

THE IMPACT OF SHADOW BANKING ON BANK CAPITAL ADEQUACY RATIO IN VIETNAM: MODERATING ROLE OF CORPORATE GOVERNANCE

● PHUNG THI THU HUONG - TA THAI HOANG - PHAM THU HA

ABSTRACT:

This study investigates the impact of shadow banking on the capital adequacy ratio (CAR) of listed Vietnamese commercial banks from 2012 to 2022, emphasizing the moderating role of corporate governance. Results show a positive relationship between shadow banking and CAR, highlighting benefits in income diversification and capital optimization. Gender diversity on boards enhances this effect, while larger board sizes diminish governance effectiveness. This study offers valuable insights for policymakers, underscoring the importance of balancing financial innovation with effective risk management and governance to ensure banking stability.

Keywords: shadow banking, corporate governance, bank risk management.

JEL: G21, G28, G32, G34, E58, O16

1. Introduction

Shadow banking played a critical role in the 2007-2008 global financial crisis, exposing systemic vulnerabilities that had gone unnoticed (Financial Stability Board -- FSB, 2015). Its rapid growth has increased credit availability but also introduced significant risks to financial stability, as shadow banks operate outside traditional regulatory frameworks, heightening liquidity and credit risks (Pozsar et al., 2013; Adrian, 2014). Policymakers emphasize the need for robust regulations to mitigate these risks (FSB, 2011).

Shadow banking activities blur the lines with traditional banking through cross-ownership and asset holdings (Cetorelli, 2014; Pozsar et al., 2013). Banks often sponsor loans, provide liquidity, and engage in off-balance-sheet activities like

securitization. For example, by early 2007, 75% of \$1.2 trillion in asset-backed commercial papers were linked to shadow banking (Arteta et al., 2013). Modern shadow banking integrates unconventional activities into bank accounting, while traditional shadow banking uses non-bank intermediaries for credit creation (Sun, 2019; Ehlers et al., 2018).

In China, instruments like Wealth Management Products (WMPs) bypass regulatory oversight, expanding credit but obscuring risks (Ehlers et al., 2018; Cheng & Wang, 2022). Such interconnectedness, as seen in the 2008 crisis, amplifies systemic vulnerabilities (Girncka, 2016). Similarly, in Vietnam, shadow banking activities such as bond brokerage by commercial banks raise financial stability concerns (Nguyen et al., 2023).

Existing studies (e.g., Le et al., 2021) explore shadow banking's effects on securities and bank performance but lack robust methodologies for examining its impact on the capital adequacy ratio (CAR) and the moderating role of corporate governance.

This study investigates how shadow banking influences CAR in Vietnamese banks and the moderating effects of corporate governance, using data from listed commercial banks (2012–2022). It aims to identify shadow banking factors impacting CAR, evaluate shadow banking's development, and examine corporate governance's role in this dynamic. By addressing these gaps, this research provides insights for policymakers and banking regulators, contributing to the literature on shadow banking's effects on risk and CAR.

The research comprises five chapters. Chapter 1 introduces the research background and significance. Chapter 2 reviews literature and develops hypotheses. Chapter 3 outlines the methodology. Chapter 4 presents findings and implications. Chapter 5 concludes with recommendations and limitations.

2. Literature review and hypothesis development

2.1. Shadow banking

Shadow banking refers to financial activities resembling traditional banking but operating outside conventional regulatory frameworks. Coined by Paul McCulley in 2007, it describes credit and investment practices through leveraged instruments parallel to regulated banking. While shadow banking enhances liquidity and capital flow by offering alternative credit channels, it lacks transparency and safeguards (Guofeng Sun, 2019).

Modern shadow banking includes off-balance-sheet activities like Wealth Management Products (WMPs), while traditional forms involve non-bank intermediaries providing credit. In China, shadow banking's ties to commercial banks via WMPs obscure credit risks and weaken monetary policy (Ehlers et al., 2018; Cheng & Wang, 2022). Globally, it supports credit intermediation and liquidity but relies on short-term funding and high leverage, increasing systemic risks (FSB, 2017).

Despite these risks, shadow banking promotes

financial diversity, resource allocation, and liquidity. However, its lack of oversight contributed to the 2007–2009 financial crisis, exposing systemic vulnerabilities and the interconnectedness between shadow and traditional banks, where liquidity runs destabilized commercial banking (FSB, 2015; Głrnicka, 2016).

2.2. Bank Capital Adequacy Ratio (CAR)

The capital adequacy ratio (CAR), defined as the ratio of equity capital to risk-weighted assets, is a key metric for assessing a bank's resilience and stability (Ahmed Abdel Karim, 1996). A higher CAR indicates stronger capacity to absorb losses and safeguard stakeholders during disruptions (Gupta & Kashiramka, 2020). Beyond regulatory compliance, it reflects a bank's ability to support growth while managing risks.

CAR standards are guided by the Basel Accords, with Basel II (2004) and Basel III (2013) introducing stricter resilience requirements. In Vietnam, the State Bank mandates a minimum CAR of 8% to ensure sound credit growth and risk management, aligning with Basel standards. As a buffer against losses, CAR curbs excessive risk-taking and fosters public confidence in banking. Its importance in Vietnam has grown with modernization and global integration, underscoring its role in mitigating risks and promoting sustainable growth (Dao & Nguyen, 2020).

2.3. Corporate governance

Corporate governance comprises systems and practices that ensure accountability, transparency, and alignment among stakeholders (Cadbury, 1992). By defining the roles and responsibilities of the board, management, shareholders, and other stakeholders, it fosters trust, enhances performance, and supports long-term sustainability through risk mitigation and resilience (Jensen & Meckling, 1976).

The board of directors is pivotal in overseeing management and aligning operations with strategic goals. Diverse boards, especially those with gender diversity, enhance decision-making and risk management, as female directors are often associated with higher ethical standards and risk-averse practices (Robinson & Dechant, 1997; Byrnes et al., 1999; Erhardt et al., 2003). In

banking, effective governance frameworks - such as independent oversight and robust internal controls - strengthen risk management and mitigate shadow banking risks. Their success, however, hinges on regulatory contexts and organizational culture (Adams et al., 2010; Pierce & Sweeney, 2010). For shadow banking, governance moderates its impact on financial stability, with larger, diverse boards providing enhanced oversight, reducing systemic risks, and improving resilience.

2.4. Hypothesis development

Shadow banking operates outside strict regulatory oversight, allowing traditional banks to optimize their capital structure by transferring credit risks to shadow entities. This reduces risk-weighted assets and improves CAR. By enabling banks to focus on strategic lending while shadow institutions manage high-risk or short-term financing, shadow banking enhances liquidity and market efficiency (Meisenzahl & Peydro, 2018). Thus, the first hypothesis is proposed:

H1: Shadow banking positively impacts the bank capital adequacy ratio.

Corporate governance, particularly effective board structures, plays a crucial role in risk management and performance (Cadbury, 1992; Adams, 2012). Larger, diverse boards improve decision-making and resource allocation, potentially moderating shadow banking's impact on CAR. This leads to the second hypothesis:

H2: Corporate governance significantly moderates the relationship between shadow banking and bank capital adequacy ratio.

3. Data sample and research methodology

3.1. Data sample

This study examines the impact of shadow banking on bank capital adequacy using a dataset of 19 commercial banks listed on the Hanoi Stock Exchange (HNX) and Ho Chi Minh City Stock Exchange (HOSE) in Vietnam over the period 2012 - 2022. The dataset comprises 209 observations, sourced from annual reports and the FiinPro platform. To mitigate the influence of outliers, continuous variables are winsorized at the 1% and 99% levels. The definitions of all variables are summarized in Appendix 1.

3.2. Variable construction

3.2.1. Dependent variable

The bank capital adequacy ratio is the primary measure of bank stability and is calculated as the sum of Tier 1 capital and Tier 2 capital scaled by total risk weighted assets of a bank. Specifically, tier 1 capital includes equity capital and disclosed reserves, while Tier 2 capital comprises undisclosed reserves, revaluation reserves, and subordinated debt. Risk-weighted assets vary depending on the nature of the loans of the observed bank.

3.2.2. Independent variables: Shadow banking

The dependent variable measures the level of shadow banking activity by commercial banks, calculated using methods from prior studies (Ding et al., 2020; Wen et al., 2017; Nguyen et al., 2022). This activity is derived from three components: net fees and commissions (NFC), contingent liabilities (CL), and non-interest income (NII).

The first variable, Shadow banking 1, is based on net fees and commissions, which represent income from services like payment processing, loan facilitation, and account maintenance. This metric reflects fee-based activities commonly linked to shadow banking, such as entrusted loans and intermediary enterprise services. Shadow banking 1 is defined as:

$$\text{Shadow banking } 1_{it} = \frac{\text{Net fees and commissions}_{it}}{\text{Total assets}_{it}}$$

The second variable, Shadow Banking 2, is based on non-interest income, including revenue from off-balance-sheet activities (e.g., credit guarantees, letters of credit), financial advisory fees, trading income, and investment gains, representing broader shadow banking dimensions. Following Carbí Valverde and Rodríguez Fernández (2007) and Nguyen (2012), it is calculated as:

$$\text{Shadow banking } 2_{it} = \frac{\text{Non-interest income}_{it}}{\text{Total assets}_{it}}$$

3.3. Model specification

We use the following model to investigate the impacts of shadow banking on bank capital adequacy:

$$\begin{aligned} & \text{Bank capital adequacy}_{it} \\ &= \beta_0 + \beta_1 \text{Shadow}_{it} + \beta_2 \text{Control}_{it} \\ &+ \beta_3 \text{Bank capital adequacy}_{it-1} + \delta_i + \gamma_t + \varepsilon_{it} \end{aligned}$$

where capital adequacy of the bank i in year t proxied by capital adequacy ratio, following the literature of Dendawijaya (2005), Riyadi (2006), Maharani (2007). Shadow is measured by two measures Shadow banking 1 and Shadow banking 2.

We include key control variables to account for factors influencing the capital adequacy ratio. Bank size (SIZE), measured as the natural logarithm of total assets, reflects the trade-off between stability from market dominance and risks from larger operations (Cifk & Hesse, 2010; Laeven et al., 2014; Tabak et al., 2012; Mirzaei et al., 2013; Fu et al., 2014). Bank age (AGE) captures operational experience, while the equity-to-total-assets ratio (ETA) indicates resilience during financial shocks (Diaconu & Oanea, 2014; Tabak et al., 2012). Additional controls include cost-to-income ratio (CIR) for efficiency, non-performing loans to total loans (NPLTL) for credit risk, loan-to-deposit ratio (LDR) for liquidity, and total assets (TA) for asset value.

3.4. Summary statistics

Table 1 provides descriptive statistics for the variables included in the analysis, summarizing their central tendencies and variability. The dependent variable, CAR, has a mean value of 2.615 with a standard deviation of 8.669, indicating

significant variation across banks, ranging from 0.09 to 33.298. Shadow Banking 1 and Shadow Banking 2, which measure the intensity of shadow banking activities, show relatively low mean values of 0.003 and 0.007, respectively, with limited variability.

Control variables reveal key differences. Bank age, with a mean log-transformed value of 3.403, reflects a mature banking system. Bank size shows considerable heterogeneity, averaging 30.403 with a standard deviation of 8.656. The cost-to-income ratio averages 0.537, indicating moderate efficiency, while non-performing loans (NPL) remain low at 0.021. Governance variables add further insights. Female board representation averages 18.9% with a standard deviation of 16.7%, highlighting limited diversity. Board size, with a log-transformed mean of 2.25 and a standard deviation of 0.248, indicates consistency in structure.

Table 2 provides the correlation matrix. Shadow Banking 1 and 2 show negative correlations with CAR, though these do not account for control variables or governance factors. Regression results confirm shadow banking reduces CAR, supporting the hypothesis that shadow banking, while optimizing liquidity and capital, heightens systemic risks and weakens capital buffers.

The negative correlations likely indicate that larger, older banks engaged in shadow banking tend to have lower CARs due to their scale and

Table 1. Summary statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
CAR	144	2.615	8.669	0.09	33.298
Shadow Banking 1	144	0.003	0.002	-0.002	0.012
Shadow Banking 2	144	0.007	0.006	-0.004	0.027
Bank age	144	3.403	0.361	2.708	4.19
Bank size	144	30.403	8.656	0.506	34.938
Cost-to-income ratio	144	0.537	0.137	0.292	0.876
NPL	144	0.021	0.013	0	0.07
Loan-to-deposit ratio	144	0.838	0.18	0.439	1.344
Equity-to-asset ratio	144	0.079	0.024	0.044	0.164
Female fraction	143	0.189	0.167	0	0.6
Ln(Board size)	144	2.25	0.248	1.792	2.89

Table 2. Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) CAR	1										
(2) Shadow Banking 1	-0.26	1									
(3) Shadow Banking 2	-0.33	0.71	1								
(4) Bank age	-0.56	0.11	0.18	1							
(5) Bank size	-0.99	0.29	0.34	0.56	1						
(6) Cost-to-income ratio	0.03	-0.52	-0.53	-0.23	-0.17	1					
(7) NPL	-0.12	-0.02	0.1	0.02	0.04	0.29	1				
(8) Loan-to-deposit ratio	-0.03	0.43	0.29	0.08	0.13	-0.57	-0.1	1			
(9) Equity-to-asset ratio	-0.1	0.32	0.46	-0.17	0.08	-0.18	0.21	0.15	1		
(10) Female fraction	-0.03	-0.26	-0.18	-0.01	0.02	0.24	-0.14	-0.16	-0.22	1	
(11) Ln(Board size)	0.01	0.03	-0.04	0.25	0.02	-0.04	-0.17	-0.03	-0.13	-0.07	1

operational complexities. Shadow banking may also facilitate risk transfer and short-term profits, reducing incentives to maintain higher CARs. These dynamics highlight the need for multivariate analyses to clarify shadow banking's impact on CAR.

4. Empirical results

4.1. The impacts of shadow banking on the capital adequacy ratio

Table 3 summarizes the baseline regression results on the impact of shadow banking on the CAR. Shadow Banking 1 and Shadow Banking 2 exhibit significant positive effects on CAR, with coefficients of 102.886 (1% level) and 21.175 (10% level), respectively, supporting Hypothesis H1. These results indicate that shadow banking enhances CAR by generating non-interest income, diversifying risks, and easing capital reserve pressures (Barth et al., 2013; Meng-Wen Wu & Chung Hua Shen, 2018).

Control variables reveal that larger banks maintain lower CAR, while bank age and total assets positively correlate with CAR, underscoring stability benefits from maturity and scale. Higher cost-to-income ratios reduce CAR, consistent with research linking poor expense management to weakened financial stability (Sufian & Chong, 2008; Hess & Francis, 2004).

While the correlation matrix suggested a negative link between shadow banking and CAR, regression results underscore the role of control variables and fixed effects, showing shadow banking's potential to improve CAR in the short term despite long-term risks to financial stability.

4.2. Robustness checks

Table 4 presents the results of a robustness check where all independent variables are lagged by one year. Lagging variables addresses potential endogeneity concerns by reducing simultaneity bias, ensuring that the explanatory variables precede the dependent variable in time. This approach also accounts for delayed effects, as changes in bank characteristics or shadow banking activities may not immediately impact capital adequacy but influence it over time.

The results remain consistent with the baseline findings, confirming the robustness of the analysis. Shadow Banking 1 lagged by one year has a positive and highly significant impact on CAR, with a coefficient of 98.558 (1% level). Similarly, Shadow Banking 2 lagged by one year shows a positive effect on CAR, with a coefficient of 22.690 (10% level). These results reinforce the conclusion that shadow banking activities enhance CAR by generating non-interest income and diversifying risks.

Table 3. Baseline results

VARIABLES	CAR	
	(1)	(2)
Shadow Banking 1_t	102.886*** (4.961)	
Shadow Banking 2_t		21.175* (1.721)
Bank age $_t$	1.564*** (10.111)	1.479*** (8.840)
Bank size $_t$	-1.046*** (-146.846)	-1.038*** (-135.172)
Cost-to-income ratio $_t$	-1.500*** (-3.752)	-1.849*** (-4.016)
NPL $_t$	-4.249 (-1.151)	-2.602 (-0.645)
Loan-to-deposit ratio $_t$	0.447 (1.616)	0.515* (1.685)
Equity-to-asset ratio $_t$	-8.475*** (-4.429)	-9.429*** (-4.052)
N	144	144
Adjusted R-square	0.2431	0.3003
Bank FE	Yes	Yes
Year FE	Yes	Yes

Standard errors are clustered at the country level, while *t*-statistics reported in parentheses. Statistical significance is denoted as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Among the control variables, bank age and size maintain significant positive and negative effects on CAR, respectively. Cost-to-income and equity-to-asset ratios also retain significant negative relationships with CAR, while non-performing loans and loan-to-deposit ratios remain statistically insignificant, indicating limited influence in the lagged specification.

Table 5 presents robustness checks excluding observations from the COVID-19 period (2020 onward) to address potential distortions caused by pandemic-related economic disruptions and policy

Table 4. Lagging all independent variables by one year

VARIABLES	CAR	
	(1)	(2)
Shadow Banking 1_{t-1}	98.558*** (4.134)	
Shadow Banking 2_{t-1}		22.690* (1.667)
Number of bank_id	126	126
Adjusted R-square	0.3031	0.2636
All control variables	Yes	Yes
Bank FE	Yes	Yes
Year FE	Yes	Yes

Standard errors are clustered at the country level, while *t*-statistics reported in parentheses. Statistical significance is denoted as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 5. Removing Covid-19 observation period (Year 2020 onward)

VARIABLES	CAR	
	(1)	(2)
Shadow Banking 1_t	102.886*** (4.961)	
Shadow Banking 2_t		21.175* (1.721)
N	142	142
Adjusted R-square	0.216	0.192
All control variables	Yes	Yes
Bank FE	Yes	Yes
Year FE	Yes	Yes

Standard errors are clustered at the country level, while *t*-statistics reported in parentheses. Statistical significance is denoted as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

interventions. The results remain consistent with baseline findings: Shadow Banking 1 retains a significant positive effect on CAR, and Shadow Banking 2 continues to show a positive impact at the 10% level. These findings confirm that shadow banking enhances CAR, even without pandemic-related distortions.

Overall, these robustness checks confirms that the observed relationships between shadow banking and CAR are stable under normal economic conditions, further reinforcing the reliability of our findings.

4.3. Cross-sectional heterogeneity tests

This section examines how the impact of shadow banking on CAR varies under different corporate governance conditions, using interaction terms with governance variables such as female board representation and board size. Table 6 reveals that corporate governance quality significantly moderates the relationship between shadow banking and CAR, highlighting the importance of governance structures in mitigating risks and optimizing capital adequacy.

The positive and significant interaction terms between Shadow Banking 1 and female board representation (620.334, 1%) and Shadow Banking 2 and female board representation (140.774, 1%) suggest that greater female representation enhances shadow banking's positive impact on CAR. Research highlights that gender diversity fosters risk-averse decision-making and ethical practices, strengthening governance and financial stability (Byrnes et al., 1999; Erhardt et al., 2003; Sila et al., 2016).

In contrast, the interaction of Shadow Banking 1 with board size is insignificant, while for Shadow Banking 2, it is negative and significant, indicating larger boards dilute shadow banking's impact on CAR due to coordination challenges and reduced accountability (Jensen, 1993; Adams et al., 2010). While diverse perspectives are beneficial, excessive board size can hinder governance, particularly in managing shadow banking risks.

These findings highlight the critical role of corporate governance in moderating shadow banking's impact on CAR. Gender-diverse boards

Table 6. Cross-sectional heterogeneity tests

VARIABLES	CAR			
	(1)	(2)	(3)	(4)
Shadow Banking 1 _t x Female fraction _t	620.334***			
	(5.846)			
Shadow Banking 2 _t x Female fraction _t		140.774***		
		(2.810)		
Shadow Banking 1 _t x Ln(Board size) _t			-90.671	
			(-1.312)	
Shadow Banking 2 _t x Ln(Board size) _t				-72.087***
				(-2.611)
Observations	143	143	144	144
Adjusted R-square	0.2701	0.2431	0.2694	0.2164
All control variables	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

*Standard errors are clustered at the country level, while t-statistics reported in parentheses. Statistical significance is denoted as follows: ***p<0.01, **p<0.05, *p<0.10.*

improve outcomes through prudent risk management, while overly large boards may undermine governance effectiveness. Tailored governance practices are crucial for addressing shadow banking risks and ensuring financial stability.

5. Discussion and conclusions

5.1. Conclusions and contributions

This study offers key insights into the interplay between shadow banking, corporate governance, and the capital adequacy ratio of Vietnamese commercial banks. Shadow banking activities demonstrate a consistent positive impact on CAR, enabling banks to diversify income, optimize capital, and reduce dependence on interest-based revenue streams. These findings align with prior research emphasizing shadow banking's role in liquidity provision and financial diversification. Robustness checks, including lagged variable analysis and the exclusion of COVID-19 data, confirm the reliability of these results.

Corporate governance significantly moderates this relationship. Greater female board representation amplifies the positive effects of shadow banking on CAR, consistent with research linking gender diversity to stronger ethical standards and risk management (Byrnes et al., 1999; Erhardt et al., 2003). Conversely, larger boards may hinder effective decision-making. These findings underscore the need for tailored

governance strategies to manage the complexities of shadow banking.

This study contributes to the broader literature on shadow banking and financial stability. It supports global findings that, while shadow banking provides liquidity and efficiency benefits, it can pose systemic risks if improperly managed (Pozsar et al., 2013; Głównicka, 2016). In Vietnam, the results highlight the distinctive role of governance in shaping CAR, offering fresh perspectives on financial stability in transitional economies.

5.2. Implications for Governments and Practitioners

Leveraging the benefits of shadow banking while ensuring financial stability requires targeted strategies. Governments must implement regulatory frameworks that balance innovation with risk mitigation, promote gender diversity on bank boards to enhance oversight, and establish optimal governance structures. Practitioners should use shadow banking to diversify income and improve CAR, supported by robust risk management practices and operational efficiencies. Diverse boards, especially with greater female representation, strengthen ethical oversight and resilience. Regular stress testing and scenario analysis are critical for anticipating long-term impacts, enabling stakeholders to harness shadow banking's potential while maintaining financial system sustainability ■

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Appendix 1. Variable definitions	
Variable	Definition
Capital adequacy ratio (CAR)	Ratio of Tier 1 and Tier 2 capital to risk-weighted assets
Shadow banking 1	Net fees and commissions / Total assets
Shadow banking 2	Total non-interest income / Total assets
Bank size	Natural log of total assets
Bank age	Log of the number of years since foundation
Cost-to-income ratio	Total cost / Total operating income
Loan-to-deposit ratio	Ratio of a bank's total loans to total deposits
Equity-to-total-assets ratio	Ratio of equity to total assets (%)
Non-performing loan ratio	Ratio of non-performing loans to total loans
Ln(Board size)	Natural logarithm of the number of board members
Female fraction	Proportion of women on the board

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TÁC ĐỘNG CỦA HOẠT ĐỘNG NGÂN HÀNG NGẦM LÊN TỶ LỆ AN TOÀN VỐN CỦA NGÂN HÀNG TẠI VIỆT NAM: VAI TRÒ ĐIỀU TIẾT CỦA HOẠT ĐỘNG QUẢN TRỊ NGÂN HÀNG

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TÓM TẮT:

Nghiên cứu này điều tra tác động của hoạt động ngân hàng ngầm lên tỷ lệ an toàn vốn (CAR) của các ngân hàng thương mại Việt Nam niêm yết trong giai đoạn từ năm 2012 đến năm 2022; qua đó, nhấn mạnh vai trò điều tiết của hoạt động quản trị ngân hàng. Kết quả cho thấy hoạt động của ngân hàng ngầm có mối quan hệ với tỷ lệ CAR, từ đó cho thấy những lợi ích trong việc đa dạng hóa thu nhập và tối ưu hóa vốn. Sự đa dạng về giới trong hội đồng quản trị làm tăng hiệu ứng này, trong khi quy mô hội đồng quản trị lớn hơn làm giảm hiệu quả quản trị. Nghiên cứu này cung cấp những dữ liệu giá trị cho các nhà hoạch định chính sách, nhấn mạnh tầm quan trọng của việc cân bằng đổi mới tài chính với quản lý rủi ro và quản trị hiệu quả để đảm bảo sự ổn định của ngân hàng.

Từ khoá: ngân hàng ngầm, quản trị doanh nghiệp, quản lý rủi ro ngân hàng.