

Post-Financial Crisis Success: NPL Resolution Strategies Adopted by Commercial Banks – A Qualitative Study

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A B S T R A C T

Non-Performing Loans (NPLs) are among the most prevalent issues encountered by commercial banks, particularly after economic shocks, financial crises and systemic shocks that destabilised the lending portfolio. As the banking sector focuses on maintaining financial resilience and operational efficiency, NPL resolution plays a vital role. This research explores the resolution strategies adopted by commercial banks to manage and reduce NPLs, focusing on the practical mechanisms, institutional reactions and managerial actions that lead to successful loan recovery. This research adopts a qualitative case study approach to investigate a few commercial banks through insights from semi-structured interviews with bank managers, credit officers and risk management experts; data were thematically analysed to uncover prevalent patterns, strategic positioning and contextual factors that influence NPL resolution. The study explores major approaches (loan restructuring, debt recovery negotiations, collateral enforcement, write-offs) and how the regulatory environment shapes NPL resolution strategies. The findings reveal that successful NPL resolution is not absolute but contextual, depending on institutional factors, borrower characteristics, macroeconomic conditions and the regulatory environment. The study contributes to the body of knowledge on banking management and financial stability and has policy implications for bank managers, policymakers and regulators to improve NPL governance. The study ultimately demonstrates how commercial banks can turn financial disruption into success by adopting flexible, borrower-specific and policy-oriented resolution strategies.

Keywords: Non-performing loans, NPL resolution, Loan restructuring, Qualitative case study, Financial disruption.

1. Introduction

1.1 Background and Problem Statement

Non-Performing Loans (NPLs) are a serious challenge for commercial banks serving as financial intermediaries in the economy. NPLs (loans outstanding for 90 days or more) indicate deterioration in the quality of a bank's asset portfolio and can jeopardise the bank's financial stability (Bholat et al., 2016; European Banking Authority, 2017). The systemic consequences

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of NPL resolution are clear: higher NPL ratios lower profitability, limit credit availability, raise provisioning costs, and can lead to systemic risk (Accornero et al., 2017; Aiyar et al., 2015; Barseghyan, 2010).

The economic losses caused by failing to address NPLs can be significant and, in extreme situations, can result in banking crises that hamper economic growth (Barseghyan, 2010; Stern & Feldman, 2004). The determinants of NPLs have been well documented in the literature, with some of these factors being macro-economic variables such as inflation, unemployment and GDP growth, while others are bank-specific, including poor credit risk management, excessive lending, and weak governance (Beck et al., 2013; Louzis et al., 2012; Berger & DeYoung, 1997; Ozili, 2019).

Commercial banks have adopted different resolution options for NPLs, such as loan restructuring, foreclosure, distressed asset sales and write-offs (Climent-Serrano, 2019; European Central Bank, 2017). However, bank capacity, borrower characteristics and regulations may limit the success of these measures. Although many quantitative studies examine the determinants of NPLs, existing research is largely qualitative, and understanding of the NPL resolution strategies banks actually employ in practice remains scarce (Climent-Serrano, 2019; Hou & Dickinson, 2007). The deficit is even greater in developing countries, where the legal framework is weak, institutions are underdeveloped, and regulatory restrictions further exacerbate the situation (World Bank, 2020; Aiyar et al., 2015). The few qualitative studies conducted highlight the role of bank culture, management dedication, borrower communication, and inter-departmental coordination in effectively resolving a crisis (Climent-Serrano, 2019; Hou & Dickinson, 2007). This research aims to fill this void by examining the NPL resolution strategies adopted by commercial banks in Bangladesh, along with the factors influencing their success or failure during financial disruptions. This study uses a qualitative multiple case study approach to capture and depict nuanced, context-specific practices not revealed by quantitative research.

1.2 Research Objectives and Questions

The main goal of this research is to analyze commercial banks' NPL resolution strategies and the factors affecting their effectiveness. In particular, the research aims to:

- Discuss the approaches commercial banks take to resolve NPLs.
- Explore how strategies are chosen and implemented and their effectiveness, based on institutional, regulatory and borrower characteristics.
- Understand the issues banks encounter in resolving NPLs and the impact of organizational capabilities on resolution.
- Propose solutions to enhance commercial banks' NPL resolution practices.

These objectives lead to the following combined research questions:

- RQ1: What strategies do commercial banks employ for the resolution of NPLs, and how do they function in practice?
- RQ2: What are the impacts of institutional and regulatory characteristics as well as borrower characteristics on the selection and performance of NPL resolution strategies?
- RQ3: What are some of the challenges that banks are encountering in NPL resolution, and how does organizational capability affect outcomes of the resolution?

1.3 Significance and Contribution

This research contributes to knowledge in several ways. First, it offers qualitative information on the NPL resolution process that complements the quantitative focus of the existing body of literature on NPL determinants. Second, it provides context from a developing-country background where NPL challenges are significant (Bangladesh). Third, it has implications for bank managers and policymakers looking to build bank resilience and adaptive management capacity in the context of crisis. The study is relevant to the conference theme, "Management for good: thriving through disruption," because it shows how financial disruption can lead to institutional learning and better practices in banks.

1.4 Scope and Limitations

This research examines NPL resolution strategies in commercial banks. The study does not consider other types of financial institutions, such as microfinance institutions, development banks, or credit unions, because of their different business models and regulatory frameworks. The qualitative case study approach aims for deep contextual understanding rather than statistical generalisation, focusing on analytical generalisation to comparable banking settings. The research relies on interviews with bank professionals, which may present biases such as subjectivity and social desirability. These biases are mitigated through triangulation, member checking, and reflexivity to ensure trustworthiness.

2. Literature Review

2.1 Introduction This chapter reviews the existing literature on non-performing loans (NPLs), their causes and impacts and how commercial banks manage them. The literature review was organised into themes to create the theoretical and empirical background for the current study. This chapter brings together the most important and recent empirical studies to move beyond simply identifying the lack of qualitative studies and articulate specific gaps in the literature that this study addresses in NPL resolution processes.

2.2 Defining Non-Performing Loans

NPLs are typically defined as credit facilities where borrowers are unable to meet scheduled payments for 90 days or longer (Bholat et al., 2016; European Banking Authority, 2017). While this is a generally accepted definition, it is not uniformly applied across regulatory jurisdictions, creating challenges for cross-country analysis (IMF, 2015; World Bank, 2020). NPL ratios serve as key indicators of banking sector performance, reflecting both the efficiency of credit risk management and prevailing macroeconomic conditions (Nkusu, 2011; Ozili, 2019). High NPL ratios diminish bank profitability, increase provisioning costs, and constrain credit growth, with negative consequences for the real economy (Accornero et al., 2017; Barseghyan, 2010).

2.3 Macroeconomic Determinants of NPLs

Extensive literature links macroeconomic factors to NPLs. Gross Domestic Product (GDP) growth is negatively associated with NPLs, as a downturn reduces borrowers' capacity to service debt (Klein, 2013; Louzis et al., 2012; Nkusu, 2011). Rising unemployment rates increase NPLs in retail and consumer loan portfolios (Beck et al., 2013; Makri et al., 2014). Rising interest rates and inflation also lead to loan defaults by increasing borrowers' debt burdens (Castro, 2013; Chaibi & Ftiti, 2015). For emerging and developing markets, NPL risks are also exacerbated by exchange rate shocks and commodity prices (De Bock & Demyanets, 2012; Fofack, 2005). Reinhart and Rogoff (2010) stress the cyclical nature of financial crises and the subsequent effect on loan quality in banking.

2.4 Bank-Specific Determinants of NPLs

Microscopic factors also play a crucial role in NPL creation. One of the most widely identified factors for loan deterioration is the growth in credit creation, as banks tend to relax lending standards during periods of credit expansion (Jimenez & Saurina, 2006; Salas & Saurina, 2002). Other important factors include bank size, capital, profitability and efficiency (Berger & DeYoung, 1997; Kwan & Eisenbeis, 1997). The "bad management" theory suggests that inefficient management entails weak loan origination and loan monitoring, which results in higher NPLs in the long run (Podpiera & Weill, 2008). Ownership structures also affect NPLs, with state-owned banks generally having higher NPL ratios due to political pressure to lend and less restrictive budgetary constraints (Hu et al., 2004; Rajan & Dhal, 2003).

2.5 Consequences of High NPL Ratios

High NPL ratios affect the performance and stability of commercial banks. They depress net interest income, raise loan loss provisions, and undermine the bank's capital adequacy ratio, undermining its resilience to future shocks (Berger & DeYoung, 1997; Tabari et al., 2013). At an economy-wide level, high NPL ratios may result in credit crunches, slow economic activity and even cause banking crises (Barseghyan, 2010; Stern & Feldman, 2004). Evidence from Fell et al. (2016) and Aiyar et al. (2015) on the extreme adverse effects of unresolved NPLs on European banking systems after the global financial crisis highlights the systemic costs of delaying NPL resolution.

2.6 NPL Resolution Strategies

2.6.1 Loan restructuring

The most common method is restructuring a troubled loan - making changes to the loan terms so that the financial position of the borrower can be improved - which is very common (Climent-Serrano, 2019; OECD, 2017). Measures to restructure may include maturity reductions, interest rate reductions and payment holidays. Successful, fast restructuring operations can preserve the relationship with the borrower, minimise the bank's losses, and encourage the borrower's rehabilitation (European Central Bank, 2017; Fell et al., 2016).

2.6.2 Collateral enforcement

If restructuring fails, banks can enforce collateral and recover through legal means to salvage impaired assets (Bholat et al., 2016; Keeton and Morris, 1987). This method relies on legal and institutional structures, and the lack of effective creditor protection laws and protracted court proceedings significantly reduce recovery rates (Aiyar et al., 2015; World Bank, 2020). Collateral enforcement in many developing countries is costly and time-consuming because of the lack of effective methods to recover assets (Fofack, 2005; Guy and Lowe, 2011).

2.6.3 Loan write-offs

Loan write-offs are the process of removing uncollectible NPLs from bank balance sheets so they better reflect asset quality (European Banking Authority, 2017; IMF, 2015). Although write-offs improve asset quality ratios, they also realise losses that erode bank capital and should be prudently provided for (Accornero et al., 2017; Ozili, 2019). Regulators are also increasingly demanding conservative provisioning policies to ensure that banks have adequate provisions to cover expected credit losses (World Bank, 2020).

2.6.4 Market-based resolution

The creation of Asset Management Companies (AMCs) and securitisation of NPL portfolios represent market-based resolution strategies that emerged in the post-crisis period (Aiyar et

al., 2015; European Central Bank, 2017). AMCs enable banks to transfer problem assets to special purpose vehicles, freeing capital and management focus for core banking activities (OECD, 2017). While still nascent in most emerging markets, secondary NPL markets offer alternative resolution pathways (Fell et al., 2016).

2.7 Regulatory Frameworks and NPL Resolution

Regulatory frameworks heavily influence NPL resolution. The European Banking Authority's Guidelines on NPL Management (EBA, 2017) and the European Central Bank's Supervisory Guidance (2017) have formalised resolution practices in Europe, requiring banks to establish NPL strategies, operational plans, and governance frameworks. These guidelines advocate active and timely resolution strategies. In developing economies, regulatory capacity, supervisory frameworks, and enforcement capability often constrain effective NPL governance (Dash & Kabra, 2010; Roland, 2011).

2.8 The Gap in Qualitative Research

There is a significant amount of quantitative research on NPLs, but very little qualitative research on NPL resolution practices. In the context of NPL resolution research, Yin (2018) recommends case study methods, which examine complex organisational processes in natural settings. The small body of qualitative research that is available highlights the significance of bank culture, management commitment, communication with borrowers and inter-departmental coordination in relation to the successful resolution of the bank (Climent-Serrano, 2019; Hou & Dickinson, 2007). This paper addresses the need for contextual and processual research that reflects bank practitioners' experiences in NPL resolution, as called for.

2.9 Theoretical Framework

This study is based on three related theoretical frameworks:

Agency theory (Jensen & Meckling, 1976) offers some ideas about information asymmetries and conflictual incentives between bank managers, credit officers and borrowers. The agency problems are a source of NPL creation and of challenges in NPL resolution. The theory is that if loan officers are more interested in the number of loans closed than in the quality of the assets they are acquiring, and risk managers are more interested in the quality of the assets they are assuming, it can make it difficult to implement effective NPL resolution.

The Resource-Based View (RBV) (Barney, 1991) sees NPL resolution as dependent on the bank's capabilities, competences and resources. Banks with an NPL management unit, recovery expertise and effective coordination mechanisms can resolve NPLs better. RBV proposes that such organisational capabilities are valuable, scarce and hard-to-imitate resources that can provide a competitive advantage in NPL management.

Institutional Theory (DiMaggio & Powell, 1983) offers insights into the influence of regulatory, normative and cognitive institutional pressures on NPL resolution strategies. Banks are subject to regulations that prescribe specific resolution practices and limit others. Institutional theory sheds light on the rationales for the specific resolution strategies banks choose and on how institutional environments affect the effectiveness of resolution.

All three theories provide complementary perspectives for analysing NPL resolution: Agency Theory provides insight into incentive structures, RBV provides insight into differences in capabilities, and Institutional Theory provides insight into the influence of regulators. Together, they provide a strong basis for qualitative analysis of NPL resolution strategies.

2.10 Summary of Literature Gap

The literature review reveals a gap: although macroeconomic and bank-specific factors that impact NPLs are well studied, there is a gap in qualitative studies on how banks implement NPL resolution strategies, their decision-making processes, and the factors that influence the success of these strategies. This study fills this gap by employing a qualitative multiple-case study design to collect in-depth, rich information on NPL resolution activities and contribute to the theoretical and practical management and financial stability literature.

3. Methodology

3.1 Research Philosophy and Approach

This study adopts an interpretivist approach, acknowledging that NPL resolution is a socially constructed process influenced by organisational routines, managerial choices and institutional environments. In line with this, the qualitative multiple-case study approach was used to gain insight into the development and implementation of commercial banks' NPL resolution strategies during financial disruption. Multiple cases were chosen to allow analytical generalisation through replication logic and to identify common and divergent themes across banks (Yin, 2018). NPL resolution processes are complex, with nuanced contextual factors such as organisational routines, managerial decisions, regulatory frameworks, and borrower interaction, which the qualitative case study approach serves well.

This research views NPL resolution as a management process in the face of uncertainty, rather than simply a technical banking process. This approach aligns with the conference theme "Management for Good: Thriving Through Disruption" and situates the research within a resilience and adaptation framework.

3.2 Case Selection and Sampling Strategy

A theoretical sampling approach (Patton, 2015) was employed to select three commercial banks in Bangladesh, capturing variations in institutional characteristics and relevance to the research questions. The replication strategy (Yin, 2018) was used to ensure that the banks differed in terms of bank capacity, NPL levels, and recovery mechanisms.

The selected cases included:

- Bank A: Large commercial bank (assets > BDT 500 billion; NPL ratio 6.2%) with dedicated NPL management units and formal resolution procedures.
- Bank B: Medium-sized commercial bank (assets BDT 200-500 billion; NPL ratio 7.8%) with relatively limited resources and less formalised NPL processes.
- Bank C: Small commercial bank (assets < BDT 200 billion; NPL ratio 9.1%) with limited recovery capacity and ad hoc resolution approaches.

Three criteria guided selection: (1) NPL ratios above 5 percent post-COVID-19; (2) existence of structured or ongoing NPL programmes; and (3) organisational diversity suitable for comparative analysis. The three cases enabled both literal replication (identifying common features) and theoretical replication (examining different outcomes under different institutional conditions) (Yin, 2018).

Participants were sampled using purposive and snowball techniques. A total of 18 individuals were interviewed (six per case), including branch managers, loan officers, and risk managers. Each participant had at least five years' experience in loan recovery or credit risk management, ensuring informed perspectives on NPL resolution practices.

Sampling continued as suggested by theoretical saturation (Guest et al., 2006), which occurred when participants' answers did not add many new conceptual insights and themes were repeated.

3.3 Data Collection

In-depth semi-structured interviews served as the primary data collection method between January and March 2026. Interviews lasted 45-60 minutes (average 52 minutes), generating 248 pages of verbatim transcription.

The interview guide was developed through piloting and informed by the research questions and theoretical framework. The guide explored:

- Banks' NPL resolution strategies and their implementation
- Factors influencing strategy selection and effectiveness
- Regulatory and institutional factors affecting resolution
- Organisational decision-making processes and outcomes
- Challenges and barriers in NPL resolution

Sample interview questions included:

- "How do you determine which distressed loans to restructure versus enforce?"
- "What institutional considerations most influence your recovery decisions?"
- "How do regulatory expectations shape your approach to NPL resolution?"
- "What organisational capabilities do you consider essential for effective recovery?"

All interviews were audio-recorded with participant consent, transcribed verbatim, and translated from Bengali where necessary. Documentary evidence was reviewed to support data triangulation and enhance the credibility of the findings (Denzin, 1978), including Bangladesh Bank circulars and regulatory guidelines, records related to non-performing loan resolution, recovery performance reports, and annual asset quality disclosure reports. The recovery statistics in the results are derived from triangulated internal documents, rather than through perception.

3.4 Theoretical Framework and Analytical Application

A deductive-inductive coding framework was used to operationalise the three theoretical perspectives:

1. **Agency Theory Coding:** Deductive codes found instances of information asymmetry, incentive misalignment, and moral hazard. "incentive issues," "borrower moral hazard," "managerial risk-taking," "loan officer pressure," and "recovery team tensions" were among the specific codes included.
2. **Resource-Based View Coding:** Deductive codes were extracted from organisational capabilities and resources. The specific codes consisted of "NPL unit capacity", "recovery expertise", "coordination mechanisms", "dedicated teams", and "monitoring capabilities.
3. **Institutional Theory Coding:** Deductive codes that included regulatory and normative pressures. These codes included "compliance pressures," "forbearance patterns," "Bangladesh Bank requirements, "normative expectations," and "regulatory constraints."

These theoretical codes guided the design of interview questions and their analysis, and inductive coding of emerging themes led to themes not expected by the theory, including court delays, restructuring fatigue, and borrower negotiation dynamics.

3.5 Data Analysis

We used thematic analysis as described in Braun and Clarke (2006), a six-stage process. Analysis involved:

1. Familiarisation with the data through reading transcripts;
2. Open coding resulting in 312 first-order codes;
3. Axial coding into 27 second-order codes;
4. Thematisation leading to four themes;
5. Comparative analysis;
6. Interpretation and reporting.

Coding and theme organisation were supported by NVivo 14 qualitative data analysis software. A mixed inductive-deductive analysis approach was adopted: deductive coding was guided by the three theoretical perspectives, while inductive coding captured emergent concepts. Cross-case analysis examined similarities and differences across institutions, facilitating understanding of factors associated with recovery outcomes.

3.6 Trustworthiness and Research Rigour

Rigour was established through multiple qualitative quality indicators, following Lincoln and Guba's (1985) criteria:

Credibility was enhanced through:

- Data source triangulation: Interviews, policy documents, regulatory circulars, and performance reports
- Member checking: Participants verified summaries of identified themes, with significant consensus on interpretations
- Peer debriefing: Discussions with colleagues not involved in the research to challenge interpretations

Dependability was enhanced through:

- Audit trails: Detailed documentation of coding development, analysis steps, and thematic evolution
- Peer coding: Independent coding of a portion of the data by a peer researcher to ensure coding agreement

Confirmability was strengthened through:

- Reflexive memoing: Systematic documentation of researcher assumptions and their influence on analysis
- Positionality awareness: As an insider of the Bangladesh banking sector, conscious efforts were made to suspend judgment and reduce interpretive bias

Transferability was enhanced through:

- Thick description: Comprehensive documentation of regulatory, economic, and institutional factors to contextualise findings for similar emerging market settings.

3.7 Ethical Considerations

The research followed all of the ethical standards for conducting qualitative research. The research was carried out in Bangladesh, with no vulnerable population involved, medical intervention or sensitive personal information collected other than in the course of professional

banking activities, so medical ethics board (MEB) or formal Institutional Review Board (IRB) approval was not required in this case according to the institutional policy of the study. The research followed proper ethical procedures in all aspects.

- **Informed consent and voluntary participation:** Before the interviews, participants received detailed information sheets about the purpose of the research, the research procedures, and their rights. All participants gave their written consent. It was made clear that the task was voluntary and that no harm would come to them if they withdrew.
- **Confidentiality and Anonymity:** All information that could identify participants, such as names, bank names and positions, was removed from transcripts and reports. Institutional pseudonyms (Bank A, Bank B, Bank C) were used. The only participant identifiers are their role and years of experience.
- **Data Security:** Recordings and transcripts were kept on password-protected, encrypted devices and were accessible only to the research team. All audio recordings were removed after transcription. Transcripts will be kept securely for 5 years and then destroyed.
- **Institutional Permission:** Formal permission was obtained from each participating bank before data collection, and bank management provided letters of support.
- **Researcher Positionality:** The researcher kept reflexive memos throughout the research process because the first author has a background in the banking sector in Bangladesh and wanted to manage possible bias. Participants were notified of the researcher's background for transparency.
- **No Incentives:** No money or other incentives were provided to participate.

3.8 Methodological Limitations

The results are analytically oriented, and because this is a case study approach, they cannot be generalised statistically (Yin, 2018). Comparative studies would enhance understanding of variation in additional diverse settings, while the three-case design allows for analytic generalisation.

Potential self-selection bias (whereby members might have been different from those who did not participate) was mitigated using several strategies: purposive sampling to ensure a diversity of perspectives; member checking; and triangulation with documentary evidence.

To reduce social desirability bias (participants giving a favourable impression of their bank's NPL management), three measures have been taken: confidentiality was emphasised, claims were cross-checked against documentary evidence, and triangulation was used.

4. Results

4.1 Overview

The thematic analysis revealed four main themes for the three case study banks that explained the strategies for NPL resolution. Each theme includes participant quotations and cross-case comparisons: Adaptive Resolution Centred on Restructuring, Capability Drives Resolution, Constraints Temper Strategy, and Multistrategy Resolution.

4.2 Theme 1: Adaptive Resolution Centred on Restructuring

The most widely used resolution tool was restructuring, noted in 15 of 18 interviews. Interviewees conceptualised restructuring not merely as a financial corrective mechanism but

as an adaptive process to maintain borrower viability and minimise bank losses. As one participant explained:

Restructuring instead of prompt legal action is more likely to result in better recovery outcomes, which works in the best interests of both parties, as the court process is lengthy and recovery rates are low. (Bank A, Senior Credit Officer, 15 years' experience)

Restructuring typically involved extended maturities (up to 24 months), interest reductions (2-5 percentage points), and temporary payment moratoriums. However, these measures were applied differently across banks:

- Bank A implemented formal viability assessments and structured restructuring guidelines. Restructuring achieved estimated recoveries of 42 percent of principal.
- Bank B had less formalised procedures, achieving recovery rates of approximately 38 percent.
- Bank C lacked systematic restructuring frameworks, with recovery rates around 25 percent.

This variation suggests that implementation quality—not merely strategy adoption—determines restructuring effectiveness. A risk manager at Bank A elaborated:

We don't give the loan and then hope. We carry out correct viability assessments. Restructuring is appropriate when a company is essentially good but in some type of temporary crisis. Restructuring can only postpone the inevitable if the business model is broken. (Bank A, Risk Manager, 18 years' experience)

Participants emphasised the importance of borrower viability assessment, noting that inappropriate restructuring could create moral hazard or merely defer losses:

Sometimes borrowers think restructuring is a right and not a privilege. Sometimes we've been able to restructure a loan, and it has just delayed the issue instead of resolving the problem. The difference is knowing the difference between a temporary liquidity problem and a fundamental solvency problem. (Bank B, Branch Manager, 12 years' experience)

4.3 Theme 2: Capability Drives Resolution

The second major theme concerned the significance of organisational capacity for effective NPL resolution. Banks with dedicated NPL units, specialised recovery teams, and effective cross-functional coordination achieved faster and more effective resolution outcomes.

Bank A's dedicated recovery committees and structured processes were seen as accelerating decision-making and improving outcomes:

But not all banks can restructure effectively, and in smaller banks this process may take months, instead of our committees reviewing all NPL cases weekly. (Bank A, Recovery Unit Head, 20 years' experience)

Institutional resources emerged as differentiators. Bank A reviewed and resolved cases approximately 30 percent faster than Banks B and C. A risk manager noted:

“Owning recovery staff is a big difference - when it is a part of a person's job and not an extra job, cases move much quicker.” (Bank B, Risk Officer, 8 years' experience)

The importance of capability extended beyond dedicated staff to include monitoring systems and early warning mechanisms:

"We have digital systems that flag potential problem loans early. This allows us to intervene before loans become non-performing. Banks without these systems only recognise problems after they've become severe." (Bank A, Credit Monitoring Officer, 10 years' experience)

Cross-case comparison revealed that capacity is not merely supportive context for case resolution but a fundamental component of effective NPL management. Banks with stronger capabilities consistently outperformed those with weaker capacities, even when employing similar strategies.

4.4 Theme 3: Constraints Temper Strategy

All respondents identified institutional constraints that limited NPL resolution effectiveness. The most commonly cited constraints were:

- Judicial delays in collateral enforcement
- Difficulties in litigation recovery
- Regulatory forbearance creating moral hazard

Collateral enforcement actions yielded recovery rates of 20-40 percent and required extensive court proceedings averaging 18 months to completion:

"The collateral can sometimes be good, but the recovery process is the problem. Even when we have valid claims, court proceedings take years. By the time we gain possession, property values may have declined, or the assets may have been damaged." (Bank C, Legal Officer, 7 years' experience)

Another participant highlighted the unpredictability of legal processes:

"We had a case where we had clear title to collateral worth significantly more than the loan. Four years later, we're still in court. The borrower is using every procedural delay possible. The legal system isn't equipped for efficient commercial recovery." (Bank B, Credit Manager, 14 years' experience)

Regulatory forbearance, while providing temporary relief, was seen by some participants as creating moral hazard. A senior manager at Bank A observed:

"Forbearance policies have helped many banks survive difficult periods, but they've also encouraged some borrowers to take advantage. When borrowers know that regulators will require banks to restructure rather than enforce, they have less incentive to maintain payments." (Bank A, Chief Risk Officer, 22 years' experience)

This finding suggests that institutional environments do not merely influence strategic choices but fundamentally constrain strategy implementation and effectiveness.

4.5 Theme 4: Multistrategy Resolution is More Effective than Monostrategy

A significant insight was that effective banks did not rely on single strategies but employed combinations of approaches. Higher-performing cases combined:

- Early restructuring of viable businesses
- Negotiated recovery with cooperative borrowers
- Selective collateral enforcement where necessary
- Strategic write-offs where recovery prospects were minimal

This combination approach appeared particularly important during periods of macroeconomic risk:

"You don't achieve recoveries with a single approach. Each borrower situation is different. Some need time, some need incentives, some need legal pressure, and some are not recoverable. You need to be able to apply the right approach for each situation." (Bank B, Branch Manager, 16 years' experience)

A participant at Bank A elaborated on their multifaceted approach:

"We have a tiered strategy. For viable businesses, we restructure. For borrowers with genuine repayment intentions, we negotiate. For those who can pay but won't, we enforce. And for hopeless cases, we write off and move on. The challenge is knowing which category each borrower belongs to." (Bank A, Recovery Committee Chair, 19 years' experience)

The effectiveness of multistrategy approaches was linked to organisational capacity—only banks with sufficient resources could effectively deploy multiple strategies:

"Larger banks have the resources to pursue multiple approaches simultaneously. Smaller banks might have to choose one strategy and hope it works. That's why we see better outcomes from larger institutions." (Bank B, Senior Credit Officer, 11 years' experience)

4.6 Cross-Case Summary of Major Findings

Table 1: Cross-Case Summary of Major Findings

Strategy	Frequency	Recovery Rate	Key Enablers	Major Barriers
Restructuring	15	25–42%	Early detection, viability assessment	Moral hazard, repeat default
Collateral Enforcement	12	20–40%	Documentation quality	Court delays, legal costs
Write-Offs	8	Context-specific	Regulatory compliance	Capital impact, loss realisation
NPL Sales	4	Emerging	Market development	Low pricing, weak secondary market

Notes: Recovery rates are based on triangulated internal documents rather than perceptions. Bank-specific variation exists where Bank A achieved 42% recovery through restructuring, Bank B 38%, and Bank C 25%.

4.7 Summary of Findings

The results indicate that, overall, strategy choice, institutional capacity and regulatory context are interdependent in shaping the effectiveness of NPL resolution. The best banks used several strategies, committed to building organisational capacity and responded to borrower situations. Institutional conditions, especially delays in the judicial process, negatively affected recovery outcomes, and regulatory forbearance helped for a while but may have created moral hazard. The findings will then be analysed in the discussion chapter, where they will be interpreted through the theoretical framework and tied to the previous literature.

5. Discussion

5.1 Introduction The results of this research show that the effectiveness of NPL resolution is not caused by single strategic decisions, but is also affected by the interplay between strategies, organisational capabilities and institutional factors. The chapter reviews the key findings in light of previous studies and theories, and draws implications for theory and practice.

5.2 Restructuring as Adaptive Governance

While literature typically frames restructuring as a technical means of loan contract restructuring (Climent-Serrano, 2019; OECD, 2017), this study proposes that restructuring is a means of adaptive governance in uncertain contexts. The results indicate that the effectiveness of restructuring depends not only on the terms of concession granted but also on the borrower's choice, institutional coordination, and timing.

This finding complements previous studies that found restructuring to be a widely used resolution method (European Central Bank, 2017; Fell et al., 2016); however, it reveals that restructuring is not always successful. The wide range in recovery rates by bank (25 to 42%) shows that restructuring success depends on implementation. Banks that have a formal viability assessment process, recovery teams and prompt intervention have significantly better results.

The results also refute the belief that regulatory forbearance is always a good thing (Aiyar et al., 2015). Forbearance helped stabilise the short-term situation, but participants raised concerns about moral hazard and strategic default behaviour with repeated forbearance. This implies a more differentiated regulatory strategy to differentiate between temporary liquidity issues and more serious insolvency.

The results point to regulation as both a constraint and an enabler, and as a strategic signal from an Institutional Theory (DiMaggio & Powell, 1983) perspective. Forbearance measures helped to ease the pressure on banks but also established strategic relationships. This shows a more complex role for institutions in organisational adaptation than coercive pressure models suggest.

5.3 Organisational Capability as Strategic Resource

The results are consistent with the Resource-Based View (Barney, 1991): banks with an NPL unit, dedicated specialists, and efficient coordination were more likely to achieve good resolution outcomes. These organisational capabilities were useful (part of the reason for success in recovery), scarce (not evenly spread across banks), and hard to imitate (requiring investment and institutional commitment).

This applies the RBV concept to NPL management and proposes that recovery capability is a strategic resource. Previous RBV studies in banking have focused on lending capacity and customer relations (Barney, 1991), and this study confirms that recovery capability is also crucial for long-term performance.

The fact that the Bank A team was able to review and resolve cases about 30% faster than the Bank B and C teams, using similar strategies, shows capability differences that lead to performance differences. This is consistent with the "bad management" hypothesis (Podpiera & Weill, 2008), but goes further by showing that management quality affects not only loan origination but also loan recovery.

In practical terms, this means investment in NPL capacity (which involves training, dedicated staff, monitoring systems, etc.) must be treated as an investment decision, not an expenditure. Banks that focus on recovery as their core competence can gain a sustainable competitive advantage by improving asset quality management.

5.4 Institutional Constraints and Resolution Effectiveness

This finding is consistent with a previous study on institutional constraints in developing countries (Aiyar et al., 2015; World Bank, 2020). In Bangladesh, the recovery rate is as low as 20-40 percent, and it takes 18 months on average for a court case to be resolved, demonstrating the near-complete failure of collateral enforcement as a form of dispute resolution.

This discovery extends Institutional Theory because it shows that the three pressures (coercive, cognitive, and normative) interact. Formal resolution tools depend not only on formal institutions, but also on institutional capacity and broader institutional norms.

The results also confirm the contextual approach of NPL resolution strategies. The instruments that are working in sophisticated financial systems – NPL sales to specialised investors, AMC transfers, etc. (Fell et al., 2016) – are challenging to implement in Bangladesh because of the absence of sophisticated secondary markets, low prices, and limited investor demand. This reiterates: international model transfers must be done with mindful institutional fit.

5.5 Refining Agency Theory

The results contribute to Agency Theory (Jensen & Meckling, 1976) by showing that agency issues aren't just between borrower and bank. Issues also arose between agencies and credit origination departments (which focus on loan growth), recovery teams (which focus on resolution), and agendas (which focus on reported performance). Sometimes these internal agency rifts hindered timely and effective NPL resolution.

For instance, when loan officers make loans and they turn bad, they may not want to be aggressive about recovering them because they want to avoid admitting they were wrong in their credit decisions. Likewise, branch managers may choose to tolerate forbearance to report asset quality and avoid provisioning. Internal banking agency problems indicate that, in addition to the borrower-bank problem, banks must also address incentive-alignment issues to resolve NPLs.

In theory, this adds to Agency Theory, as information asymmetries and conflicting incentives exist at several levels within financial institutions. Mechanisms for aligning these internal incentives within effective NPL governance should include independent NPL recovery units, clear performance indicators, and accountability for resolution outcomes.

5.6 The Multistrategy Advantage

One major contribution is the finding that successful banks use a combination of strategies rather than a single strategy. This refutes the usual research-practice dichotomy of treating NPL resolution strategies as separate options. The multistrategy approach of early restructuring, negotiated recovery, selective enforcement, and strategic write-offs seemed to be more effective than implementing any single strategy alone.

This discovery adds to disruption-adaptation theory by showing that an organisation's ability to use a variety of strategies as an adaptive response is also a valuable skill. Banks that tailored their strategies to their borrowers' specific circumstances achieved better results.

The multistrategy finding is also of relevance to institutional theory. Multiple strategies could help banks to better weather a variety of institutional pressures. Some strategies may be led by regulatory needs (e.g., early restructuring), some by market pressures (e.g., NPL sales) and some by borrower characteristics (e.g., negotiated settlements). Smart banks cope with these pressures flexibly.

5.7 Disruption-Adaptation Perspective

The results support a disruption-adaptation framework in which NPL outcomes result from four elements: strategic choice, organisational capability, institutional conditions, and macroeconomic disruption. This shifts the literature from a determinant perspective on explanations (Louzis et al., 2012; Beck et al., 2013) to a more process-oriented perspective.

Banks are also dealing with increased NPLs, limited capital, limited lending capabilities, and increased regulatory attention during financial disruption. Banks that are responsive and invest in NPL capabilities, build flexible approaches and engage with regulators constructively could turn disruption into institutional learning and better practices. This reflects the conference theme of "thriving through disruption"—showing that NPL issues do not necessarily have to be "bad things" but can be "good things" that stimulate positive organisational change.

5.8 Practical Implications

The results indicate that a number of practical recommendations for bank managers may be drawn:

Develop NPL management capacities. Effective NPL resolution requires not just dedicated recovery units, but also specialised staff and monitoring systems. The way forward for banks is to perceive NPL capabilities, not as a cost, but as an investment.

Construct flexible and multistrategy solutions. Banks should build the ability to deploy their resolution tools flexibly to address borrower situations and regulatory and market requirements, rather than using a one-size-fits-all approach.

Improve borrower viability process. Restructuring is an effective process only if it is based on a proper evaluation of borrower viability – and that implies that the issue of temporary liquidity needs is separated from the matter of underlying solvency. Banks need to build assessment skills and establish clear restructuring guidelines.

The conclusions imply for policy makers and regulators that:

Address judicial delays. The greatest difficulty in resolving NPLs, as raised by participants, was delays in court enforcement of collateral. Using special financial recovery tribunals and streamlined processes could greatly enhance recovery.

Develop restructuring viability standards. Templates for viability assessments that are standard across banks could improve the quality and consistency of restructurings and minimise the risk of inappropriate restructurings creating moral hazard.

Graduate forbearance policies. Forbearance can be beneficial during crises, but a phased approach to reducing forbearance as economic conditions improve can help control moral hazard without compromising stability.

5.9 Contribution to Disruption Management Literature

This research also contributes to the disruption management literature by showing how adaptive institutional responses can create organisational insight through financial disruption. The present study proposes that NPL problems are not only crisis symptoms but also opportunities for positive organisational change by emphasising resolution-problem approaches as spaces for managerial innovation.

This aligns with the resilience literature (Sutcliffe & Vogus, 2003), which focuses on organisations' capacity for learning and development in the face of difficulty. Banks capable of

creating a successful NPL resolution strategy during a crisis will likely be economically stronger, with enhanced risk management, borrower relations and business models.

6. Conclusion

6.1. Addressing the Research Questions

This multiple case study uses a qualitative approach and answers three research questions relating to NPL resolution strategies of commercial banks in Bangladesh.

RQ1: What are commercial banks' NPL resolution strategies and how are they practiced?

Restructuring was the most common strategy adopted (15 out of 18 participants), while collateral enforcement (12), write-offs (8) and nascent NPL sales (4) were other strategies adopted. Restructuring recovery rates ranged from 25% to 42%, depending on implementation quality. Effective banks used several strategies rather than single strategies.

RQ2: What are the characteristics of institutions, regulations and borrowers, and how do they influence the choice of NPL resolution strategies and their effectiveness?

Banks with dedicated NPL units and specialised staff had quicker resolution and recovery rates. Regulatory frameworks influence strategy selection by requiring some provisioning and forbearance policies. Appropriate strategies are based on both borrower cooperation and business viability. The biggest institutional constraint is judicial delays, which average 18 months.

RQ3: What are the challenges faced by banks in NPL resolution, and how does the ability of the organisations affect the resolution outcome?

The main problems are judicial delays, borrower moral hazard, regulatory forbearance causing incentive issues, and the lack of development in the NPL market. Organisational capability (dedicated recovery units, early warning systems, and cross-functional coordination) is a key differentiator. Banks with stronger capabilities resolved cases about 30% faster and achieved higher recovery rates.

6.2 Theoretical Contributions

This research has three theoretical contributions. To Agency Theory (Jensen & Meckling, 1976), it extends agency issues to those between credit origination departments and recovery teams, and between credit origination departments and the corporate agenda. In the Resource-Based View (Barney, 1991), it shows that NPL management skills – recovery units, NPL specialists and good systems – are valuable resources, scarce in the market and hard to imitate. It demonstrates, through Institutional Theory (DiMaggio & Powell, 1983), that regulation is not only a constraining force; it is also an enabling and signalling one.

6.3 Practical Implications

For Bank Managers: Create special NPL management units, equipped with specialised personnel; adopt digital early warning systems; adopt a multi-strategic approach; build capabilities for borrower viability assessments; and establish cross-functional recovery committees.

For Policymakers and Regulators: Set up specific financial recovery tribunals, create templates for financial viability tests for restructuring, introduce graduated forbearance regimes, facilitate secondary market trading of NPLs, and increase regulatory capacity to supervise NPLs.

6.4 Limitations and Future Research

The three-case design restricts institutional variation, country-specific results need to be compared with results from other countries, self-reported data may be subject to bias, and the study timeframe covers only a single point in time. Future research should use mixed methods to establish causal relationships, track restructured loans longitudinally, conduct cross-country comparative studies within South Asia, and include borrower perspectives and the impact of digital transformation on NPL resolution.

6.5 Concluding Remarks

This qualitative multiple case study shows how commercial banks in Bangladesh have adapted their strategies to tackle non-performing loans and build institutional resilience from financial challenges. The most common practice was loan restructuring, which recovered 25-42% of the principal when institutional support was adequate, intervention was timely, and the borrower's viability was assessed. This is supported by collateral enforcement, policy forbearance, macroeconomic considerations, and emerging NPL trading, which is restricted by delays in litigating the cases and policy forbearance. The results show that NPL resolution is neither a standard case nor a universal practice, but one that is context-specific and influenced by institutional, borrower, macroeconomic and regulatory characteristics. Commercial banks can turn NPL problems into opportunities to improve their institutions by using flexible resolution plans tailored to the borrower and aligned with policy. Bank stability, economic growth and successful leadership in an uncertain world are all part of effective NPL resolution.

References

- Abid, L., Ouertani, M. N., & Zouari-Ghorbel, S. (2014). Macroeconomic and bank-specific determinants of households' non-performing loans in Tunisia. *Procedia Economics and Finance*, 13, 58–68.
- Accornero, M., Alessandri, P., Carpinelli, L., & Sorrentino, A. M. (2017). *Non-performing loans and the supply of bank credit: Evidence from Italy* (Bank of Italy Occasional Paper No. 374).
- Aiyar, S., Bergthaler, W., Garrido, J. M., Ilyina, A., Jobst, A., Kang, K., Yan, M. (2015). *A strategy for resolving Europe's problem loans* (IMF Staff Discussion Note SDN/15/19).
- Anastasiou, D., Louri, H., & Tsionas, M. (2016). Determinants of non-performing loans: Evidence from Euro-area countries. *Finance Research Letters*, 18, 116–119.
- Arpa, M., Giulini, I., Ittner, A., & Pauer, F. (2001). The influence of macroeconomic developments on Austrian banks: Implications for banking supervision. *BIS Papers*, 1, 91–116.
- Aver, B. (2008). An empirical analysis of credit risk factors of the Slovenian banking system. *Managing Global Transitions*, 6(3), 317–334.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. doi.org/10.1177/014920639101700108
- Barseghyan, L. (2010). Non-performing loans, prospective bailouts, and Japan's slowdown. *Journal of Monetary Economics*, 57(7), 873–890.
- Beck, R., Jakubik, P., & Piloju, A. (2013). Non-performing loans: What matters in addition to the economic cycle? *European Central Bank Working Paper Series* No. 1515.
- Berger, A. N., & DeYoung, R. (1997). Problem loans and cost efficiency in commercial banks. *Journal of Banking & Finance*, 21(6), 849–870.
- Bholat, D., Lastra, R. M., Markose, S. M., Miglionico, A., & Sen, K. (2016). *Non-performing loans: Regulatory and accounting treatments of assets* (Bank of England Staff Working Paper No. 594).
- Bofondi, M., & Ropele, T. (2011). Macroeconomic determinants of bad loans: Evidence from Italian banks. *Bank of Italy Occasional Papers* No. 89.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi.org/10.1191/1478088706qp0630a

- Castro, V. (2013). Macroeconomic determinants of the credit risk in the banking system: The case of the GIPSI. *Economic Modeling*, 31, 672–683.
- Chaibi, H., & Ftiti, Z. (2015). Credit risk determinants: Evidence from a cross-country study. *Research in International Business and Finance*, 33, 1–16.
- Climent-Serrano, S. (2019). NPLs resolution strategies: An overview. *Journal of Risk and Financial Management*, 12(3), 123.
- Dash, M. K., & Kabra, G. (2010). The determinants of non-performing assets in Indian commercial banks: An econometric study. *Middle Eastern Finance and Economics*, 7(2), 94–106.
- De Bock, R., & Demyanets, A. (2012). Bank asset quality in emerging markets: Determinants and spillovers. *IMF Working Paper* WP/12/71.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). McGraw-Hill.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.5465/amr.1989.4308385>
- European Banking Authority. (2017). *Guidelines on management of non-performing and forborne exposures* (EBA/GL/2018/06).
- European Central Bank. (2017). *Guidance to banks on non-performing loans*.
- Fell, J., Grodzicki, M., Martin, R., & O'Brien, E. (2016). Addressing market failures in the resolution of non-performing loans in the euro area. *Financial Stability Review*.
- Fofack, H. (2005). Non-performing loans in Sub-Saharan Africa: Causal analysis and macroeconomic implications. *World Bank Policy Research Working Paper* No. 3769.
- Ghosh, A. (2015). Banking-industry specific and regional economic determinants of non-performing loans: Evidence from US states. *Journal of Financial Stability*, 20, 93–104.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Guy, K., & Lowe, S. (2011). Non-performing loans and bank stability in Barbados. *Economic Review*, 37(1), 77–99.
- Hou, Y., & Dickinson, D. (2007). The non-performing loans: Some bank-level evidence. *Proceedings of the 4th International Conference on Applied Financial Economics*.
- Hu, J. L., Li, Y., & Chiu, Y. H. (2004). Ownership and non-performing loans: Evidence from Taiwan's banks. *Developing Economies*, 42(3), 405–420.
- International Monetary Fund. (2015). *Global financial stability report: Navigating monetary policy challenges and managing risks*.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jimenez, G., & Saurina, J. (2006). Credit cycles, credit risk, and prudential regulation. *International Journal of Central Banking*, 2(2), 65–98.
- Keeton, W. R., & Morris, C. S. (1987). Why do banks' loan losses differ? *Federal Reserve Bank of Kansas City Economic Review*, 72(5), 3–21.
- Klein, N. (2013). Non-performing loans in CESEE: Determinants and impact on macroeconomic performance. *IMF Working Paper* WP/13/72.
- Kwan, S., & Eisenbeis, R. A. (1997). Bank risk, capitalization, and operating efficiency. *Journal of Financial Services Research*, 12(2–3), 117–131.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Louzis, D. P., Vouldis, A. T., & Metaxas, V. L. (2012). Macroeconomic and bank-specific determinants of non-performing loans in Greece. *Journal of Banking & Finance*, 36(4), 1012–1027.
- Makri, V., Tsagkanos, A., & Bellas, A. (2014). Determinants of non-performing loans: The case of the Eurozone. *Panoeconomicus*, 61(2), 193–206.
- Messai, A. S., & Jouini, F. (2013). Micro and macro determinants of non-performing loans. *International Journal of Economics and Financial Issues*, 3(4), 852–860.

- Nkusu, M. (2011). Non-performing loans and macro-financial vulnerabilities in advanced economies. *IMF Working Paper* WP/11/161.
- OECD. (2017). *Resolving non-performing loans in Europe*. OECD Economic Policy Notes.
- Ozili, P. K. (2019). Non-performing loans and financial development: New evidence. *Journal of Risk Finance*, 20(1), 59–81. <https://doi.org/10.1108/JRF-07-2017-0112>
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage Publications.
- Podpiera, J., & Weill, L. (2008). Bad luck or bad management? Emerging banking market experience. *Journal of Financial Stability*, 4(2), 135–148.
- Rajan, R., & Dhal, S. C. (2003). Non-performing loans and terms of credit of public sector banks in India. *Reserve Bank of India Occasional Papers*, 24(3), 81–121.
- Reinhart, C. M., & Rogoff, K. S. (2010). From financial crash to debt crisis. *American Economic Review*, 101(5), 1676–1706.
- Salas, V., & Saurina, J. (2002). Credit risk in two institutional regimes. *Journal of Financial Services Research*, 22(3), 203–224.
- Skarica, B. (2014). Determinants of non-performing loans in Central and Eastern European countries. *Financial Theory and Practice*, 38(1), 37–59.
- Stern, G. H., & Feldman, R. J. (2004). *Too big to fail: The hazards of bank bailouts*. Brookings Institution Press.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 94–110). Berrett-Koehler.
- Tabari, N. A. Y., Ahmadi, M., & Emami, M. (2013). The effect of liquidity risk on performance of commercial banks. *International Research Journal of Applied and Basic Sciences*, 4(6), 1624–1631.
- Tanasković, S., & Jandrić, M. (2015). Macroeconomic and institutional determinants of non-performing loans. *Journal of Central Banking Theory and Practice*, 4(1), 47–62.
- World Bank. (2020). *Global financial development report 2020: Bank regulation and supervision a decade after the global financial crisis*. World Bank Publications.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.

