DOES LOAN RESTRUCTURING PLAY A ROLE IN INCREASING CREDIT RISK OF RURAL BANKS DURING COVID-19 PANDEMIC?

Soni Prima Nugroho^{1*},Irwan Trinugroho²

^{1*} Indonesia Financial Services Authority (OJK), Indonesia

²Faculty of Economics and Business, Sebelas Maret University,
soniprimanugroho@gmail.com

Abstract

Comparing the impact of COVID-19 loan restructuring on credit risk at sharia and conventional rural banks, sharia banks operate under Islamic principles that prohibit charging interest, whereas conventional banks charge interest on loans. This study aims to examine the impact of loan restructuring on credit risk at a sharia and conventional rural bank in Surakarta during the COVID-19 pandemic. The study may investigate whether the differences in the banking systems affect the credit risk associated with loan restructuring. The study could have significant implications for rural banks and borrowers, particularly in countries with a large rural populations. Understanding the impact of loan restructuring on credit risk could help rural banks develop more effective strategies to manage risk and support borrowers during times of economic hardship. The research data uses panel data from quarter 1 to quarter 4 in 2020-2022. The test uses multiple linear regression analysis with random effect model selection. The study results show that restructuring negatively impacts the risk of problem financing in both sharia and conventional rural banks. Providing loan restructuring by financial authorities is appropriate to address the risk of default in rural banks. In summary, the study likely examines the impact of COVID-19 loan restructuring on credit risk at Sharia and conventional rural banks, focusing on understanding the differences between the two banking systems.

Keywords: COVID-19, loan restructuring, financing risk, Sharia Rural Bank, Conventional Rural Bank.

INTRODUCTION

The COVID-19 pandemic has significantly impacted the global economy, and many borrowers have been unable to meet their loan obligations. As a result, many banks have had to restructure loans to help borrowers manage their debt and avoid default.

Loan restructuring is modifying a loan with different terms from its original terms, usually to assist borrowers who are experiencing financial difficulties in paying off their loans. Loan restructuring can impact credit risk, depending on the type of restructuring being done. If loan restructuring is done correctly by considering the borrower's ability to repay the loan and modifying the loan terms to make it more feasible for the borrower to pay, credit risk can be reduced. This is because loan restructuring can help borrowers maintain their credit and avoid late payments or defaults.

However, if loan restructuring is done without considering the borrower's ability to repay, then credit risk can increase. This is because loan restructuring that is not appropriate for the borrower's ability can make it even more difficult for them to repay their loan and even worsen their financial condition. In addition, if too many loans are restructured, credit risk can increase because it can indicate a more significant financial problem among borrowers. Excessive loan restructuring can also lower the quality of the bank's assets and affect the bank's overall financial health. In conclusion, loan restructuring can affect credit risk differently depending on how it is done. Credit risk can be reduced if done properly, but if done improperly or excessively, credit risk can increase.

In Indonesia, loan restructuring has become essential in recent years, especially during the COVID-19 pandemic. Various financial institutions, such as banks, cooperatives, and financing companies, have announced loan restructuring policies to help borrowers affected by the pandemic.

In 2020, Bank Indonesia issued several policies related to loan restructuring, such as expanding the scope of loan restructuring for corporate, Micro, Small, Medium Enterprise, and consumer segments affected by the COVID-19 pandemic; providing relief for loan installment payments and/or interest to borrowers affected by the COVID-19 pandemic; and facilitating loan restructuring applications with more accessible and more flexible requirements.

In addition, the Indonesian Financial Services Authority (OJK) also issued various regulations and policies related to loan restructuring, such as setting a maximum loan restructuring period of 2 years, requiring lending companies to provide clear and transparent information to borrowers regarding loan restructuring, and requiring lending companies to have clear policies and procedures related to loan restructuring.

With loan restructuring policies in place, it is hoped to help borrowers who are experiencing difficulty paying their debts and also reduce the risk of non-performing loans for lending companies. However, loan restructuring should also be done carefully to avoid systemic risks to the financial sector and the overall economy. Here are some potential benefits and drawbacks of loan restructuring:

- a) Restructuring a loan can result in lower monthly payments, making it easier for borrowers to meet their financial obligations.
- b) Extending the loan term can also result in lower monthly payments, although this can result in higher total interest paid over the life of the loan.
- c) Restructuring a loan can result in a reduced interest rate, which can help borrowers save money over the life of the loan.
- d) As mentioned, extending the loan term can result in higher total interest paid over the life of the loan.
- e) In some cases, loan restructuring can result in higher overall costs due to fees and interest charges.
- f) Even with loan restructuring, there is still a risk that the borrower may default on their loan if their financial situation does not improve.

Overall, loan restructuring can be an effective tool to help borrowers struggling to meet their financial obligations. However, it is important to carefully consider the potential benefits and drawbacks of loan restructuring before making a decision and to work with a trusted financial

professional or lender to ensure that the restructuring plan is viable and appropriate for the borrower's situation.

Many business sectors have experienced a decline, and some customers have difficulty paying their credit installments. To address this issue, the Indonesian government has provided several loan restructuring policies through the Indonesian Financial Services Authority (OJK) to help bank customers during the pandemic. One such policy is postponing installment payments, which are available at rural banks during the first COVID-19 period. This policy allows rural bank customers affected by COVID-19 to apply to postpone their credit installment payments for several months, providing financial leeway for those experiencing difficulties. By offering loan restructuring policies, the government aims to reduce the financial burden on affected customers and prevent a potential economic crisis. This assistance can help individuals and businesses maintain their credit scores, avoid default, and ultimately improve their financial situation in the long run.

The following policy is an extension of the credit period, where in addition to delaying installment payments, rural banks customers can also request an extension of the credit period. With the extension of the term, customers can reduce the burden of making monthly installment payments. In addition, there is partial repayment through BPRS. Customers can also repay part of their credit to reduce the responsibility of the installment payments that must be made.

The Indonesian government has provided several credit restructuring policies to help rural banks customers during this pandemic. However, to obtain the loan restructuring policy, customers must apply and meet the requirements set by the Indonesian Financial Services Authority (OJK) and operating standard of rural banks.

Not only conventional but sharia rural banks in Surakarta are also inseparable from the impact of this pandemic. Along with the decline in business activities and the decline in demand for credit from the public due to the pandemic, Sharia rural banks in Surakarta experienced a decrease in revenue and profit. In this challenging economic situation, some customers may need help paying their credit installments. This can potentially affect the asset quality of Sharia BPR in Surakarta. The COVID-19 pandemic has also affected the cost structure of Sharia BPR in Surakarta. Some costs, such as transportation and office operating costs, may decrease, but other costs, such as IT device maintenance, may increase. The COVID-19 pandemic has forced many companies, including BPR Syariah in Surakarta, to increase technology adoption to maintain their businesses. Sharia BPR in Surakarta must accelerate the use of technology to improve the efficiency and effectiveness of their businesse.

Overall, the performance of Sharia rural banks in Surakarta was influenced by difficult economic conditions due to the COVID-19 pandemic. However, with adopting the right technology and government policy support, Sharia rural banks in Surakarta can continue to survive and adapt to the existing situation. Conventional and sharia rural banks differ in terms of the principles of financing applied and the sources of funding used. Government policy support provides policy support such as credit restructuring and postponement of installment payments, which can help sharia rural banks in Surakarta overcome the impact of the pandemic.

Conventional rural banks apply financing principles that are not based on Islamic Sharia. The source of funding used by conventional rural banks is depositors and owner's capital, as well as interest given by banks on loans provided. Conventional rural banks provides loans with a predetermined interest rate and is equipped with collateral or collateral pledged by the borrower.

Meanwhile, sharia rural banks applies financing principles based on Islamic Sharia. Sharia rural banks funding source comes from customer funds invested in Sharia and owner capital. Sharia rural banks provides financing in the form of mudharabah, musyarakah, murabahah, and ijarah. The financing is provided based on a mutual agreement between the bank and the party in need of financing.

In sharia rural banks, the financing provided is not equipped with an interest rate but a profit-sharing system. This means that the profits obtained by the bank and the parties who need financing are divided based on a predetermined agreement. In general, the main difference between conventional and sharia rural banks lies in the principles of financing and the sources of funding used. Conventional rural banks apply principles not based on Islamic Sharia, and the head of funding comes from interest and depositors, while sharia-compliant rural banks apply sharia financing principles, and the head of funding comes from customer funds invested in Sharia.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Rural Bank

Bank Perkreditan Rakyat (BPR) or conventional rural bank is a form of a microfinance institution that originated in Indonesia. BPR was authorized to operate under Banking Law No. 7 of 1992, as revised by Act No. 10 of 1998. Additionally, Sharia-based business activities, according to Law No. 21 of 2008, are activities that do not include elements of riba (illegitimate income), maysir (speculation), gharar (unclear objects), haram (forbidden objects), or zalim (unfairness to others). Riba, for example, may occur in transactions involving the exchange of goods that are not of the same quality, quantity, or delivery time (fadhl) or in lending transactions that require the borrower to return the funds received more than the principal loan because of the passage of time (nasi'ah). Transactions that do not adhere to these principles are considered noncompliant with Sharia law.

The law stipulates that rural banks conduct business in a traditional manner based on Sharia principles, also known as Bank Pembiayaan Rakyat Syariah (BPRS), and do not provide payment traffic services in their operations. Rural banks differs from commercial banks in terms of its lower capital requirements and its focus on meeting the credit needs of underrepresented groups in society, including farmers, fishermen, small traders, employees, retirees, and others, to avoid their exploitation by loan sharks (Iswandari and Anan, 2015). An Islamic bank is a bank that conducts business activities or operates based on Sharia principles and does not rely on interest in providing financing and other services in payment transactions (Muhammad, 2005). The Banking Booklet of Indonesia 2014 outlines the Sharia principles that Sharia banks must adhere to. The principles are based on fulfilling the fundamental principles of Islamic law, which include justice and balance (adl wa tawazun), benefits (maslahah), universalism (alamiyah), and avoiding gharar, maysir, riba, injustice, and forbidden objects. Shariah banks follow these principles by raising money using contracts such as wadi'ah and mudharabah and funding disbursement or financing using contracts such as mudharabah, musyarakah, murabahah, salam, istishna, ijarah, ijarah muntahiya bittamlik, and qardh. They also provide services using contracts such as kafalah, hawalah, and sharf.

As for the legal forms of rural banks, they are: limited liability company, cooperative, or regional company. The business activities carried out by rural banks in accordance with the 2014

Indonesian Banking Booklet include: collecting funds from the public in the form of time deposits, savings, and/or other similar forms; providing loans; and placing their funds in the form of SBI, time deposits, certificate of deposits, and/or savings in different banks.

Rural banks are specialized banks that focus on providing financial services to individuals and small businesses in rural areas. These services typically include loans and savings accounts. Rural banks are regulated by the Indonesian Financial Services Authority (OJK) and must comply with certain capital and operational requirements. They serve as an alternative funding source for those who may need access to traditional banks or financial institutions.

Sharia rural banks, on the other hand, are sharia-compliant rural banks that follow Islamic principles in their banking operations. They offer similar financial services to rural banks, such as loans and savings accounts, but operate under different rules and regulations. Sharia rural banks are also regulated by the Indonesian Financial Services Authority (OJK) and must meet specific operational and capital requirements.

Both conventional and sharia rural banks aim to support the financial needs of individuals and small businesses in rural areas. Additionally, they often provide financial education and other support services to help clients improve their financial literacy and business skills. Overall, these rural banks play an essential role in providing financial services and promoting financial inclusion in Indonesia.

Contingency Theory

Contingency theory is a management concept that asserts that no one-size-fits-all approach or management style is appropriate for every situation. This means that a management style that works well in one situation may only work well in one situation. Managers must therefore adapt their management style to the circumstances they face. The importance of selecting an appropriate management style based on factors such as company structure, technology, the external environment, human resources, and company objectives is highlighted by contingency theory. A participative management style, for example, may be more effective in a company focused on innovation and creativity, whereas an authoritative management style may be more appropriate in companies with a bureaucratic structure.

The concept of contingency is more than just knowing that different company conditions require different management approaches. In addition, the concept emphasises the importance of the company's leaders being able to know and understand the situation that the company is facing, as well as the importance of making the right choice of management style in the face of the problem. This suggests that managers should have the ability to analyse situations, identify factors, and choose the management style most suitable for the situation based on the factors that have been identified. In addition, the company's leaders should be flexible enough to change the management approach if the situation changes or if the current approach does not produce the expected output.

The contingency theory in banking is the idea that there is no one-size-fits-all approach to managing a bank. Rather, the approach to managing a bank should be contingent on the unique circumstances, challenges, and opportunities that each bank faces. In the context of banking, the contingency theory suggests that bank managers should evaluate the internal and external factors that affect their bank's performance and tailor their management practices accordingly.

This means that there is no one set of best practices that can be applied to all banks, but rather that the best management practices will depend on the specific context of the bank.

For example, a bank operating in a rapidly growing market with high levels of competition may need to focus on innovation and differentiation to remain competitive, while a bank operating in a more stable market with a strong brand reputation may need to focus on maintaining customer loyalty through consistent and high-quality service. Overall, the application of contingency theory in banking suggests that successful management of a bank requires an understanding of the unique circumstances, challenges, and opportunities that each bank faces and the ability to adapt management practices to these unique circumstances.

In practice, contingency theory can help managers choose the most suitable management style for the situation and conditions they face. Thus, managers can achieve organizational goals more effectively and efficiently. Contingency theory suggests that the effectiveness of an organization's decision-making processes depends on various internal and external factors, including the organization's structure, culture, size, and technology, as well as the nature of the task at hand and the external environment (Zeithaml & Zeithaml, 1988).

The process of reorganizing actions taken, such as decreasing the minimum obligations of debtors who are facing difficulties, postponing payments, extending timeframes, or decreasing interest rates, is known as restructuring. The objective of restructuring for banks is to assist debtors in resolving their outstanding debts. For debtors, restructuring is a viable alternative when a business is experiencing financial difficulties, has substantial liabilities, and possesses significant intangible assets (Gilson et al., 1990; Forgione & Migliardo, 2019; Bawa & Basu, 2020).

In the case of rural banks restructuring their loans during the COVID-19 pandemic, the theory suggests that the effectiveness of their decision-making processes depends on a range of factors, such as the size and complexity of the BPR, the type of loans and borrowers, the severity of the pandemic's impact on the local economy, and the availability of government support.

Therefore, rural banks need to consider these contingencies when making decisions about loan restructuring during the pandemic. For example, they may need to assess the financial health of borrowers, the risks associated with different types of loans, and the potential impact of government policies on loan restructuring. They may also need to consider the effectiveness of their existing loan restructuring processes and systems and adapt them to meet the needs of the pandemic situation. Overall, contingency theory suggests that effective decision-making in loan restructuring during the COVID-19 pandemic requires rural banks to be flexible, adaptive, and responsive to the unique circumstances of their organization and the external environment (Bartik et al., 2020).

Loan Restructuring

Based on Indonesian Financial Services Authority Policy Number 33 (POJK 33), there are several types of loan restructuring that can be done, including: 1) Extension of loan term (tenor): This restructuring is done by extending the loan term so that the monthly installment becomes smaller. However, extending the loan term will increase the amount of interest that must be paid in the end. 2) Deferral of principal and interest payments: This type of restructuring provides flexibility to borrowers by deferring the payment of principal and interest for a certain period of time. However, this deferral is usually followed by higher interest rates in the future. 3) Conversion of interest type: This restructuring is done by changing the type of interest charged

on the loan, for example, from fixed interest to floating interest or vice versa. This can be done to adjust the installment payment to the borrower's financial ability. 4) Partial debt forgiveness: This restructuring is done by forgiving some of the borrower's debt so that the amount of debt to be paid becomes smaller. However, this forgiveness is usually only given to borrowers who are experiencing severe financial difficulties. 5) Combination of several types of restructuring: This type of restructuring is done by combining two or more types of restructuring to provide the best solution for borrowers who are experiencing financial difficulties.

Restructuring is an attempt by the government to tackle various financial issues that arise due to the COVID-19 pandemic. The restructuring is essential for the banking system to prevent future losses (Kloks, 2021; Teresien et al., 2021). It is important to remember that loan restructuring should be done carefully and after carefully considering the borrower's financial ability, because restructuring done carelessly can have a worse impact in the long run.

The effectiveness of loan restructuring in the banking industry is still unclear, as different studies have conflicting opinions. Some research indicates that banks utilize loan restructuring as a means of reallocating resources and capital to support new lending, which can enhance the efficiency of loan recovery by providing a more cost-effective alternative to lengthy legal proceedings (Ahamed & Mallick, 2017; Collins, Shackelford & Wahlen, 1995; Moyer, 1990). The effectiveness of this practice has been the subject of debate among researchers, with differing opinions on whether it is a useful tool for improving loan recovery efficiency or just another form of evergreening loans. Banks use loan restructuring as a way to free up resources and capital that can be used to support new lending. This is seen as a more cost-effective alternative to lengthy legal proceedings, which can tie up resources and delay the recovery of funds. By restructuring the loan of a borrower, the bank can improve its chances of recovering the loan and provide the borrower with a better chance of avoiding default.

However, other studies argue that loan restructuring is simply another method of loan evergreening. Banks continuously renew their loans to maintain their profitability and ensure that capital requirements do not pose a risk to their financial stability (Caballero, Hoshi, & Kashyap, 2008; Peek & Rosengren, 2005). These studies suggest that loan restructuring is viewed as a type of "evergreen" loan by some researchers, as banks repeatedly extend the loans of their struggling borrowers to protect their profitability and evade provisioning requirements that may endanger their financial stability. Consequently, loan restructuring is seen as a tactic for delaying provisioning and avoiding losses rather than genuinely assisting borrowers in repaying their debts. The differing views among scholars underscore the ongoing discussion on the effectiveness of loan restructuring in the banking sector.

Non Performing Loan

Non-performing loans are loans that cannot be paid on time or in the manner specified in the loan agreement. Banks classify problem loans or credit risks to estimate the level of potential losses that may occur in their loan portfolios. Some common classifications of problem loans used by banks include: 1) Non-performing loans (NPLs): NPLs are loans that have matured for more than 90 days and have not been repaid by the borrower. NPLs are considered the highest risk for banks and require collective action or recovery. 2) Doubtful loans: Doubtful loans are loans that have matured for more than 90 days and the borrower has a history of poor payments. Doubtful loans require special action, such as a larger write-off or reserves. 3) Special mention

loans: Special mention loans are loans that show signs of risk, such as late payments, but have not yet matured for more than 90 days. Special-mention loans require closer monitoring and increased supervision. 4) Performing loans: Performing loans are loans that are paid on time according to the agreement. However, performing loans still need to be monitored to prevent them from becoming problem loans.

When classifying problem loans, banks may also consider other factors such as economic conditions, industry risks, and individual borrower risks. This can help banks manage credit risk and minimize losses in their loan portfolios (POJK 33). A lack of performance in financing can have consequences for the bank's liquidity, solvency, customer trust, potential customers, and overall performance. The efficient performance, survival, and competitiveness of a bank in the industry can be attributed to the level of trust, confidence, and overall health of the bank (Zeitun & Benjelloun, 2013).

In disbursing credit, banks need to conduct a thorough analysis to determine the eligibility of prospective borrowers who will be granted credit to avoid the risk of loan repayment failure. The analysis should at least consider the evaluation of the 5C's. This is the application of prudential banking principles that banks implement to ensure that the credit disbursed does not become a problem in the future. The analysis should at least consider the evaluation of the 5C's (Arthesa and Handiman, 2006) is as follows:

Character.

Assessing the Character of a borrower is utilized to ascertain the degree of the borrower's accountability in meeting installment obligations, including the repayment of both principal and interest payments to other banks, sourced from the borrower's business income. If the borrower pays bills on schedule regularly, it is reasonable to assume that the borrower's Character is favorable. Conversely, if there is a history of the borrower being inconsistent in fulfilling payment obligations, the borrower's Character becomes unfavorable, and the bank must rethink extending credit facilities to the potential borrower

2. Capacity.

The process of evaluating a prospective borrower's business capacity entails an examination of their existing business turnover and total expenses, as well as anticipated loan payments. Moreover, this assessment factors in the future outlook of the borrower's business, their consistent income stream, and their ability to manage both operational and non-operational costs during periods of economic decline.

3. Capital.

The assessment of a borrower's capital is utilized to determine whether their available funds are adequate to sustain their business operations. This examination involves analyzing the assets, capital, and financial reserves of the borrower in order to ascertain their capacity to repay the loan.

4. Collateral.

The Collateral evaluation involves an assessment of the suitability and nature of the collateral that has been offered by the prospective borrower. This assessment takes into consideration various forms of collateral, such as land and buildings, vehicles, business machinery, and inventory owned by the borrower.

5. Condition.

External factors that could impact the prospective borrower's capacity to meet their credit

obligations are assessed. These factors include market conditions, business competition, and broader economic circumstances that may affect the borrower's business.

Understanding the 5C's of credit is essential for borrowers seeking financing and lenders evaluating creditworthiness. Lenders utilize these criteria to assess the borrower's financial standing and potential risks associated with lending. By evaluating a borrower's capacity, capital, collateral, conditions, and character, lenders can make informed decisions about extending credit and managing their risks. Conversely, borrowers who understand the 5C's of credit can work to strengthen their loan profile and position themselves to receive favorable financing terms. Overall, the 5C's of loan are a valuable framework for evaluating creditworthiness and mitigating risks in lending

The presence of a large number of non-performing loans can have negative impacts on banks, as they tend to generate low profits, require high provisions, and demand significant resources to be managed effectively. Such loans may also consume a considerable amount of managerial attention, which could result in negative consequences in terms of efficiency and new activities. Additionally, non-performing loans are frequently employed as a means of predicting bank failures, which can further increase the funding costs of the affected bank when compared to its peers. These assertions have been supported by various studies, including those conducted by Aiyar et al. (2015), Berger and DeYoung (1997), Caballero et al. (2008), Cucinelli (2015), Blattner et al. (2019), Kaminsky and Reinhart (1999), Kolari et al. (2002), and Lu and Whidbee (2013). Non-performing loans can negatively impact banks in several ways. Firstly, non-performing loans typically generate low profits, which can result in a decrease in revenue for the bank. Secondly, these loans require high provisions, which can be costly for banks to manage. Finally, non-performing loans also demand significant resources, including managerial attention, which can divert resources away from other areas of the bank's operations, negatively affecting efficiency and new activities.

Hypothesis

Loan estructuring is often seen as a strategy to mitigate the risk of non-performing loans by giving borrowers more flexible repayment terms. However, some studies have shown that loan restructuring may actually increase the risk of non-performing loans. This could be due to a number of factors, such as borrowers taking advantage of the leniency and not making timely payments, or the restructuring plan not being effective in addressing the underlying issues that led to the loan default in the first place. If the number of non-performing loans has a high ratio, it will have a negative impact because bank productivity and liquidity will be disrupted (Ganefi & Hatikasari, 2022).

Therefore, the hypothesis is that loan restructuring has a negative effect on the risk of non-performing loans in conventional rural banks and sharia rural banks, meaning that it increases the likelihood of borrowers defaulting on their loans. (Elekdag et al., 2020) Point out that the NPL ratio is another key factor driving overall bank performance and is used as a risk management metric. However, it is important to note that this hypothesis may not hold true in all cases and may depend on various factors, such as the quality of the restructuring plan and the specific characteristics of the borrowers and the industry.

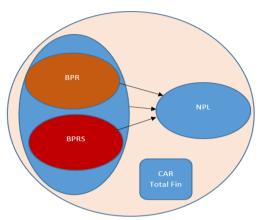


Figure 1. Conceptual framework

H1a: Restructuring credit during COVID-19 pandemic in Conventional rural banks has a negative effect on credit risk (NPL).

H1b: Restructuring credit during COVID-19 pandemic in Sharia rural banks has a negative effect on credit risk (NPF).

RESEARCH METHOD

Data search method in the form of reports from rural banks (BPR) on the empirical analysis of risk assessment We collected data from all BPRs in the city of Surakarta registered with the Financial Services Authority (Otoritas Jasa Keuangan). The presented data set contains cross-sectional observations from 2020 to 2022. The dependent variable uses financing risk, the independent variable uses financing restructuring, and the control variable includes the amount of financing, the amount of financing nominal value that has been restructured, and the CAR (capital adequacy ratio). The variable measurements can be seen in Table 1.

Tabel 1. Definition and Variables

Dependent Variables	Measurement	Reference
Financial Risk	NPL = Number of non- performing loans divided by the number of loans disbursed	
Independent Variable		(Bawa & Basu, 2020)
Credit Restructuring	Number of rural banks that restructure loans	
Control Variables		(Abdelaziz et al., 2022)

Bank Financing	Logarithm Natural Total Financing	
Financing Credit Restructuring	Logarithm Natural Nominal amount of financing restructuring	
CAR	Total capital divided by risk- weighted assets	

This study examines the effect of loan restructuring on credit risk by using the control variables of the amount of restructured financing, financing amount, and CAR (capital adequacy ratio). Therefore, a regression equation is created as follows:

NPL= $\alpha + \beta 1 Retrc + \beta 2 LN_Loan + \beta 3 LNSumres + \beta 4 CAR + e$

RESULT AND DISCUSSION

The descriptive statistical results show that the highest NPL value is 52% and the minimum value is 5.940, with a mean of 0.320. This indicates that the problem financing condition is quite high, where the minimum limit set by Bank Indonesia is 5%.

Table 2. Descriptive Statistic

	NPF	RESTRUC	LN_LOAN	LN_SUMRES	CAR
Mean	8.369	128.897	23.965	21.935	38.261
Median	5.940	69.000	24.433	22.754	30.660
Maximum	52.910	1307.000	27.024	25.131	125.820
Minimum	0.320	0.000	16.992	0.000	5.130
Std. Dev.	6.643	176.316	2.293	2.946	22.480
Skewness	1.757	3.658	-1.598	-2.895	1.680
Kurtosis	7.554	20.399	5.102	16.875	5.909
Observations	653	653	653	653	653

The credit restructuring variable has a maximum value of 1307 and a minimum value of 0. Although there is a policy that allows credit restructuring, there are still some BPRs that do not implement it.

Table 3 Correlation

	NPF	RESTRUC	LN_LOAN	LN_SUMRES	CAR
NPF	1.000	-0.207	-0.099	-0.010	0.101

RESTRUC	-0.207	1.000	0.392	0.369	-0.217
LN_LOAN	-0.099	0.392	1.000	0.863	-0.065
LN_SUMRES	-0.010	0.369	0.863	1.000	0.010
CAR	0.101	-0.217	-0.065	0.010	1.000

The results of the correlation between variables show that nothing exceeds 0.9. This shows that there is no multicollinearity in regression models. Then it can be concluded that the regression model used already meets the requirements of a good regression model.

Tabel 4 Regression

Variable	Model 1		Model 2 (BPR)		Model 3 (BPRS)	
	Coef	t-Stat	Coef	t-Stat	Coef	t-Stat
С	362.551	14.514	348.986	12.830	391.642	5.806
RESTRUC	-0.005	-2.611***	-0.003	-1.675*	-0.037	-1.362
LN_LOAN	-14.736	-14.256***	-13.422	-12.639***	0.489	2.149**
LN_SUMRES	0.306	2.541**	-0.057	-0.244	-21.192	-5.728***
CAR	-0.185	-8.991***	-0.184	-9.386***	-0.210	-2.133**
R-squared Adjusted R-	0.792		0.829		0.560	
squared	0.765		0.807		0.479	
F-statistic Prob(F-	28.898		36.570		6.944	
statistic)	0.000		0.000		0.000	
FEM	0.000		0.000		0.000	
Obs	653		585		72	

^{*} significant 10%, ** significant 5%, ***significant 1%

The regression results show that the restructuring of financing has a negative effect on financing risk. Hypothesis 1 is accepted. while the R-squared value is 79.2%. For testing penel data, a fixed-effect model with a prob value of 0.000 was selected. All control variables also have a significant influence on financing risk variables.

Discussion

Loan restructuring can have a negative impact on non-performing loans because the process can make creditors delay or reduce the recognition of losses on non-current loans. This could make the NPF on the bank's balance sheet appear lower than it should be. The results showed that the amount of restructuring carried out had a negative impact on the risk of BPR financing.

In addition, loan restructuring can extend the repayment period of loans that were originally due, thereby slowing down the process of removing NPF from the bank's balance sheet. In some cases, loan restructuring can even worsen the initially poor loan quality, especially if the process is not carried out carefully and is not accompanied by a careful evaluation of creditor

worthiness. Loan restructuring can affect NPF (non-performing loans) both positively and negatively, depending on how the restructuring process is carried out. Positively, loan restructuring can help reduce the amount of NPF on a bank's balance sheet by extending the repayment period of loans that were originally due or providing other conveniences to debtors in order to repay their loans. This can help banks reduce the burden of losses and improve their financial performance.

However, loan restructuring can also have a negative impact on NPF if it is not done carefully and is not accompanied by a careful evaluation of creditworthiness. If the restructuring process is unsuccessful or worsens the already poor quality of loan, then the NPF on the bank's balance sheet may further increase.

The amount of financing can negatively affect NPLs (non-performing loans). The higher the amount of financing provided by the bank, the greater the potential credit risk that arises. If economic conditions deteriorate or there is an inability to pay on the part of debtors, the bank will face the risk of more and more non-performing loans, or NPLs.

In addition, excessive amounts of financing can also cause liquidity problems for banks. If too much money is lent and not repaid, then banks may have difficulty fulfilling their financial obligations, such as payments of deposits or loans from other banks. Therefore, it is important for banks to conduct a careful evaluation of creditworthiness before providing financing and also to actively monitor loan quality and potential credit risks that arise over time.

Conventional vs sharia rural banks

After conducting a resampling procedure, which differentiated between conventional and sharia rural banks, researchers found that the restructuring of loan facilities affected by the COVID-19 pandemic had an impact on only conventinal rural banks. The research accepted hypothesis H1a, which stated that the restructuring of loan facilities due to COVID-19 had a significant impact on conventional rural banks, concurred with the suppositions and investigation of Tedeschi et al. (2020). However, hypothesis H1b, which stated that credit restructuring affected by COVID-19 had no significant impact on sharia rural banks, was rejected. Agreed with research of Wahyuni et al. (2021) stated that, In order to improve the state of Indonesian banking, the banking restructuring policy has not been effective.

Furthermore, the study found that control variables such as loan amount and CAR ratio had a negative effect on credit risk in conventional rural banks. Conversely, in sharia, an increased amount of restructuring had a negative effect on credit risk. In other words, more restructuring in sharia rural banks led to higher credit risk, while a higher loan amount and CAR ratio in conventional rural banks led to lower credit risk. The sample analyzed in the study had several sharia rural banks that did not undergo loan restructuring due to the COVID-19 pandemic, resulting in no significant impact on NPF. However, all rural banks underwent loan restructuring due to the pandemic, which had a significant impact on NPL. The findings suggest that the impact of the COVID-19 pandemic on credit facilities was more severe in conventional compared to sharia rural banks.

This research suggests that the impact of the COVID-19 pandemic on credit facilities varied depending on the type of financial institution. The study found that loan restructuring had a significant impact on conventional rural banks, while it did not significantly impact sharia rural banks. Control variables such as loan amount and CAR ratio also had a negative effect on credit

risk in conventional rural banks, while an increased amount of restructuring had a negative effect on credit risk in sharia rural banks. These findings provide important insights for policymakers and financial institutions in managing credit risk during economic crises such as the COVID-19 pandemic.

CONCLUSION

The study found that financial restructuring has a negative impact on financing risks for rural banks. This means that restructuring can worsen the risk of default on loans for rural banks. On the other hand, the study did not find a significant impact of restructuring on sharia rural banks, which is an Islamic microfinance bank. This is mainly due to the low number of restructurings financed by Islamic banks. The statement further suggests that the government's policy, as implemented by the OJK (Indonesia's financial services authority), in mitigating the impact of COVID-19 through financing restructuring is appropriate. This means that the government's efforts to restructure financing to help mitigate the economic impact of the pandemic are effective.

However, the statement also notes that the study's sample is limited to the Surakarta region, which may not fully represent the national situation. Therefore, further research is needed to expand the scope to a national level and fully understand the impact of financing restructuring on rural banks and Islamic microfinance banks in Indonesia.

REFERENCE

- Abdelaziz, H., Rim, B., & Helmi, H. (2022). The interactional relationships between credit risk, liquidity risk and bank profitability in MENA region. *Global Business Review*, 23(3), 561–583.
- Ahamed, M. M., & Mallick, S. (2017). Does regulatory forbearance matter for bank stability? Evidence from creditors' perspective. *Journal of Financial Stability*, 28, 163–180. https://doi.org/10.1016/J.JFS.2017.01.001
- Aiyar, S., Bergthaler, W., Garrido, J.M., Ilyina, A., Jobst, A., Kang, K., Kovtun, D., Liu, Y., Monaghan, D. & Moretti, M. (2015). A strategy for resolving Europe's problem loans. IMF Staff Discussion Note No 15/19.
- Arthesa Ade dan Handiman Edia. 2006. *Bank dan Lembaga Keuangan Bukan Bank*. PT Indeks Kelompok Gramedia. Jakarta
- Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *How are small businesses adjusting to COVID-19? Early evidence from a survey*. National Bureau of Economic Research.
- Bawa, J. K., & Basu, S. (2020). Restructuring assets reform, 2013: Impact of operational ability, liquidity, bank capital, profitability and capital on bank credit risk. *IIMB Management Review*, 32(3), 267–279. https://doi.org/10.1016/j.iimb.2019.10.009
- Berger, A. & DeYoung, R. (1997). Problem loans and cost efficiency in commercial banks. Journal of Banking & Finance, 21(6), 849-870. https://doi.org/10.1016/S0378-4266(97)00003-4
- Blattner, L., Farinha, L. & Rebelo, F. (2019). When losses turn into loans: the cost of undercapitalized banks. ECB Working Paper Series No. 2228.

- Caballero, Ricardo J., Takeo Hoshi and Anil K. Kashyap. 2008. "Zombie Lending and Depressed Restructuring in Japan." American Economic Review, 98(5):1943-77
- Collins, J. H., Shackelford, D. A., & Wahlen, J. M. (1995). *Bank Differences in the Coordination of Regulatory Capital, Earnings, and Taxes*. Journal of Accounting Research, 33(2), 263. doi:10.2307/2491488
- Cucinelli, D. (2015). The impact of non-performing loans on bank lending behaviour: evidence from the Italian banking sector. Eurasian Journal of Business and Economics, 8 (16), 59-71. https://doi.org/10.17015/ejbe.2015.016.04
- Elekdag, S., Malik, S., & Mitra, S. (2020). Breaking the bank? A probabilistic assessment of Euro area bank profitability. *Journal of Banking & Finance*, 120, 105949.
- Forgione, A. F., & Migliardo, C. (2019). An empirical analysis of the impact of trade credit on bank debt restructuring. *Economia Politica*, *36*(2), 415–438. https://doi.org/10.1007/s40888-018-0110-x
- Ganefi, G., & Hatikasari, S. (2022). The Impact of Covid-19 Outbreak on Banking Policies in Indonesia. *Jurnal Scientia Indonesia*, 8(1), 1–36.
- Gilson, S. C., John, K., & Lang, L. H. P. (1990). Troubled debt restructurings An empirical study of private reorganization of firms in default*. In *Journal of Financial Economics* (Vol. 27).
- Iswandari, M., Anan, E., 2015. Kinerja Keuangan Bank Perkreditan Rakyat dan Bank Pembiayaan Rakyat Syariah : Studi Kasus di daerah istimewa Yogyakarta. Jurnal Riset Akuntansi dan Keuangan 11 (1), 3145.
- Kaminsky, G. & Reinhart, C. (1999). The twin crises: the causes of banking and balance-of-payments problems. American Economic Review, 89(3), 473-500. https://doi.org/10.1257/aer.89.3.473
- Kloks, P. (2021). Matthias Thiemann: The Growth of Shadow Banking: A Comparative Institutional Analysis. *Financial Markets and Portfolio Management*, *35*(2), 269–272. https://doi.org/10.1007/s11408-021-00378-4.
- Kolari, J., Glennon, D., Shin, H. & Caputo, M. (2002) Predicting large US commercial bank failures. Journal of Economics and Business, 54(4), 361-387. https://doi.org/10.1016/S0148-6195(02)00089-9
- Lu, W. & Whidbee, D. (2013). Bank structure and failure during the financial crisis. Journal of Financial Economic Policy, 5, 281-299. https://doi.org/10.1108/JFEP-02-2013-0006
- Moyer, S. E. (1990). Capital Adequacy Ratio Regulations And Accounting Choices In Commercial Banks. In *Journal of Accounting and Economics* (Vol. 13).
- Muhammad. (2005). Manajemen Bank Syariah. Yogyakarta: UPP AMP YKPN.
- Peek, Joe, and Eric S. Rosengren. 2005. "Unnatural Selection: Perverse Incentives and the Misallocation of Credit in Japan." American Economic Review, 95 (4): 1144-1166.
- Tedeschi, G., Vidal-Tomás, D., Delli-Gatti, D., & Gallegati, M. (2021). The macroeconomic effects of default and debt restructuring: An agent based exploration. *International Review of Economics and Finance*, 76, 1146–1163. https://doi.org/10.1016/j.iref.2021.08.003
- Teresienė, D., Keliuotytė-Staniulėnienė, G., & Kanapickienė, R. (2021). Sustainable Economic Growth Support through Credit Transmission Channel and Financial Stability: In the Context of the COVID-19 Pandemic. *Sustainability*, 13(5), 2692. https://doi.org/10.3390/su13052692.



- Wahyuni, S., Pujiharto, Azizah, S. N., & Zulfikar. (2021). "Impact of the COVID-19 pandemic and New Normal implementation on credit risk and profitability of Indonesian banking institutions." Banks and Bank Systems, 16(3), 104–112. https://doi.org/10.21511/bbs.16(3).2021.10
- Zeithaml, V. A., & Zeithaml, C. P. (1988). The contingency approach: its foundations and relevance to theory building and research in marketing. *European Journal of Marketing*, 22(7), 37–64.
- Zeitun, R., & Benjelloun, H. (n.d.). The Efficiency of Banks and Financial Crisis in a Developing Economy: The Case of Jordan.