



# Banking Resilience in Indonesia: Financial Indicators and Regulatory Policies

Nyoman Pendi Agung<sup>1\*</sup>

<sup>1</sup> Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia

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## Abstract

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This study aims to evaluate the resilience of Indonesia's banking sector by focusing on four key indicators: Non-Performing Loans (NPL), Capital Adequacy Ratio (CAR), profitability, and liquidity. A literature review method was employed, analyzing 17 academic articles published last five years alongside regulatory documents from the Financial Services Authority (*Otoritas Jasa Keuangan*/OJK) and Bank Indonesia. The findings reveal that although the pandemic increased pressure on the real and banking sectors, the industry remained relatively resilient. NPL was successfully controlled through credit restructuring policies, CAR stayed well above the minimum threshold, liquidity was supported by macroprudential measures, and profitability, though reduced, remained positive. However, resilience varied across bank types: Islamic banks were more stable in maintaining profitability, conventional banks were stronger in capital adequacy, while rural banks (BPR) were more vulnerable. These findings highlight the need for differentiated policy approaches tailored to each bank type. The study underscores the importance of long-term strategies such as enhancing efficiency, strengthening risk management, consolidating BPR, and accelerating banking digitalization to reinforce the stability of Indonesia's financial sector.

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\*Corresponding author:  
(Nyoman Pendi Agung)



## **1. Introduction**

The health crisis that began in early 2020 soon developed into a multidimensional crisis, affecting the real sector, finance, and social stability. Indonesia's economy contracted for the first time since the 1998 Asian crisis, with negative economic growth in 2020. The most pronounced impact was seen in declining business activities, supply chain disruptions, declining domestic demand, and increasing unemployment and layoffs. Data from the Ministry of Manpower shows that millions of workers have been affected by the pandemic, both through job losses and reduced working hours, which ultimately reduces people's purchasing power (Clemente-Suárez et al., 2021). This condition pressures the business sector at large, including banking as a financial intermediation institution.

The banking sector has an important role in supporting financial stability, considering its function as a credit channel and liquidity provider for the real sector. However, during the pandemic, banks faced major challenges, ranging from increased credit risks due to debtor defaults, decreased profitability due to declining credit demand, to liquidity risks due to mismatches between third-party funds and credit disbursement. Research by Anas et al. (2022) confirms that the Covid-19 shock has increased the vulnerability of the corporate and banking sectors in Indonesia, although macro stability remains relatively maintained. This shows the importance of the resilience of the banking sector in facing this kind of crisis.

The concept of bank resilience itself can be understood as the ability of the banking system to survive, adapt, and recover from external pressures. According to Reeves & Whitaker (2020), resilience in a business perspective means the ability of

an organization to respond to shocks without losing its primary function. In the financial context, the Basel Committee emphasizes the importance of capital adequacy, prudent risk management, and stress testing practices as part of the banking resilience framework. In research on banks in Indonesia, indicators such as Non-Performing Loans (NPLs), Capital Adequacy Ratio (CAR), Return on Assets (ROA), and liquidity ratios are the main benchmarks to measure banking resilience during the pandemic.

Several empirical studies have highlighted this condition. For example, Seto and Septianti (2021) found that the Indonesian banking industry was relatively resilient to the Covid-19 pandemic, mainly thanks to the credit restructuring policy issued by the Financial Services Authority (OJK) and stimulus from Bank Indonesia. Meanwhile, Dandung et al. (2020) compared the performance of Islamic and conventional banks in Indonesia and found that both showed fairly good resilience, although the pressure on asset quality remained high. This is in line with Pratomo and Ramdani (2021) who revealed that there is a difference in performance between Islamic and conventional banks before and during the pandemic, with Islamic banks showing relatively more stable performance.

In the context of policy, the role of regulators is crucial. The OJK issued a credit restructuring policy to maintain the quality of bank assets, while Bank Indonesia lowered the benchmark interest rate and strengthened liquidity instruments to maintain financial system stability. This policy has been proven to contain a potentially higher spike in NPLs and keep CAR above the minimum threshold. In addition, the *Pemulihan Ekonomi Nasional (PEN)* program launched by

the government also supports banking resilience by encouraging liquidity and facilitating financing to MSMEs (Abubakar & Handayani, 2021).

However, research on the resilience of Indonesia's banking is still relatively limited compared to other countries. Many international studies have discussed banks in Europe, Poland, and Bangladesh, but in-depth studies on the differences in resilience between banks in Indonesia, both large, medium, and small, are still rare. This is the main research gap. Therefore, this study aims to assess the resilience of Indonesian banks during the Covid-19 pandemic, identify the most influential financial indicators, and provide input for regulators and bank management in strengthening financial sector stability in the future.

## **2. Literature Review**

### **2.1. Banking Resilience in Indonesia**

The Covid-19 pandemic has caused a major shock to the stability of Indonesia's financial system, including the banking sector. Late credit payments, increased risk of default, and decreased credit demand are major problems. A study by Siregar & Gunawan (2021) shows that the pandemic has increased the vulnerability of the corporate and banking sectors, although macro stability is relatively maintained due to responsive monetary and fiscal policies. This means that despite the pressure on the business world, government policies play a role in maintaining public trust and preventing systemic instability.

Furthermore, Seto and Septianti (2021) also affirmed that Indonesian banks were able to maintain their resilience, largely thanks to credit restructuring policies

that slowed the increase in Non-Performing Loans (NPLs) and supported the sustainability of intergeneration. The credit restructuring mechanism provides room for debtors to continue their obligations, so that banks can maintain smooth cash flow. This shows that although the pandemic weakened economic activity, timely policy measures were able to prevent banks from falling into a more severe liquidity or solvency crisis. Thus, Indonesia's banking sector has proven to be quite resilient, although pressure on asset quality remains a major challenge that must be anticipated to maintain long-term stability.

## **2.2. Banking Resilience Indicators**

Banking resilience is generally measured through several key financial indicators such as NPLs, Capital Adequacy Ratio (CAR), Return on Assets (ROA), and liquidity ratios. These indicators provide an overview of the bank's health in the face of external and internal pressures. Research by Pratomo and Ramdani (2021) found that there was a difference in performance between Islamic and conventional banks in Indonesia during the pandemic. Although both are affected, Islamic banks are relatively more stable in maintaining profitability, which indicates a certain advantage in their business model.

In addition, Hidayah et al. (2021) also emphasized that bank resilience is strongly influenced by credit quality and capital adequacy, where banks with higher CAR show better ability to deal with crisis pressures. An adequate CAR serves as a capital cushion to absorb losses when the risk of default increases. Other indicators such as ROA reflect the bank's level of profitability, while liquidity ratios indicate the bank's ability to meet short-term obligations. Thus, these indicators not only

reflect the internal health of banks, but also serve as signals for regulators in assessing the stability of the national financial system. Therefore, an in-depth analysis of key indicators is important in measuring the resilience of banks to external shocks such as the pandemic.

### **2.3. Government Policies and Authorities in Strengthening Resilience**

Regulatory policies play an important role in maintaining the resilience of the banking sector during the pandemic. The Financial Services Authority (OJK) issued credit restructuring rules that allow banks to postpone the recognition of non-performing loan losses. This policy has proven effective in containing a surge in NPLs that have the potential to disrupt banking stability. According to Supari & Anton (2022), the National Economic Recovery (*Pemulihan Ekonomi Nasional*/PEN) program involving *Bank Rakyat Indonesia* (BRI) has also increased the resilience of MSMEs, thereby indirectly strengthening the banking sector. This shows that there is a close relationship between government policies, banks, and the business world in maintaining the sustainability of the national economy.

In addition, the Basel Committee has emphasized the importance of applying the principles of prudence, stress testing, and capital adequacy in strengthening the global financial system (Wright et al., 2018). These principles are a reference in building a regulatory framework that can anticipate systemic risks. In Indonesia, this principle is applied through the Financial Services Authority Regulations (*Peraturan Otoritas Jasa Keuangan*/POJK) on minimum core capital and Bank Indonesia's macroprudential policy, which plays a role in maintaining a balance between short-term stability and long-term sustainability of banking. With a combination of

domestic policies and international standards, Indonesia's banking sector has been able to maintain its resilience despite facing severe pressure due to the pandemic.

#### **2.4. Challenges and Future Prospects for Banking Resilience**

Although Indonesia's banking sector has proven to be quite resilient during the Covid-19 pandemic, there are a number of challenges that still need to be faced in maintaining long-term stability. First, the increase in Non-Performing Loans (NPLs) after the end of the credit restructuring policy has the potential to reduce the quality of banking assets. Credit risks that are delayed during the pandemic may reappear along with the ability of debtors who have not fully recovered. Second, changes in people's behavior towards digitalization require banks to accelerate technological transformation. Infrastructure readiness, cybersecurity, and customer digital literacy are important aspects in maintaining public trust (Nam, 2019).

In addition, external pressures from global uncertainties, such as fluctuations in international interest rates, inflation, and the potential for a recession, can also affect banking stability. These challenges require adaptive risk mitigation strategies and strengthening risk management frameworks. However, on the other hand, the outlook for Indonesian banking remains positive. Government support through fiscal policy, strengthening OJK and Bank Indonesia regulations, and accelerating banking digitalization are the main supporting factors. Increasing financial inclusion also opens up opportunities for broader banking market growth. Thus, if banks are able to manage challenges and take advantage of opportunities, the resilience of this sector will be stronger and more sustainable in the face of global economic dynamics.

### **3. Methods**

This research uses a literature study method or literature review, which focuses on collecting, evaluating, and synthesizing findings from various academic sources as well as regulatory documents related to the resilience of Indonesian banking during the Covid-19 pandemic. This method was chosen because it is able to provide a comprehensive overview of the development of concepts, indicators, and policies that affect the resilience of the banking sector, without collecting primary data. The literature study is considered relevant considering that the research topic is closely related to macroprudential policy dynamics, macroeconomic conditions, and bank financial indicators that have been widely discussed in official reports and previous research.

The first step in this method is the literature search process. The search was conducted through academic databases such as Google Scholar, Elsevier, and Researchgate, as well as national and international journal portals. The keywords used include “bank resilience Indonesia Covid-19”, “NPL CAR profitability liquidity Indonesia”, and “pandemic banking resilience”. The established publication time span is the last five years to ensure relevance to the context of the pandemic. In addition to journal articles, regulatory reports from the Financial Services Authority (OJK), Bank Indonesia (BI), as well as publications from international institutions such as the IMF and the World Bank are also important secondary sources of data.

The second stage is the literature selection. The selected article must meet certain criteria, namely relevant to the topic of banking resilience, have adequate methodological quality (both quantitative and qualitative), and discuss key indicators



such as Non-Performing Loan (NPL), Capital Adequacy Ratio (CAR), profitability (ROA), and liquidity (LCR or LA/DPK). Literature comparing Islamic and conventional banks, as well as large banks and BPRs, was also included to see variations in resilience among different types of banks.

The third stage is the literature analysis. At this stage, data and findings from various studies and policy reports are critically analyzed to find patterns, similarities, and differences. For example, some studies highlight the role of credit restructuring in containing the surge in NPLs, while others emphasize the difference in resilience between Islamic and conventional banks. The analysis also includes how the macroprudential policies of the OJK and BI contributed to the stability of the financial sector during the pandemic.

The last stage is synthesis. The results of the analysis are compiled to provide a complete understanding of the resilience of Indonesian banks. The synthesis was carried out by connecting theoretical concepts of resilience (e.g. definitions from Reeves & Whitaker, 2020 and Basel Committee) with empirical data from Indonesia. Thus, this study not only provides an overview of factual conditions, but also places them within a broader conceptual framework. This literature study method allows the research to answer questions about the extent to which the Indonesian banking sector is resilient during the Covid-19 pandemic, which indicators are most influential, and how regulatory policies can strengthen financial stability in the future.

## **4. Results**

The Covid-19 pandemic that has hit Indonesia since early 2020 has caused a serious shock to the real sector and the national financial system. Declining demand, supply chain disruptions, and rising unemployment rates affect debtors' ability to meet their financial obligations. This condition directly pressures the quality of banking assets, especially through increased credit risk. According to Anas et al. (2022), the shock of the pandemic has increased the vulnerability of the corporate and banking sectors in Indonesia, with the potential for a surge in Non-Performing Loans (NPLs) as the biggest threat to financial stability. Nevertheless, overall macro stability was maintained thanks to responsive fiscal and monetary policies, including the National Economic Recovery (PEN) stimulus and Bank Indonesia's measures to strengthen liquidity.

One of the key indicators of banking resilience is the NPL ratio which reflects credit quality. During the pandemic, this ratio was under pressure due to the increase in the number of loans that underwent restructuring. Research by Purbayati, Rivanda, and Afgani (2022) shows that without a restructuring policy from the Financial Services Authority (OJK), the banking NPL ratio has the potential to jump much higher. However, with the relaxation in the recognition of non-performing loans, banks can keep NPL ratios under control. This is concrete evidence that policy interventions are able to maintain asset quality even in uncertain economic conditions. Meanwhile, Dandung et al. (2020) emphasized that both Islamic banks and conventional banks experienced an increase in credit risk, but both still showed

considerable resilience thanks to regulatory support and risk management practices that were strengthened during the crisis.

In addition to asset quality, other important indicators are liquidity and capital adequacy. OJK data shows that the Capital Adequacy Ratio (CAR) of Indonesian banks remains well above the minimum provision, which is in the range of 20 to 25 percent throughout the pandemic. This capital buffer is an important instrument to absorb potential losses due to the increase in non-performing loans. Viphindrartin et al. (2022) found that banks with higher CARs have better resilience in the face of crisis pressures, as strong capital allows banks to incur short-term losses without disrupting operations. In addition, Bank Indonesia's policy of easing the Minimum Reserve Requirement (GWM) provides significant additional liquidity, so that the banking intermediation function can continue to run despite declining credit demand.

Banking profitability is also one of the aspects affected by the pandemic. A decline in business activity and a weakening of people's purchasing power reduced credit demand, while provision costs increased due to increased potential defaults. A study by Wijana and Widnyana (2022) revealed that Islamic banks are relatively better able to maintain efficiency and profit margins than conventional banks, which face greater pressure in terms of provision costs. Meanwhile, Hidayah et al. (2021) added that operational efficiency is one of the key factors that distinguish the level of resilience between banks. Although banking profitability in general declined, the sector was still able to maintain a positive Return on Assets (ROA), indicating the bank's adaptability in maintaining operational sustainability.

Another important finding is the variation in resilience between Islamic banks, conventional, and People's Credit Banks (BPR). Islamic banks tend to be more stable in maintaining liquidity and profitability, while conventional banks are superior in terms of capital adequacy. However, BPRs are facing greater pressure due to limited capital and lack of business diversification. Juniasti (2022) noted that BPRs are more vulnerable to economic shocks although some of them have managed to survive through efficiency strategies and local government support. In line with that, Rela et al. (2022) found that BPRs in West Java show a lower level of resilience than commercial banks, but have opportunities to increase resilience through optimizing financial ratios and developing financing product innovations.

The role of government and financial authorities in maintaining the resilience of the banking sector during the pandemic is key. The credit restructuring policy issued by the OJK has proven to be able to withstand the surge in NPLs and provide room for debtors to recover their cash flow. The PEN program also supports the liquidity of MSMEs, which in turn strengthens banking resilience. Supari and Anton (2022) emphasized that the involvement of Bank Rakyat Indonesia (BRI) in the implementation of the PEN program not only encourages the resilience of MSMEs, but also strengthens bank stability by maintaining smooth credit payments. However, although these policies are effective in the short term, the potential for moral hazard to arise is an important issue that needs to be considered in long-term policy evaluation.

When compared regionally, Indonesian banks are relatively more resilient than several other ASEAN countries. Nugroho et al. (2020) found that both Islamic

and conventional banking in Indonesia showed better resilience, supported by aggressive macroprudential policies and the active role of the government in maintaining financial system stability. Meanwhile, Hasan (2020) highlighted that Islamic banking in Indonesia benefits from the principle of profit sharing that is more adaptive to crisis conditions, although it still faces limitations in terms of product diversification and customer base. This confirms that variations in institutional and regulatory structures have a major impact on the resilience of the banking sector in the face of global shocks.

The results of this literature study show that the Indonesian banking sector has a fairly good level of resilience during the Covid-19 pandemic. The NPL ratio can be controlled thanks to the restructuring policy, the CAR remains high so that it is able to absorb potential losses, liquidity is maintained through the easing of reserve requirements, and profitability remains positive despite the decline. Variations in resilience were found between types of banks, with Islamic banks being more stable, conventional banks being stronger in terms of capital, and BPRs being relatively vulnerable to external shocks. The role of regulators through OJK, BI policies, and the support of the PEN program has proven to be very decisive in maintaining financial stability. However, the challenge ahead is to strengthen long-term resilience by minimizing moral hazard risks, improving operational efficiency, and expanding diversification of banking products so that Indonesia's financial system is more resilient to future crises.

## **5. Discussion**

The results of literature research show that Indonesia's banking sector is able to show a relatively good level of resilience during the Covid-19 pandemic. This stability is mainly supported by several key factors, namely adaptive regulatory policies, strong capital structures, and banks' ability to carry out massive credit restructuring. Non-Performing Loans (NPLs), which were originally expected to soar high, can be suppressed thanks to the policies of the Financial Services Authority (OJK), so that financial system stability is not disturbed. However, there is a fundamental challenge in the form of potential moral hazards due to a restructuring policy that is too loose. This is in line with the findings of Purbayati et al. (2022) who stated that restructuring is effective in reducing NPLs, but its sustainability needs to be evaluated so as not to reduce long-term credit discipline.

In addition to asset quality, capital strength is an important factor that explains why Indonesian banking is more resilient compared to other countries in the region. The bank's Capital Adequacy Ratio (CAR) remains above 20 percent, even in times of crisis, which provides an adequate buffer for banks to absorb losses. This is consistent with the results of research by Viphindrartin et al. (2022) which confirm that banks with higher CAR levels have better adaptability when faced with pressure. Bank Indonesia's macroprudential policies such as the easing of the Minimum Reserve Requirement (GWM) have also strengthened liquidity, allowing banks to continue disbursing credit despite weakening demand. Thus, the combination of strong capital and maintained liquidity provides a large room for maneuver for the banking sector to deal with uncertainty.

On the other hand, there are variations in resilience between types of banks which shows a disparity in resilience. Islamic banks are relatively more stable in maintaining profit margins thanks to profit-sharing-based systems that are more flexible to market fluctuations, while conventional banks are superior in capital strength. However, the People's Credit Bank (*Bank Perkreditan Rakyat*/BPR) faces heavier pressure due to limited resources. Juniasti (2022) emphasized that BPRs tend to be more vulnerable to economic shocks, although some of them have managed to survive with efficiency strategies and local government support. This fact shows that strengthening resilience in the future must take into account the characteristics of each bank group, so that the policies implemented are not uniform but contextual in accordance with the capacity and role of the institution.

Thus, this discussion confirms that the resilience of Indonesian banks during the pandemic is the result of the synergy between internal and external factors. Internal factors include capital, liquidity, and operational efficiency, while external factors include macroprudential and fiscal policy support. Although the results show good resilience, in the future strategies are needed to strengthen long-term resilience, especially by encouraging digitalization, expanding product diversification, and improving the quality of risk management. Without these strategic steps, Indonesian banks risk experiencing new vulnerabilities when facing future global crises.

## **6. Conclusion**

This research shows that the Indonesian banking sector was able to show sufficient resilience during the Covid-19 pandemic. Various key indicators such as

Non-Performing Loans (NPLs), Capital Adequacy Ratio (CAR), profitability, and liquidity give an idea that banks have managed to maintain stability despite the pressure of the crisis. NPLs that originally had the potential to increase dramatically could be controlled through restructuring policies, while CAR remained well above the minimum threshold, providing adequate capital cushioning. Liquidity was also well maintained thanks to Bank Indonesia's macroprudential policy, while profitability, although declining, still recorded a positive performance.

However, this study also highlights the disparity in the level of resilience between bank groups. Islamic banks tend to be more stable in terms of profitability, conventional banks are stronger in capital, while People's Credit Banks (BPR) are relatively more vulnerable to shocks. This difference shows the need for different policy approaches according to the characteristics and capacities of each type of bank. In the future, strengthening long-term resilience must be focused on improving operational efficiency, strengthening risk management, consolidating BPR, and utilizing banking digitalization. With this strategy, Indonesia's banking sector is expected to be more resilient in facing future crises while supporting sustainable national economic growth.

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