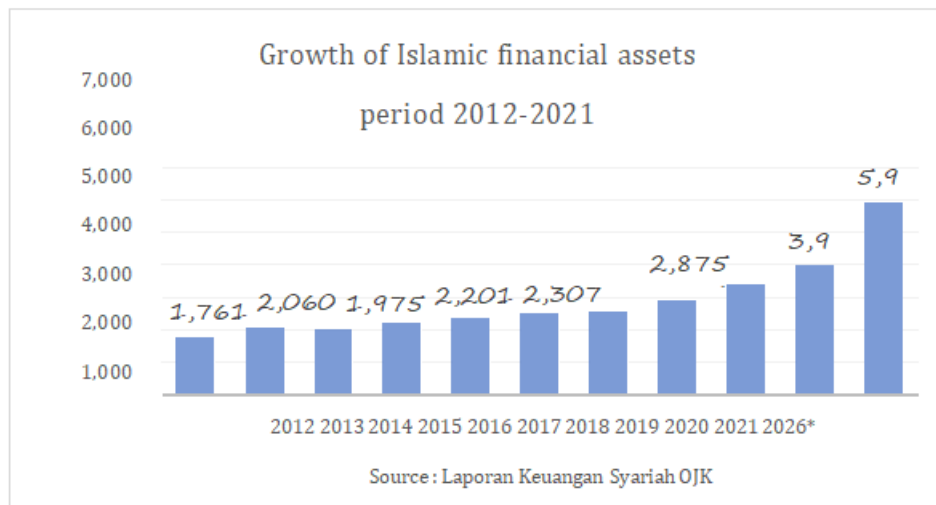
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## 1. INTRODUCTION

In the implementation of Law no. 10 period 1998 and Law no. 21 for the 2008 period was the background to the accelerated development of sharia banks experiencing a significant increase which can be proven by the number of sharia commercial banks in the 2007 period, there were only 3 sharia commercial banks, then growing rapidly in the 2021 period to 12 sharia commercial banks. This has an impact on the community's economy and sharia financial institutions which are able to contribute to productive economic activities.

The Financial Services Authority (OJK) in a press release revealed that financial system stability is maintained and the intermediation performance of financial institutions is improving. Despite weak national economic growth, high global inflation, tight and aggressive monetary policy, and protracted geopolitical developments. The world's major Central Banks increase policy rates with the aim of accelerating the pace of policy tightening in response to rising inflationary pressures, although such measures may slow the pace of economic development.

Financial institutions are able to survive when facing a financial crisis by having financial strength, asset growth, credit and risks that can still be minimized. Maintaining stability must absolutely be carried out by banks with an overview of whether the bank's overall performance is stable or not, which is related to financial transmission both between banks and banks and the public (Fahrial, 2018).



**Graph 1.** Growth of Sharia Financial Assets

In the past decade, Islamic finance has become one of the fastest growing sectors in the global financial industry, even surpassing conventional financial markets. In the sharia financial report published by the OJK, it is estimated that the value of global sharia financial assets will reach USD 3.95 trillion in the 2021 period. This is an increase of 16.76% compared to the previous period of USD \$3.37 trillion, showing that the global sharia financial industry continues to grow despite the economic slumped due to the Covid-19 pandemic. The global Islamic finance industry is expected to continue to grow to reach USD \$5.90 trillion in 2026, with an average growth of 8% over a 5 (year) gradual period. One metric used to measure how good or bad asset quality is financial inefficiency (NPF). The higher the NPF of a sharia bank, the worse its performance (Basse & Mullazid, 2017). This also has an impact on the formation of large PPAP, lower operating profits, low additional capital formation.

The existence of income diversification in sharia banking is one of the factors in developing the number of managed companies that can optimize banking profits and performance. Therefore, when Islamic banks manage their operations, their income does not come from conventional income streams. This non-financial income is generated from fee- and service-related activities, along with other income that falls outside the realm of traditional income sources (such as fundraising income). The national economic climate can be measured by looking at the inflation rate in Indonesia over the last ten years. In 2013, the highest annual inflation rate that year reached 8.38%. After that, inflation began to decline until it reached 1.68% in 2020, outside the inflation target set by BI.

Seasonal factors at the start of the year and greater public movement were the main causes of this slightly higher inflation rate, according to BPS head Margo Yuwono. This was the result of supply disruptions caused by severe weather at the manufacturing facility. To prevent the economy from overheating, central banks in various countries have begun to normalize their monetary policies, either by reducing stimulus or by lowering their policy interest rates. The tightening of monetary policy by the central bank is expected to continue in 2022 as inflation expectations remain high.

## 2. METHOD

This research uses a quantitative approach with secondary data. This research tests the significance of the influence of the independent variable on the dependent variable and the intervening variable which mediates the independent variable and the dependent variable. The form of secondary data used is panel data with information from the website of each BUS (Sharia Commercial Bank). The object of this research is a Sharia Commercial Bank located in the Financial Services Authority (OJK). In this research, the population was 14 banks, and a sample of 6 banks was obtained that met the criteria. The data in this research was collected using documentation and library research techniques.

## 3. RESULT AND DISCUSSION

### Result

The stationarity test in this study used a unit root test using the Augmented Dickey-Fuller test. The stationarity test results for each variable can be seen in the following table:

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**Table 1.** Stationarity Test Results

Variable	Level	Probability	Information
Stabilitas (Y)	1 <sup>st</sup> Difference	0.0000	Stasioner
Diversifikasi Pendapatan (X1)	1 <sup>st</sup> Difference	0.0000	Stasioner
Inflasi (X2)	1 <sup>st</sup> Difference	0.0000	Stasioner
Gross Domestic Product (X3)	1 <sup>st</sup> Difference	0.0000	Stasioner
Ukuran Bank (X4)	1 <sup>st</sup> Difference	0.0000	Stasioner
Non-Performing financing (Z)	1 <sup>st</sup> Difference	0.0000	Stasioner

In table 1 above it can be seen that the variables in this study data are stationary at the 1st difference level.

**Table 2.** Chow Test Result

<b>Redundant Fixed Effects Tests Equation: Untitled</b>			
<b>Test cross-section fixed effects</b>			
<b>Effects Test</b>	<b>Statistic</b>	<b>d.f.</b>	<b>Prob.</b>
Cross-section F	31.990723	(7,67)	0.0000
Cross-section Chi-square	117.472597	7	0.0000

The probability value above is 0.0000, which means it is smaller than 0.05, so the FEM model is more feasible than the CEM model.

**Table 3.** Hausman Test Results

<b>Correlated Random Effects - Hausman Test</b>			
<b>Equation: Untitled</b>			
<b>Test cross-section random effects</b>			
<b>Chi-Sq.</b>			
Test Summary	Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	18.306327	5	0.0026

The probability value above is 0.0026, which means it is smaller than 0.05, so the FEM model is more feasible than the REM model.

**Table 4.** Lagrange Multiplier Test Results

<b>Lagrange multiplier (LM) test for panel data</b>			
<b>Date: 07/30/23 Time: 17:07</b>			
<b>Sample: 2012 2021</b>			
<b>Total panel observations: 80</b>			
<b>Probability in ()</b>			
<b>Null (no rand. Effect)</b>	<b>Cross-section</b>	<b>Period</b>	<b>Both</b>
<b>Alternative</b>	<b>One-sided</b>	<b>One-sided</b>	
Breusch-Pagan	116.9348 (0.0000)	1.391752 (0.2381)	118.3266 (0.0000)
Honda	10.81364 (0.0000)	-1.179726 (0.8809)	6.812207 (0.0000)
King-Wu	10.81364 (0.0000)	-1.179726 (0.8809)	7.329916 (0.0000)
SLM	13.43599 (0.0000)	-0.634650 (0.7372)	-- --
GHM	-- --	-- --	116.9348 (0.0000)

Breusch Pagan was found to be 0.0000, so it was concluded that CEM was better than REM. So the model in this research uses the CEM model.

**Table 5.** Path Analysis Test Results

Model	T count	T table	Information
DP toward Stability through NPF	0.05417942246	1.66412	Not Significant
Inflation toward Stability through NPF	4.05327698852	1.66412	Significant
GDP towards Stability through NPF	0.22834888766	1.66412	Not Significant
UB towards Stability through NPF	0.37245653209	1.66412	Not Significant

## Discussion

Based on the process of the test carried out and the results known, the hypothesis test results can be summarized. The following are the results of the discussion of each hypothesis test:

### Effect of DP on Stability

Based on the results obtained, the coefficient and probability values of the Income Verified variable. The Income Verification coefficient value of 3975.434 indicates that income diversification has a positive effect on stability, while the probability value of income diversification is  $0.0012 < 5\%$ . So Income Verification has a significant effect on Stability. The results of the hypothesis test show that Income Verification has a significant positive effect on Stability. In accordance with the results of research conducted by (M. Nguyen et al., 2021) which states that income diversification at large banks through non-interest income activities is able to create stability in banking, in sharia banking the activities do not only carry out the function of financial intermediation. However, we also diversify our income to support banking performance, such as cash management services, banking transactions, payroll, bank guarantees, foreign exchange trading, letters of credit, safe deposit boxes, factoring and other sharia banking services (Pramika et al., 2022). Furthermore, the significance of the positive influence of income diversification on bank stability is supported by signaling theory which means that companies can provide signals to stakeholders. Increased income diversification is a signal that sharia banks have stability obtained through non-operational income owned by sharia commercial banks.

### The Effect of Inflation on Stability

Based on the results obtained, the coefficient and probability values of the inflation variable. The inflation coefficient value of  $3.88E+13$  indicates that inflation has a positive effect on stability, while the inflation probability value is  $0.2639 > 5\%$ , meaning inflation has an insignificant effect on stability. The results of the hypothesis test showed that inflation had a positive and insignificant effect on stability. The results of this research are different from research conducted by (Sadrinata & Rani, 2019) which explains that Islamic banks implement a profit sharing system, so that inflation that occurs in a country will not affect the stability of Islamic banks. However, the influence of inflation on stability is based on the products offered by sharia banks to customers in order to increase bank stability through ensuring customers accept and buy products offered by banks such as housing financing, motor vehicles and gold. Even though it does not have a big impact on banking, the increasing inflation rate also forces banks to consider the value of the products offered so that bank stability is maintained through policy. So, this signaling theory is very suitable for this variable.

### The Effect of GDP on Stability

Based on the results obtained, the coefficient and probability values of the GDP variable. The GDP coefficient value of  $2.53E+13$  indicates that GDP has a positive effect on stability, while the GDP probability value is  $0.0555 > 5\%$ . So GDP has no significant effect on stability. The results of the hypothesis test showed that GDP had a positive and insignificant effect on stability. The results of this research are different from the results of research conducted by (Lestari & Suprayogi, 2020) which stated that the better the economic conditions of the people in a country, the better the bank's performance. An increase in GDP in a country does not have a major impact on bank stability. Generally, increasing GDP only increases the economic stability of a country. There is no significant impact of GDP on the stability of this bank because the GDP used is the GDP of the financial services intermediary sector, where the general public uses Islamic banks only for transaction services. However, this increase in GDP benefits banks because Islamic banks receive income from non-operational sources.

### Effect of UB on Stability

Based on the results obtained, the coefficient and probability values of the UB variable. The UB coefficient value of  $-19.18516$  indicates that UB has a negative effect on stability, while the probability value of UB is  $0.0277 < 5\%$ , meaning UB has a significant effect on stability. The results of the hypothesis test showed that UB had a significant negative effect on stability. The results of this research are supported by the results of previous research conducted by (Fatoni & Sidiq, 2019) which states that the size of a bank is based on organizational management within the bank. The larger the bank size, the better the bank's ability to manage human resources; the infrastructure; and risk management so that bank stability will be more stable. If expanding the size of a bank results in economies of scale for the bank, making the bank more efficient and stable, it will be profitable. However, if expanding bank size makes banks less flexible in their operations, that will be detrimental.

### **The Effect of NPF on Stability**

Based on the results obtained, the coefficient and probability values of the NPF variable. The NPF coefficient value of  $-6.41E+13$  indicates that NPF has a negative effect on stability, while the NPF probability value is  $0.0251 < 5\%$ , so NPF has a significant effect on stability. The results of the hypothesis test showed that NPF had a significant negative effect on stability. The results of this study are supported by the results of previous research by (Fatoni & Sidiq, 2019) which stated that an increase in NPF will cause a decrease in the stability of sharia banking. In contrast to financing in conventional banking, financing in sharia banking has actually increased. The increase in financing in sharia banking most often occurs in working capital and investment, where these two factors are the biggest contributors to risk for sharia banks so it is likely to have an impact on reducing the stability of sharia banks. So the use of signaling theory on this variable is more suitable for monitoring stakeholders to be more careful in determining policies and decisions for the development of the stability of the bank itself and the turnaround in performance of Islamic banks.

### **Influence of DP on NPF**

Based on the results obtained, the coefficient and probability values of the DP variable. The DP coefficient value of  $2.54E-13$  indicates that DP has a positive effect on NPF, while the DP probability value is  $0.9585 > 5\%$ , so DP has an insignificant effect on NPF. The results of the hypothesis test showed that DP had a positive and insignificant effect on NPF. The research results differ from the results of previous research conducted by (Igstia et al., 2020) which stated that the non-interest income ratio tends to be smaller than the NPF ratio, because generally Islamic banks only focus on profit sharing income. However, this non-interest income has a good impact on the NPF. The non-interest income obtained by sharia banks is at least able to increase the profitability of the sharia bank itself which can then reduce the level of possibility of problematic financing in the financing sector.

### **The Effect of Inflation on NPF**

Based on the results obtained, the coefficient and probability values of the Inflation variable, the Inflation coefficient value of  $0.618732$ , indicates that Inflation has a positive influence on NPF, while the probability value of Inflation is  $0.0000 < 5\%$ , so Inflation has a significant effect on NPF. The results of the hypothesis test showed that inflation had a significant positive effect on NPF. The results of this research are supported by research conducted by (Laksono, 2021) who said that inflation resulted in continuous price increases, so that people's purchasing power decreased because it was eroded by inflation. It also has an impact on the condition of the business world which is felt by business actors because there are continuous expenses compared to income from their business. This condition resulted in sharia bank customers experiencing difficulties in paying their credit obligations at sharia banking, resulting in the NPF at sharia banks increasing quite high. So the use of signaling theory on this variable is the vigilance and prudence carried out by Islamic banks in facing an increase in NPF so that it does not have an impact on other factors, so that both operational and non-operational Islamic banks continue to run well.

### **Influence of GDP on NPF**

Based on the results obtained, the coefficient and probability values of the GDP variable, the GDP coefficient value of  $1.39E-05$ , indicates that GDP has a positive influence on NPF, while the competition probability value is  $0.080 < 5\%$ , so GDP has a significant effect on NPF. The results of the hypothesis test show that GDP has a significant positive effect on NPF. The results of this research are supported by research conducted by (Laksono, 2021) which states that an increase in GDP is not always followed by a decrease in NPF, in general an increasing GDP value is interpreted as an improvement in the economy of a country's people. However, in reality it cannot be proven that the economic value of society has increased evenly. When the value of society's GDP increases, people usually tend to behave more consumptively. So it is very possible that increasing the GDP value will increase the NPF value.

### **The influence of UB on NPF**

Based on the results obtained, the coefficient and probability values for the UB variable, the UB coefficient value of  $-1.30E-13$ , indicates that UB has a negative influence on NPF, while the competition probability value is  $0.001 < 5\%$ , so UB has a significant influence on NPF. The results of the hypothesis test showed that UB had a significant negative effect on NPF. The results of this research are supported by research conducted by (Aryani et al., 2016) and (Wibowo & Saputra, 2017) which states that large banks certainly have large asset values, banks that are large in size must have a system for dealing with problematic financing. which is better than a small bank, thereby enabling the bank to be able to reduce financing problems that occur.

#### **NPF's Ability to Mediate the Effect of DP on Stability**

It is known that the calculated t value of 0.05417942246 at the vulnerable t table value of 1.66412 and -1.66412 is not significant, this states that NPF is unable to mediate the influence of DP on Stability. If banks are able to maintain problematic financing, it will not affect income diversification towards stability. The results of this research are in line with research conducted by (Igustia et al., 2020) which states that the ratio of non-profit sharing income to total income is still relatively small compared to the total ratio of non-performing financing.

#### **NPF's Ability to Mediate the Effect of Inflation on Stability**

It is known that the calculated t value of 4.05327698852 at the vulnerable t table value of 1.66412 and -1.66412 is significant, this states that NPF is able to mediate the effect of inflation on stability. The results of the analysis obtained a positive value which shows that the higher inflation will have an impact on increasing bank stability through the NPF ratio. This is caused by the Islamic banking system which is different from the conventional banking system which uses an interest system so that debtors make regular installment payments without being influenced by inflation. The results of this research are in line with previous literature conducted by (Laksono, 2021) which stated that inflation resulted in continuous price increases, so that people's purchasing power decreased because it was eroded by inflation. It also has an impact on the condition of the business world which is felt by business actors because there are continuous expenses compared to income from their business. This condition resulted in sharia bank customers experiencing difficulties in paying their credit obligations at sharia banking, resulting in the NPF at sharia banks increasing quite high.

#### **NPF's Ability to Mediate the Effect of GDP on Stability**

It is known that the calculated t value of 0.22834888766 at the vulnerable t table value of 1.66412 and -1.66412 is not significant, this states that NPF is unable to mediate the effect of GDP on stability. The reason why GDP is not significant is because the GDP value in Islamic banks is relatively smaller. So that GDP growth, whether in the presence of shocks or changes, has no significant impact on NPF on stability. The results of this research are in line with the statement in research conducted by (Febrianti & Ashar, 2016) which states that the value of GDP growth in both the short and long term has no effect on Islamic banks because they are more resistant to recession and crisis shocks than conventional banks.

#### **NPF's Ability to Mediate the Effect of UB on Stability**

It is known that the calculated t value of 0.37245653209 at the t table value of 1.66412 and -1.66412 is not significant, this states that NPF is unable to mediate the influence of UB on Stability. No matter how much problem financing a bank has, it will not affect UB's influence on stability. The results of this research are supported by research conducted by (Aryani et al., 2016) and (Wibowo & Saputra, 2017) which states that large banks certainly have large asset values, banks that are large in size must have a system for handling problematic financing. better than small banks, thereby enabling the bank to be able to reduce financing problems that occur. The results of this research are supported by the results of previous research conducted by (Fatoni & Sidiq, 2019) which states that the size of a bank is based on organizational management within the bank. The larger the bank size, the better the bank's ability to manage human resources; the infrastructure; and risk management so that bank stability will be more stable.

#### **4. CONCLUSION**

The following are the conclusions of the research that has been carried out: Income verification has a significant positive effect on stability. Inflation has an insignificant positive effect on stability. Gross Domestic Product has an insignificant positive effect on stability. Bank size has a significant negative effect on stability. Non-Performing financing has a significant negative effect on stability. Income verification has an insignificant positive effect on Non-Performing financing. Inflation has a significant positive effect on Non-Performing financing. Gross Domestic Product has a significant positive effect on Non-Performing financing. Bank size has a significant negative effect on Non-Performing financing. NPF is unable to mediate the influence of DP on stability. NPF is able to mediate the effect of inflation on stability. NPF is unable to mediate the effect of GDP on stability. As is the case with inflation growth. NPF is unable to mediate the influence of UB on Stability.

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