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FACTORS AFFECTING THE RESILIENCE OF COMMERCIAL BANKS IN VIETNAM

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Abstract

This study investigates the key factors that influence the resilience of commercial banks in Vietnam. In an increasingly volatile global economic landscape, resilience is a critical requirement for maintaining the stability and sustainable development of financial institutions. The research, which utilized a combination of qualitative and quantitative methods, aimed to systematize the theoretical foundation of bank resilience and identify the key factors affecting it. Data were collected from a survey of 300 individuals over a three-month period within the Vietnamese banking sector. The study employed a theoretical framework that integrated the dynamic capabilities theory and the organizational resilience paradox matrix to analyse how banks prepare for, respond to, and adapt to unexpected shocks. The findings indicate that bank resilience is a multifaceted concept, positively influenced by several factors: technological capacity and digital transformation, risk management capability, financial capacity, and organizational culture and adaptability. Based on these findings, the study provides practical recommendations to enhance the resilience of commercial banks in Vietnam, focusing on strengthening financial foundations, improving human resources, and accelerating digital transformation in a strategic and comprehensive manner.

Keywords: Bank resilience, commercial banks, Risk management, Organizational culture

1. INTRODUCTION

In an era defined by constant global economic fluctuations and unforeseen events like the COVID-19 pandemic, climate change, and geopolitical conflicts, enhancing resilience has become a pressing necessity for Vietnamese commercial banks (Nguyen & Vu, 2025; OECD, 2025). These factors create a complex and multi-faceted risk environment, demanding that financial institutions have a high capacity for adaptation to maintain stability and foster growth (OECD, 2025). Bank resilience is not merely about surviving a crisis but also about recovering quickly and sustaining robust growth (Apergis & Apergis, 2022). This is especially crucial given the interconnected nature of the financial system, where the failure of one institution can trigger a domino effect, leading to a systemic crisis (Nga, 2025). Therefore, bolstering the resilience of individual commercial banks is a key policy priority to safeguard macroeconomic financial stability and promote sustainable economic development (OECD, 2025).

The COVID-19 pandemic acted as a significant catalyst, accelerating the banking sector's digital transformation (Nga, 2025). While the State Bank of Vietnam (SBV) promptly introduced policies to restructure loan repayment terms and waive fees to support affected customers, these short-term measures carry long-term risks, such as potential inflation and an increase in latent non-performing loans once the policies expire (Ianna Journal of Interdisciplinary Studies, 2023; Ngo, 2025). Furthermore, climate change poses a major threat, subjecting Vietnamese banks to physical risks from natural disasters and transition risks from the shift to a low-carbon economy (OECD, 2025; GIZ & UNEP FI, 2022). Geopolitical risks also significantly impact bank stability and profitability by causing financial volatility and a decline in market confidence (no specific source found). To navigate these challenges, banks must have comprehensive risk management frameworks, including the use of stress testing, to forecast potential capital shortfalls and plan for crisis response (IFC, 2022).

In this context, the study: “*Factors Affecting the Resilience of Commercial Banks in Vietnam*” aims to address this critical issue by exploring both the theoretical foundations and the practical realities of bank resilience in Vietnam (Nga, 2025). The research seeks to systematically review the concepts and measurement of bank resilience, assess its current state within the Vietnamese banking system, and identify the key factors influencing it (Nga, 2025). By doing so, the study will provide a foundation for proposing effective solutions to enhance the resilience of Vietnamese commercial banks, ensuring they can not only overcome current challenges but also thrive in an increasingly uncertain future (Nga, 2025).

2. LITERATURE REVIEW

Resilience has become an increasingly prominent concept in organizational studies, particularly in the financial sector. Scholars generally define resilience as the ability of an organization to anticipate risks, withstand disruptions, adapt to change, and recover swiftly while maintaining essential functions (Duchek, 2020). Within the banking industry, resilience is manifested through situational awareness, the capacity to manage key vulnerable areas such as credit, liquidity, and operational risks, and the ability to adapt flexibly to both expected and unexpected shocks (Horne & Orr, 1998; Sonia et al., 2007). From the perspective of the Basel Committee on Banking Supervision, resilience represents the capacity of the banking system to absorb

financial and economic shocks without triggering systemic instability (BIS, 2009). This multidimensional view positions resilience not merely as survival but as the ability to transform challenges into opportunities for sustainable growth.

The theoretical foundations of resilience draw on several key frameworks. Dynamic Capabilities Theory (Teece et al., 1997) emphasizes an organization's ability to reconfigure internal and external competencies in response to rapidly changing environments. This theory is highly relevant to commercial banks, which must constantly adapt to evolving regulatory frameworks, technological advances, and macroeconomic volatility. Another important perspective is the Organizational Resilience Paradox Matrix (Hall et al., 2011), which highlights the inherent paradoxes in building resilience: balancing efficiency with flexibility, stability with adaptability, and short-term responses with long-term sustainability. Together, these frameworks provide a basis for understanding how banks can develop resilience not only as a defensive mechanism but also as a source of competitive advantage.

Research on the determinants of resilience suggests that both financial and non-financial factors play critical roles. Financial strength, including adequate capital buffers, asset quality, and liquidity reserves, is fundamental to ensuring that banks can withstand shocks and maintain confidence during crises (Cecchetti & Tucker, 2016). Effective risk management, particularly stress testing and scenario analysis, enables banks to anticipate capital shortfalls and prepare for adverse conditions (Lê Thị Huyền Diệu et al., 2022). Technological innovation also plays a central role in enhancing resilience by enabling digital transformation, improving operational continuity, and facilitating real-time risk monitoring (Demma et al., 2024). Beyond these structural factors, organizational culture and leadership significantly influence resilience, as leaders shape decision-making under uncertainty and foster adaptability across the institution (Duchek, 2020). Furthermore, inter-organizational relationships, including cooperation with regulators, international partners, and stakeholders, strengthen systemic resilience and reduce contagion risks in times of turbulence (Nga, 2025).

International scholarship has provided extensive insights into banking resilience. For example, Battiston et al. (2016) employed complexity theory to examine systemic risk within financial networks, while Apergis and Apergis (2022) analysed the impact of climate-related factors on the resilience of U.S. banks. Other studies have focused on specific contexts, such as Bangladesh (Ghosh & Saima, 2021), the United States (Papadimitriou et al., 2022), and Italy (Demma et al., 2024), with consistent findings highlighting the importance of capital adequacy, liquidity, and technological investment. At the domestic level, however, Vietnamese research on resilience remains limited. Studies have largely focused on financial stability, stress testing, and credit risk, particularly during the COVID-19 pandemic (Anh & Sang, 2023). More recent works have considered climate change (Vũ Thị Kim Oanh, 2023) and geopolitical uncertainties (Hai & Huynh, 2025), but these are fragmented and lack integration of broader organizational perspectives such as leadership and culture. This indicates a significant research gap: while international literature emphasizes a multidimensional approach, domestic studies on Vietnamese banks remain narrowly focused on financial indicators.

3. RESEARCH HYPOTHESES AND CONCEPTUAL FRAMEWORK

3.1. Research Hypotheses

H1: Strategic leadership capability and internal risk management positively influence the resilience of commercial banks.

Leadership plays a decisive role in shaping an organization's ability to anticipate risks, make timely decisions, and guide recovery strategies. Effective leaders enhance resilience by fostering proactive risk governance, aligning resources with long-term objectives, and creating adaptive strategies during crises (Duchek, 2020). Within the banking sector, strong leadership and effective internal risk management reduce the likelihood of systemic failures and enable quicker recovery from shocks (Hall et al., 2011).

H2: The core organizational culture of banks positively affects their resilience.

Organizational culture establishes shared values and norms that influence how employees respond to crises. A culture that promotes trust, collaboration, and continuous learning enhances adaptability and problem-solving capacity (Horne & Orr, 1998). Research shows that banks with resilient cultures can absorb shocks more effectively and sustain performance under uncertainty (Martin et al., 2018).

H3: The level of employee engagement and proactiveness has a positive impact on the resilience of commercial banks.

Employees are the frontline actors in implementing crisis responses. Engaged and proactive staff contribute to resilience by anticipating disruptions, suggesting innovative solutions, and maintaining service continuity (Somers, 2009). In banking,

employee commitment and initiative are particularly vital for managing operational risks and maintaining customer trust during crises (Nguyen & Vu, 2025).

H4: Information flow and knowledge-sharing capacity within banks positively contribute to bank resilience.

Resilience is strengthened when organizations ensure effective communication and information sharing across units. Timely access to accurate data enables faster decision-making, coordination, and adaptive responses (Stephenson, 2010). Banks with transparent and efficient information systems are better able to identify vulnerabilities, mitigate risks, and recover quickly from disruptions (Demma et al., 2024).

H5: External cooperation networks and the ability to mobilize external resources positively influence the resilience of commercial banks.

Inter-organizational networks enhance resilience by providing access to external knowledge, resources, and support during crises (Powley, 2009). For banks, collaboration with regulators, fintech partners, and international institutions reduces systemic risk exposure and facilitates joint solutions to crises such as cyberattacks, pandemics, or climate-related shocks (Battiston et al., 2016).

H6: The degree of digital technology adoption positively affects the resilience of commercial banks.

Digital transformation strengthens resilience by ensuring operational continuity, enabling remote services, and enhancing risk monitoring through big data and artificial intelligence (Gomber et al., 2017). During the COVID-19 pandemic, banks with advanced digital infrastructure adapted more successfully to disruptions and maintained customer trust (Hossain et al., 2022).

3.2. Research model

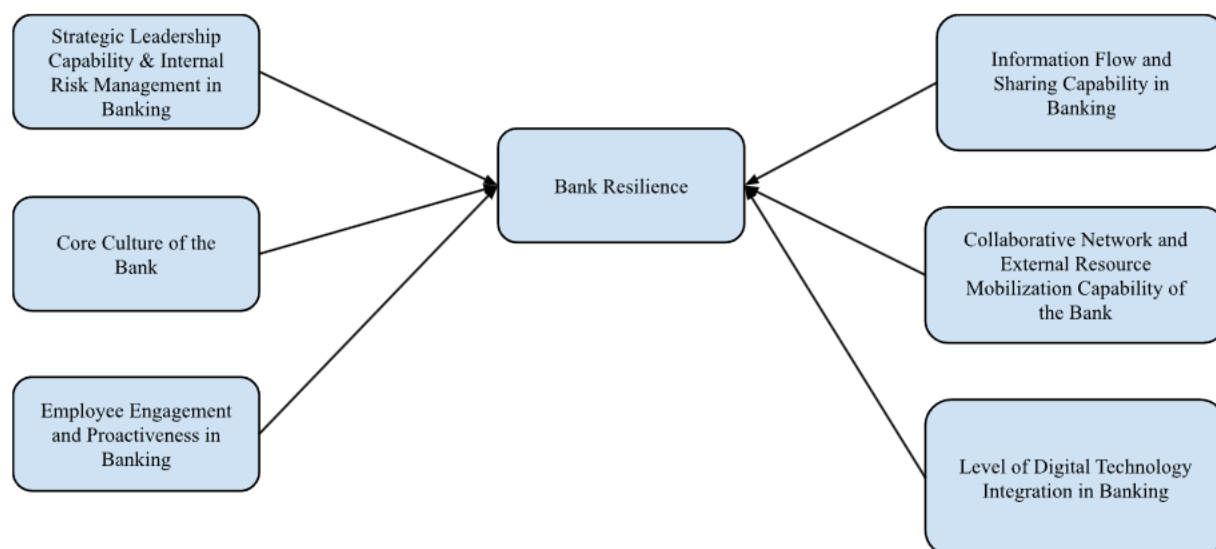


Figure 1. Research model (Authors, 2025)

4. RESEARCH METHOD

5. RESEARCH METHODOLOGY

5.1. Data Collection and Processing

This study employed both secondary and primary data sources to investigate the factors influencing the resilience of Vietnamese

commercial banks. Secondary data were gathered from official documents issued by the State Bank of Vietnam, government regulations, financial reports, and recent academic publications related to banking resilience. These sources provided an overview of the theoretical foundations and policy context.

Primary data were collected through a structured survey administered both directly and online. The survey respondents consisted of employees, managers, and stakeholders working in or

associated with commercial banks in Vietnam. This group was selected because of their direct experience and insights into banking operations, risk management practices, and organizational adaptability. A non-probability convenience sampling method was adopted due to the practical challenges of accessing a random sample in the banking sector. This approach is considered appropriate in exploratory research where feasibility and access to respondents are prioritized (Bornstein et al., 2017).

5.2. Measurement Instruments

The questionnaire was designed with three main parts. The first section included general questions on the respondents' role and experience in the banking sector. The second section collected demographic and professional information, while the third focused on measurement items capturing key constructs such as leadership capability, organizational culture, employee engagement, information flow, external cooperation, and digital technology adoption. These constructs were identified based on the literature review and the conceptual framework.

All measurement items were evaluated using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The items were adapted from validated scales in previous studies on organizational resilience and banking performance (Fornell & Larcker, 1981; Duchek, 2020; Hall et al., 2011). A pilot test was conducted with 30 respondents working in Hanoi-based banks to ensure clarity and contextual relevance. The pilot results indicated satisfactory reliability, with Cronbach's Alpha coefficients above the 0.7 threshold, and satisfactory convergent validity as indicated by outer loadings and average variance extracted (AVE) exceeding recommended cut-off values (Fornell & Larcker, 1981).

5.3. Data Analysis Method

The collected data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). This method is well suited for studies with multiple latent variables and complex structural relationships, particularly in cases with moderate sample sizes (Hair et al., 2017). Compared to covariance-based SEM, PLS-SEM has advantages such as fewer distributional requirements and the flexibility to handle both reflective and formative constructs. Considering the exploratory nature of this study, which examines diverse factors influencing bank resilience in Vietnam, PLS-SEM was considered the most appropriate analytical approach. The data analysis was conducted using SmartPLS version 4.0, a widely adopted tool for structural equation modeling in management and finance research.

6. RESEARCH FINDINGS

6.1. Descriptive Statistics

Table 1: Descriptive Statistics

No	Criterion	Quantity	Percentage
1	Gender		
	Female	173	57.6 %
	Male	127	42.4 %
2	Age		
	Under 25	117	39.1%

	25-30	51	17.0 %
	31- 40	58	19.3%
	41-50	49	16.1%
	Over 50	25	8.5%
4	Jobs (Bank)		
	Vietcombank	152	50.6%
	BIDV	111	37.1%
	Viettinbank	29	9.5%
	Agribank	8	2.8%
5	Study level		
	University	109	36.5%
	Bachelor	117	38.8%
	PhD	43	14.5%
	Phd student	31	10.2%

(Source: Authors, 2025)

The demographic composition of the sample carries important implications for understanding bank resilience. First, the relatively high proportion of young employees (under 35 years old accounting for more than half of respondents) suggests that Vietnamese banks possess a workforce that is highly adaptable to technological change and digital transformation. Younger generations, particularly millennials and Gen Z, are more receptive to innovation and agile practices, which are essential for strengthening organizational resilience in an era of rapid digital disruption (EY, 2021; PwC, 2020). This demographic profile implies that banks can leverage the digital skills and adaptability of their younger workforce to enhance resilience against future shocks.

Second, the dominance of respondents from Vietcombank and BIDV highlights the practices of large state-owned banks, which often benefit from stronger capital buffers, government support, and established governance systems. These attributes enhance systemic resilience by ensuring stability during crises (SBV, 2022). However, the underrepresentation of smaller banks suggests that the findings may not fully capture the challenges of institutions with weaker capital structures or limited technological capacity, which are often more vulnerable to external shocks (IMF, 2020).

Third, the educational profile of respondents indicates a highly qualified workforce, with a significant shareholding postgraduate qualification. This level of academic and professional training enhances the analytical, problem-solving, and decision-making

capacities of bank employees. Prior research emphasizes that knowledge and human capital are crucial for building organizational resilience, as they enable proactive risk management and innovation in crisis response (Duchek, 2020; Hall et al., 2011).

In sum, the demographic characteristics of the sample suggest that Vietnamese banks, particularly large state-owned institutions, have favourable conditions for resilience due to their young, educated workforce and established institutional resources. At the same time, the findings point to a need for more attention to smaller banks and older employees, whose perspectives on long-term experience and resource constraints could provide additional insights into systemic resilience.

6.2. Reliability of the scale

Table 2. Reliability of the scale

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
LD	0.787	0.792	0.875	0.701
VH	0.770	0.783	0.867	0.685
GK	0.786	0.792	0.874	0.699
HT	0.858	0.860	0.898	0.638
RR	0.768	0.772	0.866	0.683
LH	0.765	0.778	0.869	0.662
CC	0.749	0.765	0.851	0.643

(Source: Authors, 2025)

The assessment of measurement reliability and validity demonstrates that all constructs in the research model meet the required standards. The internal consistency of the scales is confirmed, meaning that the items within each construct are aligned and measure the same underlying dimension. Similarly, the composite reliability values are satisfactory, indicating that the constructs are captured consistently across multiple indicators. Beyond reliability, the convergent validity results also show that the observed items effectively reflect their intended latent variables, confirming that the selected measures are theoretically and empirically sound.

These outcomes suggest that the questionnaire successfully operationalizes the conceptual framework of bank resilience. Constructs such as leadership capability, organizational culture, employee engagement, information sharing, cooperation networks, risk management, and technological adoption are all measured with acceptable levels of accuracy. This provides a solid methodological foundation for subsequent hypothesis testing using structural equation modeling. From a practical perspective, the strong measurement reliability implies that the insights derived from the data can be considered trustworthy and reflective of the realities within Vietnamese commercial banks. As prior research emphasizes, reliable and valid measurement is essential for drawing meaningful conclusions in organizational resilience studies (Fornell & Larcker, 1981; Hair et al., 2017).

The confirmation of reliability and validity of the measurement scales has significant implications for both research and practice. From an academic perspective, it ensures that the study's

constructs—such as leadership capability, organizational culture, employee engagement, and technological adoption—are measured consistently and accurately. This provides a robust foundation for testing the research hypotheses and generating findings that are not only statistically sound but also theoretically meaningful. Reliable measurement is crucial in resilience research, as it helps reduce bias and increases confidence that observed relationships truly reflect underlying organizational dynamics (Hair et al., 2017).

From a practical standpoint, the reliability of the measurement instruments strengthens the credibility of the recommendations that emerge from this study. For banking practitioners and policymakers, it means that the identified resilience-enhancing factors are grounded in valid empirical evidence, not random variation or measurement error. This is particularly important in the Vietnamese context, where commercial banks face growing challenges from digital disruption, climate risks, and global financial volatility. Reliable insights enable decision-makers to design more targeted strategies, such as investing in leadership training, fostering adaptive organizational cultures, or enhancing technological capacity, thereby strengthening the resilience of the entire banking system (Duchek, 2020; SBV, 2022).

6.3. Path Coefficient

Table 3. Path coefficient

	β	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Result
LD->CC	0.273	0.076	3.615	0.000	Supported
VH->CC	0.065	0.048	1.341	0.18	Not supported
GK->CC	0.111	0.065	1.701	0.089	Supported
HT->CC	0.264	0.072	3.644	0.000	Supported
RR->CC	0.158	0.066	2.394	0.017	Supported
LH->CC	0.192	0.070	2.743	0.006	Supported

(Source: Authors, 2025)

The analysis of structural path coefficients reveals several important insights into the factors that influence the resilience of Vietnamese commercial banks. First, strategic leadership and effective internal risk management emerge as significant drivers of resilience. This finding reinforces the view that the ability of top management to provide strategic direction and manage uncertainty is central to organizational survival and adaptation (Duchek, 2020). Similarly, external cooperation networks are shown to have a strong positive impact, highlighting the role of inter-organizational

collaboration and resource mobilization in strengthening banks' adaptive capacity (Lengnick-Hall et al., 2011).

Employee engagement also demonstrates a significant effect, indicating that a committed and proactive workforce contributes to organizational resilience by fostering adaptability and collective problem-solving during crises. Furthermore, risk management capability and leadership capacity beyond the strategic level—such as operational and middle management—are also found to positively shape resilience. These results confirm prior research suggesting that resilience is not only built through top-down strategies but also requires bottom-up engagement and robust governance structures (Annarelli & Nonino, 2016).

Technology adoption is another factor positively associated with resilience, suggesting that banks investing in digital transformation are better positioned to withstand disruptions. This aligns with recent evidence that digital tools enhance operational continuity and customer trust in volatile environments (EY, 2021).

In contrast, two factors organizational culture and information sharing—did not show a statistically significant relationship with resilience in this study. While prior literature often emphasizes the role of culture and knowledge flows in building resilience (Vogus & Sutcliffe, 2007), the non-significant findings here may reflect the specific context of Vietnamese banks, where hierarchical structures and regulatory frameworks limit the influence of softer organizational elements compared to leadership and technology.

7. CONCLUSION AND RECOMMENDATIONS

7.1. Conclusion

This study examined the factors influencing the resilience of Vietnamese commercial banks in the context of increasing global uncertainties, including economic fluctuations, climate change, and digital disruption. Drawing on survey data and structural equation modeling, the findings highlight that several factors significantly enhance bank resilience. These include strategic leadership, employee engagement, external cooperation networks, effective risk management, and digital technology adoption. These results suggest that resilience is shaped not only by the capacity of leaders to provide direction during crises but also by the collective commitment of employees, the ability to leverage external partnerships, and the adoption of advanced technological solutions.

Conversely, organizational culture and information-sharing mechanisms did not show significant direct effects on resilience. This indicates that while these elements may remain important, their influence is likely indirect or context-dependent, reflecting the hierarchical and compliance-oriented environment of Vietnamese banking. Overall, the study contributes to the literature by providing empirical evidence on resilience in emerging market banks, underscoring the multidimensional nature of resilience-building.

7.2. Recommendations

To strengthen the resilience of Vietnamese commercial banks, several practical strategies are recommended based on the research findings. First, banks should focus on developing strategic leadership and robust risk governance systems. Effective leadership plays a decisive role in navigating uncertainty, setting long-term vision, and maintaining organizational stability during crises. By investing in leadership development programs and incorporating advanced risk assessment tools, banks can enhance

their ability to anticipate and respond to shocks. Strengthened governance structures also help to ensure that resilience is embedded into daily operations rather than being treated as a reactive measure.

Second, employee engagement and empowerment must be prioritized. The results show that committed and proactive employees contribute significantly to resilience by fostering adaptability and collective problem-solving. Banks can nurture this strength by providing training, career advancement opportunities, and participatory mechanisms that allow staff at all levels to contribute to decision-making. A motivated and engaged workforce not only sustains business continuity in times of crisis but also generates innovative ideas for growth and adaptation.

Another crucial recommendation is the expansion of inter-organizational cooperation networks. Partnerships with fintech companies, regulators, and international institutions can help banks access new technologies, share critical information, and mobilize external resources when disruptions occur. Collaboration beyond the banking sector enhances flexibility and ensures that banks are not isolated in responding to systemic risks. Such networks also provide opportunities for benchmarking and adopting best practices from more advanced markets.

At the same time, banks should accelerate digital transformation as a core pillar of resilience. The study highlights that technology adoption is strongly associated with the capacity to withstand disruptions. By investing in digital infrastructure, strengthening cybersecurity, and expanding customer-centric digital services, banks can ensure operational continuity while enhancing efficiency and trust. This is particularly important in the Vietnamese context, where digital banking adoption is rapidly increasing and customer expectations are shifting toward seamless, technology-driven experiences.

Finally, although organizational culture and information-sharing mechanisms did not demonstrate significant direct effects in this study, they should not be overlooked. These elements may play an indirect or long-term role in shaping resilience by fostering collaboration and collective learning. Banks should therefore continue to encourage open communication, cross-departmental coordination, and a culture that supports adaptability and innovation. Over time, such cultural and informational factors may strengthen the overall resilience framework by reinforcing other capabilities such as leadership, risk management, and digital adoption.

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