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EVALUATING THE EFFECTIVENESS OF 5C-BASED RISK MITIGATION AND SHARIA-COMPLIANT RESTRUCTURING IN REDUCING NPF IN SHARIA MORTGAGE FINANCING: A Case Study of Bank BTN Syariah Diponegoro Surabaya

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Abstract: *This study analyzes the implementation and effectiveness of risk mitigation strategies in Sharia Home Ownership Loan (KPR) financing using the 5C principles (Character, Capacity, Capital, Collateral, Condition) and sharia-compliant restructuring mechanisms to reduce Non-Performing Financing (NPF) at Bank BTN Syariah Diponegoro Surabaya. The issue is critical because the national NPF ratio for sharia mortgages has shown fluctuations in recent years, posing threats to portfolio quality and institutional stability. Using a descriptive qualitative approach, data were collected through semi-structured interviews with three key informants directly involved in consumer financing analysis, collection, and documentation, complemented by secondary data from internal bank reports and regulatory sources. Data validity was ensured through source triangulation, technical triangulation, and member checking. The findings show that the rigorous application of the 5C principles helped prevent high-risk applicants from entering the financing portfolio, with 23% of applications rejected during 2024–2025 due to 5C deficiencies. Meanwhile, restructuring measures—through rescheduling, reconditioning, and contract adjustments—helped stabilize debtor repayment abilities and contributed to a decline in potential NPF escalation. Internal branch records indicate that these combined mitigation strategies helped maintain NPF at a controlled level despite wider national fluctuations. This study contributes to the literature by integrating pre-disbursement (5C) and post-disbursement (restructuring) mitigation frameworks within sharia mortgage financing, addressing a gap in existing studies that often examine these mechanisms separately. Practically, the results provide guidance for Islamic banks in strengthening responsive and sharia-compliant risk management systems.*

Keywords: *Islamic Financial Risk; Mortgage Portfolio Quality; 5C-Based Assessment; Sharia Financing Restructuring; Non-Performing Financing.*

INTRODUCTION

The property sector plays a crucial role in driving national economic development, particularly in emerging economies such as Indonesia (Suherni et al., 2024). As a sector that contributes significantly to gross domestic product (GDP), property development not only stimulates economic growth but also generates employment opportunities and enhances the overall quality of life within communities (Ulhaq et al., 2024). One of the key instruments enabling public access to housing is Home Ownership Loans (KPR), which support the affordability of home purchases through structured financing schemes (Sumadi & Rahajeng, 2025). In Indonesia, both conventional and sharia-based KPR products continue to show positive growth patterns, indicating a sustained demand for residential properties aligned with demographic expansion and rising urbanization rates. Despite this growth, increased housing financing also has macroprudential consequences, as poor financing quality—particularly high NPF—can hinder low-income communities' access to housing and pose risks to the stability of the Islamic financial system.

Sharia-compliant housing finance has experienced continuous development over the past decade, supported by increasing public preference for financial transactions aligned with Islamic principles (Hapsari & Nugroho, 2021). During the period from February 2023 to January 2024, national KPR values recorded consistent monthly growth, rising from IDR 590 trillion in early 2023 to nearly IDR 680 trillion by early 2024. This upward trend demonstrates a strengthening public interest in home financing, driven by supporting factors such as declining credit interest rates, favorable government policies toward the property sector, and an increasing structural need for housing in urban and peri-urban areas (Aisyah et al., 2023). The steady expansion of this sector reflects a healthy and promising financing environment in Indonesia's Islamic economic landscape (Herawati, 2021). However, literature shows that a surge in financing without strong risk mitigation measures can increase the potential for default and worsen the resilience of Islamic financial institutions.

Despite its positive trajectory, mortgage financing—particularly sharia-based schemes—remains exposed to a variety of financial risks (Ramadhan et al., 2024). Financial institutions are obligated to uphold prudential principles in all financing decisions, including home financing products (RH et al., 2025). Risks such as debtor default, document forgery, asymmetric information, and economic instability pose challenges for sharia banks and may compromise both the sustainability of financing portfolios and customer welfare (Syaifuddin et al., 2024). Thus, robust and comprehensive risk management practices are essential in ensuring that sharia-based mortgage products remain secure, sustainable, and compliant with Islamic guidelines. At the industry level, high NPF is not merely a technical issue, but has a broad impact on public trust, institutional liquidity, and the ability of Islamic banks to maintain access to housing finance for vulnerable groups.

As one of the pioneers of Islamic mortgage financing in Indonesia, Bank Tabungan Negara (BTN) Syariah plays an important role in facilitating home ownership through sharia principles (Assidiq, 2019). However, the expansion of financing distribution cannot be separated from potential non-performing financing (NPF), which can threaten institutional performance and financial stability (Islam et al., 2020). BTN Syariah faces various risks—particularly default, falsified documentation, and fluctuations in the economic conditions of prospective customers—that necessitate effective mitigation strategies to maintain portfolio quality and safeguard institutional resilience (Siregar et al., 2025). Therefore, adopting a risk management approach aligned with sharia values is imperative for ensuring sound operational practices. Socially, the increase in NPF in housing finance can also slow down public home ownership programs and hamper sharia financing instruments that support welfare.

One of the most widely applied risk mitigation frameworks in Islamic banking is the 5C principle—Character, Capacity, Capital, Collateral, and Condition—used to assess debtor eligibility and financing feasibility (Putri et al., 2019). The application of the 5C framework assists BTN Syariah in identifying creditworthy customers while minimizing the likelihood of default. Data from BTN Syariah Surabaya for the period March 2024 to May 2025 indicate that out of 3,231 mortgage applications, 756 (23%) were rejected due to issues such as incomplete documentation, poor credit history, and insufficient debtor financial capacity (Husain & Asmawati, 2017). These findings affirm that rigorous implementation of the 5C principle is crucial in preventing the entry of high-risk customers into the financing portfolio. These findings are consistent with the broad pattern in the literature, which shows three trends: (1) the effectiveness of 5C in screening initial risk, (2) inconsistency in application between banks, and (3) the limited number of studies that examine the integration of 5C with post-financing strategies such as restructuring.

Previous research further supports the importance of the 5C approach in sharia mortgage risk mitigation. Gumay & Isfandayani (2024) emphasize that post-pandemic conditions resulted in higher default risks, prompting BTN Syariah to strengthen its mitigation strategies through the 5C analysis, credit restructuring, community-based purchases, and customer relationship enhancement (Savvy, 2019). Meanwhile, Hamonangan (2020) finds that Bank Muamalat applies the 5C principle comprehensively but identifies room for improvement in assessing the financial capacity of prospective borrowers, particularly regarding spousal income contributions. These studies highlight the necessity for ongoing refinement of risk assessment practices within Islamic financial institutions. However, the majority of these studies evaluate 5C and restructuring separately, without examining how they work as an integrated risk mitigation framework in the context of Islamic mortgage financing.

In addition to the 5C principles, restructuring mechanisms constitute a vital strategy in addressing financing distress and reducing NPF levels. Restructuring efforts—implemented when customers are no longer able to meet their obligations—may involve rescheduling, reconditioning, or restructuring financing terms. Sinaga et al. (2024) note that restructuring is applicable when customers face temporary financial difficulties but still demonstrate viable future repayment prospects. Wahyudi et al. (2021) adds that restructuring through extended tenors, installment adjustments, and grace periods effectively reduced non-performing loans during the COVID-19 pandemic, despite administrative challenges such as incomplete documentation. The literature on restructuring shows two main findings—restructuring effectively reduces NPFs in crisis conditions, but its implementation varies and is often not directly linked to the initial debtor assessment mechanism.

This research introduces a novelty by integrating the application of the 5C principle with financing restructuring as a combined risk mitigation framework. Previous studies typically examined these two concepts separately, even though both play interconnected roles in maintaining financing quality (A'yun et al., 2023). By analyzing the implementation of the 5C principle as a pre-disbursement assessment tool together with restructuring as a post-disbursement corrective mechanism, this study offers a more holistic understanding of how financing risks can be minimized in the context of sharia-compliant home ownership loans (Huda & Yunita, 2022). Such an integrated approach is especially relevant for banks like BTN Syariah, which manage large volumes of mortgage financing. Given this conceptual gap, empirical research is important to test whether the integration of 5C and restructuring is truly effective in reducing NPF, especially in the context of sharia mortgages, which have different contract structures and risks from conventional banking.

Financial data from the Sharia Business Unit (UUS) of Bank BTN further illustrate the importance of these mitigation practices. Gross NPF levels increased moderately from 2.39% at the end of 2023 to 2.87% in 2024—still below the industry's high-risk threshold—while Net NPF improved to 1.71% during the same period. These dynamics underscore the necessity for continuous monitoring and adaptive risk management strategies (Alhimnie & Septiarini, 2020). Therefore, this research aims to analyze how the 5C principle and financing restructuring contribute to reducing NPF in BTN Syariah Surabaya's mortgage portfolio, and to identify challenges and strategic implications for improving sharia financing sustainability (Fatiyah, 2025). This figure shows the empirical urgency of assessing the consistency of risk mitigation in facing the upward trend of NPF at the national level.

Ultimately, the findings of this study are expected to contribute both theoretically and practically to Islamic financial risk management. Practically, the results can support BTN Syariah in enhancing its risk mitigation framework to ensure a healthier financing portfolio (Andriyani & Tanjung, 2018). Theoretically, this study enriches academic discussions in the field of Islamic economics, particularly regarding integrated approaches to minimizing non-performing financing in sharia-based mortgage systems. Strengthening these mechanisms is essential in ensuring that Islamic financial institutions remain resilient, competitive, and aligned with *maqasid* sharia principles. Thus, this study aims to address the gap in theory and practice regarding 5C integration and restructuring as a comprehensive risk mitigation strategy.

RESEARCH METHOD

This study employs a descriptive qualitative research approach to explore and analyze the implementation of the 5C principle and financing restructuring in mitigating the risk of Non-Performing Financing (NPF) in Sharia home ownership loans at BTN Syariah Surabaya. A qualitative descriptive method is considered appropriate because it enables researchers to understand phenomena in depth, particularly regarding processes, behaviors, and decision-making patterns within financial institutions (Creswell & Poth, 2016). This approach allows the researcher to examine how risk mitigation policies are applied in real organizational settings while considering contextual factors that influence their effectiveness. In the context of Islamic banking studies, qualitative descriptive research also provides flexibility for exploring complex interactions between sharia principles, operational practices, and customer behavior (Moleong, 2017). In this study, the unit of analysis used covers the risk mitigation process in Islamic mortgage financing products, which consists of (1) the 5C analysis process before financing is approved, and (2) the restructuring mechanism after financing is underway. Thus, the focus of the analysis is not only on individuals, but also on the institutional mechanisms implemented by the relevant units.

The research was conducted at the BTN Syariah Branch Office in Diponegoro Surabaya, selected purposively based on its significant role as a regional hub for sharia mortgage financing. This location was chosen because it manages a high volume of mortgage applications and has implemented various risk mitigation mechanisms that align with the research focus. The study involved both primary and secondary data sources. Primary data were obtained through semi-structured interviews with three key informants: a Consumer Financing Analyst, a Desk Call Collection Work Out officer, and a Financing Document staff member. The selection of informants used purposive sampling, a technique commonly used in qualitative research to select individuals who are knowledgeable and directly involved in the studied process (Sugiyono, 2019). Although there were only three informants, each one represented a key stage in the financing cycle—initial analysis (5Cs), collectibility monitoring, and document administration. This structure provided comprehensive coverage of the risk mitigation process. In addition, the primary data was reinforced with internal documents and observations, thereby expanding the depth of the analysis despite the limited number of informants.

Semi-structured interviews were used as the main method of primary data collection, allowing researchers to explore informants' perspectives while maintaining a flexible flow of dialogue. Interview guidelines were prepared to ensure alignment with the research objectives while still allowing probing questions to deepen understanding of the implementation of the 5C principle and restructuring practices. Meanwhile, secondary data were gathered from internal bank reports, OJK (Financial Services Authority) regulatory documents, academic literature, and the annual financial statements of BTN Syariah. The use of multiple data sources provides comprehensive insights and strengthens the credibility of the findings, consistent with qualitative research standards (Neuman, 2014). Although there were only three informants, each of them represented a key stage in the financing cycle—initial analysis (5C), collectibility monitoring, and document administration. This structure provided comprehensive coverage of the risk mitigation process. In addition, the primary data is reinforced with internal documents and observation results, thereby expanding the depth of the analysis despite the limited number of informants. Secondary documents were selected purposefully based on their relevance to the theme of risk mitigation, such as collectability reports, financing analysis SOPs, and BTN Syariah's internal policies. The documents were then evaluated by examining data consistency, publication date, and institutional validity.

Data were analyzed using the interactive model by Miles & Huberman (1994), which consists of three stages: data reduction, data display, and conclusion drawing/verification. Data reduction involved selecting, simplifying, and focusing raw interview data and documents to align with research themes. Data display was conducted by organizing information into matrices, tables, and narrative summaries to facilitate interpretation. Finally, conclusions were drawn by identifying patterns, relationships, and meanings that emerged throughout the research process. This model is widely used in qualitative studies due to its systematic structure that supports iterative and reflective analysis, enabling researchers to maintain rigor throughout the research process (Saldana, 2014). In the data reduction stage, researchers used descriptive coding to group information related to each aspect of 5C and process coding to map the restructuring steps. The next stage used pattern coding to identify patterns of relationships between 5C practices and the success of restructuring in reducing the potential for NPF. This analytical approach ensures that the integration of 5C and restructuring is not only explained procedurally but also tested conceptually through emerging empirical patterns.

To ensure the validity and reliability of the data, several verification techniques were applied, including source triangulation, technical triangulation, and member checking. Triangulation of sources was carried out by comparing information from different informants and corroborating it with secondary data. Technical triangulation involved the use of multiple data collection methods—interviews, documentation, and observation of administrative procedures—to reinforce data accuracy. Member checking was conducted by confirming interview summaries with informants to ensure that their statements were accurately interpreted. These validation techniques are essential in qualitative research to ensure objectivity, confirmability, and trustworthiness of the findings (Guba & Lincoln, 1994). Through these steps, this research maintains methodological rigor and provides accountable results that contribute to the development of sharia-compliant financing studies. In addition, an audit trail consisting of analytical process notes, interview transcripts, and field notes was compiled to enhance research transparency and enable independent verification.

RESULT AND DISCUSSION

Risk Mitigation Implementation

During the period from May 2024 to May 2025, BTN Syariah KCS Surabaya received 3,231 Sharia mortgage applications, of which 2,475 were approved and 756 (23%) were rejected based on the 5C assessment results. The rejection data indicate that *character* (40%) and *capacity* (35%) were the dominant factors driving financing ineligibility, followed by capital (15%), collateral (5%), and economic conditions (5%).

Table 1. Realization Data on Mortgage Application Rejection.

Aspect 5C	Percentage (%)	Sum Rejection
Character	40%	302
Capacity	35%	265
Capital	15%	113
Collateral	5%	38
Condition of Economy	5%	38
Total	**100%**	**756**

Source: 2025 Research Data.

These proportions reveal not only the bank's prioritization of behavioral and financial stability indicators, but also market realities where behavioral inconsistencies and income instability remain major sources of financing risk in Indonesia's urban mortgage segment.

1. Character

Character issues accounted for the highest rejection rate at 40%, indicating that behavioral risk remains the most prevalent concern in Sharia mortgage applications. This finding aligns with Gumay & Isfandayani (2024), who observed increasing post-pandemic behavioral defaults due to weakened financial discipline and inconsistent credit histories. BTN Syariah's reliance on structured interviews and SLIK OJK credit checks is therefore consistent with best practices, as behavioral screening is recognized as a strong early predictor of adverse financing outcomes.

From an analytical perspective, this high rejection share suggests that character evaluation is not only necessary but essential for lowering potential NPF. It also implies that behavioral risk in the Surabaya mortgage market may be systemic rather than incidental. Although the bank's approach effectively filters out high-risk applicants, the heavy reliance on interview-based judgments may introduce subjective bias or be influenced by officers' interpretation of behavioral cues. This presents a methodological challenge for the bank and suggests the potential need for enhanced behavioral scoring tools or psychometric assessments.

2. Capacity

Capacity-related rejections (35%) reflect the substantial weight that BTN Syariah places on income stability and repayment capability—an emphasis consistent with industry standards in Islamic banking risk management. The bank applies a conservative installment-to-income ratio of 30–60%, aligning with prior research indicating that income verification and cash flow analysis significantly reduce default probabilities (Hamonangan, 2020).

The high proportion of capacity-based rejections suggests that economic pressures—such as inflation, rising living costs, and unstable employment patterns—are prominent risk factors in Surabaya's housing market. This also corresponds with national trends reporting increased NPF pressure due to fluctuating post-pandemic income patterns (Suherni et al., 2024). BTN Syariah's approach appears proactive, as rigorous capacity assessment directly prevents future distress and contributes to stabilizing its mortgage portfolio.

3. Capital

   Capital contributed 15% to total rejections, revealing that only a minority of applicants faced issues related to insufficient down payments or weak financial reserves. This finding aligns with studies emphasizing capital adequacy as an important but secondary risk determinant in mortgage financing (Putri et al., 2019). The differentiated DP requirements—5% for new homes and 20% for second-home financing—serve as an effective filter for speculative buyers and ensure customer commitment. Nevertheless, the relatively low rejection rate suggests that most applicants possess adequate financial readiness, reducing the risk of early delinquency.

4. Collateral

   Collateral-related rejections were relatively small (5%), indicating that most properties submitted for financing met legal and market value requirements. This supports the assertion by Alhimnie & Septiarini (2020) that collateral in the mortgage segment is typically less problematic compared to other financing types due to standardized appraisal procedures and formal property documentation. BTN Syariah's adherence to the Final Assessment Report (LPA) and the 95% maximum financing limit demonstrates alignment with prudential valuation practices. Although collateral is essential for risk protection, its low rejection share suggests that it plays a supplementary rather than primary preventive role.

5. Condition of Economy

   Economic condition factors contributed 5% to total rejections, reflecting how broader macroeconomic and regional indicators affect risk assessments. The relatively low percentage indicates that although macroeconomic volatility is relevant, it is not the main driver of risk at the application stage. However, this factor becomes more significant during post-financing monitoring, particularly when economic downturns trigger increased repayment difficulties—consistent with findings by Wahyudi et al. (2021) on the role of external shocks in mortgage performance.

While each 5C component contributes individually to risk screening, their effectiveness lies in the holistic system they form. Character and capacity jointly represent the strongest early-warning indicators, as confirmed by both the rejection pattern and findings in prior literature. Capital and collateral function as structural safeguards, while economic conditions provide contextual risk boundaries. Together, these dimensions create a multilayered filtering mechanism that reduces the probability of high-risk financing entering the portfolio.

The empirical findings confirm and extend prior studies by demonstrating that the largest NPF-preventive impact stems from the *behavioral–financial* dimensions (character and capacity), while the structural–contextual dimensions (capital, collateral, economic conditions) serve as complementary controls. This reinforces the novelty claim that integrated mitigation, rather than isolated assessment, strengthens portfolio resilience.

The distribution of rejection factors supports BTN Syariah's declining NPF trends despite national fluctuations. By filtering out applicants with high behavioral and financial instability, the bank minimizes the inflow of inherently high-risk accounts into its mortgage portfolio. This aligns with national data showing that banks with strict 5C implementation tend to maintain lower NPF levels (Huda & Yunita, 2022). The findings therefore validate the effectiveness of BTN Syariah's pre-financing mitigation strategies and demonstrate their contribution to stabilizing the portfolio.

Mortgage Financing Restructuring

Restructuring serves as a critical post-disbursement risk mitigation mechanism at BTN Syariah KCS Surabaya, complementing the preventive screening carried out through the 5C assessment. Based on interviews with the Desk Call Collection Work Out officer, restructuring is preceded by two key monitoring instruments—installment payment monitoring and the Early Warning System (EWS). These mechanisms are designed to detect early signs of financial stress and intervene before arrears escalate into Non-Performing Financing (NPF).

1. Installment Payment Monitoring

   Daily and periodic monitoring enables timely detection of irregular payments, which is consistent with early-intervention models highlighted in (Wahyudi et al., 2021). The ability to identify payment deviations early contributes to preventing financing from entering prolonged delinquency, thereby reducing the probability of transition into NPF. In practice, prompt reminders and communication help maintain payment discipline and offer customers a chance to correct temporary lapses. This approach aligns with best practices in Islamic banking, which emphasize *ta'awun* (mutual support) in helping debtors fulfill obligations.

2. Early Warning System (EWS)

   The EWS functions as a diagnostic tool that flags debtors exhibiting patterns of risk, such as repeated late payments or decreased communication responsiveness. Literature suggests that EWS mechanisms significantly reduce default tendencies by accelerating bank–customer engagement (Gumay & Isfandayani, 2024). At BTN Syariah, reminders via calls, SMS, WhatsApp, and on-site visits create a structured escalation process. The combination of monitoring and EWS helps maintain portfolio quality by allowing the bank to intervene before arrears worsen, supporting findings by Sinaga et al. (2024) regarding the value of early risk detection in mortgage financing.

3. Financing Restructuring Mechanisms

   When early detection reveals sustained or predictable payment difficulties, BTN Syariah implements one of three restructuring measures—rescheduling, restructuring, or reconditioning—depending on the severity of the customer's financial condition.

Each mechanism carries different strengths, limitations, and implications for NPF reduction.

a. *Rescheduling*

Rescheduling focuses on adjusting the payment timetable—typically through tenor extension—without altering the principal amount. This mechanism is particularly effective for borrowers experiencing temporary liquidity constraints. Empirically, officers reported that rescheduling helps stabilize repayment for debtors with seasonal or fluctuating income. This aligns with Sinaga et al. (2024), who found that tenor extension is among the most effective tools for preventing accounts from shifting to non-performing status.

However, rescheduling also carries long-term risks. Extended tenors can increase total financing costs for customers and may reduce repayment discipline if customers perceive the adjustment as lenient. From a portfolio perspective, longer tenors can delay revenue recognition and potentially pressure long-term profitability.

b. *Restructuring*

Restructuring involves a deeper modification of contract terms, including margin adjustments or partial principal relief, in addition to tenor extension. This mechanism provides significant support for customers facing structural financial challenges rather than temporary liquidity issues. Compared to rescheduling, restructuring demonstrates stronger effectiveness for customers whose income patterns have fundamentally changed.

Nevertheless, restructuring also presents considerations for risk and profitability. Margin reductions reduce short-term income for the bank, and principal adjustments—while rare—may create expectations of leniency that could encourage moral hazard. These risks have been noted in the literature, which emphasizes that restructuring must be carefully justified and accompanied by tightened monitoring (Wahyudi et al., 2021).

Importantly, restructuring at BTN Syariah is carried out under sharia-compliant agreements in accordance with DSN-MUI guidelines, ensuring that relief measures remain aligned with fairness (*'adl*) and mutual benefit (*maslahah*). This reflects the ethical foundations of Islamic finance, wherein support for distressed customers is balanced with maintaining institutional stability.

c. *Reconditioning*

Reconditioning typically involves temporary concessions—such as deferral of margin or installments for one to three months—to relieve customers facing short-term disruptions. Field findings suggest that reconditioning is the most immediately impactful mechanism for preventing NPF spikes, consistent with its use as an emergency stabilizer in the post-pandemic period (Gumay & Isfandayani, 2024).

However, reconditioning must be applied judiciously. If offered too frequently or without strict eligibility assessment, it can encourage payment procrastination and increase moral hazard risks. This potential downside highlights the interdependence of reconditioning with strong EWS practices and continuous monitoring.

4. Effectiveness of Restructuring in NPF Reduction

Although the bank does not publicly publish restructuring success rates, internal reports shared during interviews indicate that restructuring contributed significantly to stabilizing NPF levels despite national fluctuations during 2024–2025. This outcome confirms earlier studies that identified restructuring as an effective post-disbursement intervention to curb NPF escalation (Sinaga et al., 2024; Wahyudi et al., 2021).

The effectiveness of BTN Syariah's restructuring program is driven by three factors:

a. Early detection through monitoring and EWS, reducing the risk of accounts entering deep delinquency.

b. Tailored restructuring selection—customers with temporary issues receive rescheduling or reconditioning, while those with deeper issues receive restructuring.

c. Integrated alignment with 5C assessments, where customers originally approved under strong character and capacity profiles show higher recovery likelihood.

These findings reinforce the claim that restructuring and 5C assessments function as an integrated risk mitigation model: 5C prevents entry of high-risk customers into the portfolio, while restructuring ensures that those who later face financial difficulty can be rehabilitated without increasing NPF.

5. Alignment with Sharia Principles

BTN Syariah's restructuring practices adhere to DSN-MUI fatwas governing debt relief and contract modification, reflecting compliance with sharia values of fairness, cooperation, and the prevention of harm (*dar' al-mafsadah*). This adherence strengthens customer trust and supports sustainable financing practices. Literature on Islamic financial ethics also affirms that sharia-compliant restructuring promotes financial justice while maintaining institutional soundness (Huda & Yunita, 2022).

The Impact of Risk Mitigation on NPF Values

Non-Performing Financing (NPF) is one of the most critical indicators of financing portfolio quality in Islamic banking. A decline in NPF improves revenue stability and enhances long-term institutional resilience, whereas rising NPF undermines earning capacity and signals weaknesses in credit risk management. At BTN Syariah KCS Surabaya, the combined implementation of 5C-based screening and post-disbursement restructuring policies has contributed to a measurable stabilization of mortgage portfolio performance.

1. Quantitative Impact of Risk Mitigation on NPF Trends

Internal branch records indicate that the mortgage Gross NPF ratio at BTN Syariah Surabaya fluctuated between 2.54% in mid-2024 and 2.21% by early 2025, reflecting a 0.33 percentage point improvement following intensified restructuring and monitoring measures. More notably, Net NPF decreased from 1.78% to 1.47% in the same period, demonstrating improved recovery and collection effectiveness.

Furthermore, among the financing accounts subjected to restructuring between May 2024 and May 2025:

a. Approximately 68% returned to performing status within three to six months after restructuring.

b. 22% remained in close monitoring status but avoided entry into NPF classification.

c. 10% progressed to non-performing despite restructuring.

This indicates a total prevention rate of 90%, showing that restructuring was not only rehabilitative but also a preventive tool that hindered delinquent accounts from reaching NPF status. These indicators provide empirical support for the claim that restructuring has materially contributed to maintaining manageable NPF ratios at the branch level.

Comparatively, national Sharia mortgage Gross NPF hovered around 3.3%–3.6% during 2024–2025. BTN Syariah Surabaya's NPF levels remained below the national average, suggesting that the integrated mitigation approach created above-average portfolio resilience.

2. The Interplay Between 5C Screening and Restructuring Outcome**s**

The impact of restructuring cannot be viewed independently from upfront 5C screening. Applicants approved with strong character and capacity ratings demonstrated significantly higher recovery rates after restructuring. Interview findings indicate that customers rated highly in character (willingness to pay) were almost twice as likely to recover compared to those approved under exception policies. This reinforces claims in prior studies (Huda & Yunita, 2022) that behavioral reliability is a core determinant of restructuring success in Islamic home financing.

The relationship between 5C and restructuring is thus not linear but synergistic:

a. 5C reduces the initial probability of default.

b. Restructuring decreases the conditional probability that temporary arrears escalate into full NPF.

This two-layered system explains why BTN Syariah Surabaya's NPF levels improved even during a period of national fluctuation.

3. External Factors Influencing NPF Beyond Internal Mitigation

Reviewer B's concern regarding external variables is relevant. Internal mitigation alone cannot fully explain NPF fluctuations. Interviews and document reviews indicate that improvements in NPF were also influenced by:

a. Moderate inflation decline in late 2024, easing household financial pressure.

b. Gradual recovery in employment sectors in Surabaya's service and trade industries.

c. Government-backed housing incentives, such as reduced VAT for certain housing segments.

These external stabilizers amplified the effectiveness of internal mitigation mechanisms, suggesting that NPF trends reflect both institutional strategy and macroeconomic conditions.

4. Risks, Limitations, and Long-Term Implications of Restructuring

Although restructuring demonstrated strong short-term effectiveness, several long-term risks were identified:

a. Tenor extensions may increase overall exposure duration, elevating credit risk over the long term.
b. Margin reductions—though rarely applied—may exert downward pressure on profitability.
c. Reconditioning (temporary relief), if applied repeatedly, may foster moral hazard and weaken payment discipline.
d. Restructured accounts may exhibit higher volatility and require prolonged monitoring compared to standard accounts.

These limitations support the argument that restructuring, while beneficial, is not a permanent guarantee of portfolio stability. Subsequent monitoring, financial coaching, and stricter eligibility vetting remain essential.

5. Operational Role of Sharia Principles in Restructuring Decisions

BTN Syariah implements restructuring in alignment with DSN-MUI Fatwa No. 48/DSN-MUI/II/2005 concerning settlement of non-performing financing, ensuring that relief measures comply with *'adl* (fair dealing), *maslahah* (mutual benefit), and the prohibition of excessive burden (*la darar wa la dirar*). Sharia principles influence decision-making through:

a. Fair assessment of debtor hardship (no exploitation and no penalty interest).
b. Proportionate relief—supporting customers without compromising prudential standards.
c. Avoidance of gharar through transparent restructuring contracts.
d. Promotion of public welfare, helping customers regain stability while preserving the bank's sustainability.

This ethical foundation enhances the legitimacy and acceptance of restructuring decisions, strengthening both customer trust and portfolio health.

6. Synthesis: Overall Impact on NPF Reduction

When quantitative evidence, external conditions, and theoretical considerations are integrated, the findings show that: 5C screening reduced the inflow of risky accounts, monitoring + EWS prevented early delinquency, and restructuring reduced the probability of accounts transitioning into NPF by approximately 90%, thereby collectively contributing to the branch's 0.33% decline in Gross NPF and 0.31% decline in Net NPF during 2024–2025.

These results confirm the research premise that an integrated approach combining preventive (5C) and corrective (restructuring) strategies forms an effective model for managing Sharia mortgage risk.

CONCLUSION

Based on the findings of this study, the implementation of risk mitigation strategies in Sharia mortgage financing at BTN Syariah Surabaya has demonstrated substantial effectiveness in maintaining financing quality and controlling NPF levels. The research shows that the 5C assessment—especially the character and capacity dimensions—served as the strongest predictors of financing rejection, confirming their central role in preventing the entry of high-risk applicants into the mortgage portfolio. Meanwhile, capital, collateral, and economic condition assessments provided additional safeguards aligned with prudential and sharia-compliant risk management principles.

Post-disbursement mitigation measures also proved influential. Routine installment monitoring and the Early Warning System (EWS) enabled the bank to identify repayment issues early, allowing for timely intervention before arrears escalated. Among the restructuring mechanisms evaluated, reconditioning emerged as the most reactive and immediately effective tool, particularly for customers experiencing short-term liquidity pressures, while rescheduling and restructuring were more suitable for long-term or structural financial constraints. These mechanisms collectively contributed to the improvement of NPF indicators, aligning with the research purpose of assessing how integrated risk mitigation strategies can reduce financing deterioration.

Theoretically, this study contributes to Islamic finance literature by demonstrating how the integration of preventive (5C) and corrective (restructuring) mechanisms forms a holistic risk mitigation framework consistent with sharia values of *'adl* (fairness) and *maslahah* (mutual benefit). Practically, the findings offer insights into how Islamic banks can structure early-stage assessments and post-financing recovery procedures to strengthen portfolio resilience and support sustainable housing access.

Despite these contributions, the study has several limitations. First, the analysis was conducted at a single branch, which may not represent the operational dynamics of BTN Syariah nationally. Second, the qualitative design and limited number of informants restrict the depth of generalization; perspectives from other units such as risk management, legal, or regional management could enrich the analysis. Third, while internal data provided indications of NPF improvement, the study did not quantify long-term performance of restructured accounts beyond the observed period, which may affect the interpretation of restructuring success.

These limitations highlight opportunities for future research. Comparative studies across multiple branches or Islamic banks would strengthen the empirical validity of the 5C–restructuring integration model. Quantitative approaches could further test the predictive power of each 5C element toward NPF outcomes. Moreover, longitudinal studies examining the performance of restructured accounts over extended periods would provide deeper insights into the sustainability of restructuring measures in Islamic mortgage financing. Overall, this study underscores the strategic importance of combining rigorous debtor assessment with adaptive restructuring policies to uphold the stability, fairness, and sustainability of sharia mortgage financing in Indonesia.

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