Policy Implications for Enhancing the Capital Adequacy Ratio of Commercial Banks Post Covid-19 pandemic in Vietnam

By

Phan Thanh Tam
Lecturer at the Faculty of Postgraduate Studies Lac Hong University (LHU), Vietnam
E-mail: tampt@lhu.edu.vn

Abstract

The impact of the Covid-19 pandemic made the banking industry in countries in the region face many difficulties, profits fell, and bad debts increased. Besides, a series of severe criminal cases nationwide related to banking governance caused thousands of billions of dollars lost and high bad debts, affecting the banking system's stability. In that context, commercial banks need to be applied the method of calculating the minimum capital adequacy ratio (CAR) according to the Basel II calculation formula. The regulations in Basel II and the implementation and implementation process are mainly aimed at ensuring the goal of ensuring safety. Thus, the article studied the internal factors affecting the CAR of commercial banks from 2010 to 2021 from 25 commercial banks during the research period. The research method applied the generalized system method of moments (SGMM). Research results show that critical factors affect the CAR coefficient with a significance level of 1.0 percent. The article's value is to ensure the safety of risky assets. Banks need to maintain a necessary level of equity as measured by the minimum capital adequacy ratio. Based on the research results, the authors give policy management to improve the future CAR coefficient.

Keywords: Capital, adequacy, ratio, commercial, banks, Basel II.

Introduction

In the context of the complicated Covid-19 pandemic, the capital mobilization ratio of banks is still growing in an increasing direction, showing the efforts of commercial banks to maintain a stable source of input capital. However, the problem is that capital mobilization's growth rate is higher than credit growth, creating pressure on commercial banks to maintain their business operations and effectively respond to challenges caused by Covid-19. Capital Adequacy Ratio (CAR): It is one of the most critical indicators of a bank's capital adequacy because it ensures its tolerance against losses arising from risks or imbalances. Besides, the CAR is the basis for measuring the bank's capital adequacy. The capital adequacy ratio reflects a bank's soundness and health to ensure that banks can withstand losses from operating losses (Irawati et al., 2019). Ensuring the bank's smooth operation protects the interests of shareholders, investors, and depositors. The capital adequacy ratio is a factor that determines a bank's ability to meet its term and other risks. This capital is used to support a bank's risky assets.

On the contrary, when banks have a low capital adequacy ratio, their ability to cope with crises and economic shocks is reduced (Leila et al., 2014). Therefore, maintaining the capital adequacy ratio at an appropriate level by controlling the factors affecting the capital adequacy ratio will help the bank effectively use capital and keep the bank's operations safe. The question is, will the bank's internal elements affect the bank's capital adequacy ratio of the bank.

The capital adequacy ratio is a factor that plays an essential role in determining a bank's ability to meet its fixed-term liabilities. Besides, it also limits credit issues, market risks, and other business activities. The CAR ratio effectively measures banks' capital and supports banks' risk assets today. It is a necessary buffer so commercial and state-owned banks can avoid potential risks and optimally protect depositors (Nadja, 2013). The bank's internal power ensures the bank's smooth operation, thereby protecting the interests of shareholders, investors, and depositors. Therefore, the article was conducted to assess the factors affecting the CAR of commercial banks in the period 2010 - 2021 to propose policy management contributed to improving the capital adequacy ratio at commercial banks in Vietnam.

Literature Review

Capital adequacy ratio (CAR)

Th ecapital adequacy ratio is the basis used to measure the bank's safety, reflecting the level of capital that the bank must maintain according to regulations to absorb possible losses in its operations and ensure its depositors' safety (Benston & Kaufman, 2016). The capital adequacy ratio (CAR) is an economic indicator that reflects the relationship between equity and risk-adjusted assets of commercial banks. CAR is an important measure to measure the safety of a bank's operations (Guidara et al., 2013).

Bank size (SIZE)

The bank size is the variable represented by the size of a bank's total assets, expressed as the natural logarithm of the bank's total assets. Banks with significant total assets are mostly risky loans. In addition, the total critical assets but the increase in equity cannot keep up with the development requirements of the bank, mainly depending on mobilized capital, which will negatively affect the CAR. Research by Ahmet & Hasan (2011) shows that large banks have low capital adequacy ratios. In other words, there is a negative relationship between bank size and CAR. Therefore, the expected CAR coefficient has a negative association with the bank size in the study. Thus, the authors give hypothesis H1 the following:

Hypothesis H1: Bank size negatively impacts the capital adequacy ratio of joint-stock commercial banks in Vietnam.

Board size (BoardS)

The board size variable is measured by the number of board members of commercial banks. Studies show that the Board of Directors plays an essential role in guiding the stable development of the bank. Based on the agency theory, a large BOD will help better monitor the CEO's domination and help protect the interests of shareholders, according to Allen et al. (2013). A large number of BOD members will increase the bank's ability to supervise, inspect and manage risks. At the same time, by performing well the supervision function, the Board of Directors can increase business performance (Bahiru, 2014; Li et al., 2016). Therefore, it is expected that there is a positive correlation between the CAR coefficient and the size of the bank's Board of directors. Thus, the authors give hypothesis H2 the following:

Hypothesis H2: Board size positively impacts the capital adequacy ratio of joint-stock commercial banks in Vietnam.

Independent members in the Board (IndepB)

Board of Directors: Independent members in the Board is a variable reflecting the proportion of independent members on the board of directors of commercial bank i in year t,

which is measured by the number of independent members divided by the total number of members of the bank. The role of independent members is to reduce conflicts of interest between the parties and reduce representation issues. They will help improve the quality of supervision to minimize risks for shareholders and the bank. Research by Berger et al. (2014) shows that commercial banks with a high percentage of independent members have a risk control effect on the bank's operations. Research by Chan et al. (2016) also shows that an increase in the proportion of independent members helps to reduce credit risk. Therefore, the relationship between the balance of independent members of the Board of Directors and the CAR coefficient is positive. Thus, the authors give hypothesis H3 following:

Hypothesis H3: Independent members of the Board positively impact the capital adequacy ratio of joint-stock commercial banks in Vietnam.

Female members of the Board of Directors (FemaleB)

Female members of the Board of Directors are variable percentage of female members on the Board of Directors is a variable that reflects the percentage of female board members of the bank, which is measured by the number of female BOD members divided by the total number of BOD members. Gender diversification in the Board of directors with a high percentage of women will make the bank more efficient, as demonstrated in the study of Mekonnen (2015) showed that an increase in the rate of female BOD members not only increased profits and cost efficiency but also helped the bank reduce risks. Therefore, the study expects that the higher the percentage of female members on the Board of Directors, the higher the CAR of commercial banks. Thus, the authors give hypothesis H4 the following:

Hypothesis H4: Female members of the Board of Directors positively impact the capital adequacy ratio of joint-stock commercial banks in Vietnam.

The foreign member ratio in the Board (ForeignB)

The foreign member ratio in the Board is the variable percentage of foreign members on the Board of Directors, which is determined by dividing the number of foreign board members by the total number of board members of the bank. Unfamiliar members of the Board of Directors are expected to help improve the supervisory capacity of the Board of Directors through their experience and knowledge of foreign markets, connectivity, and the application of new technologies and techniques management ability. The benefits that foreign members bring will help the bank reduce risks, thereby ensuring the safety of the bank's operations. Mohammed et al. (2013) have shown a negative relationship between the proportion of foreign members and the level of risk in the process of commercial banks in China. Vietnamese commercial banks also offer similar results. Therefore, the study expects the relationship between the proportion of foreign members to be positively correlated with the CAR coefficient. Thus, the authors give hypothesis H5 the following:

Hypothesis H5: The foreign member ratio in the Board positively impacts the capital adequacy ratio of joint-stock commercial banks in Vietnam.

Educational attainment of the members of the Board (EduB)

Educational attainment of the members of the Board is the variable academic level of the members of the Board of Directors (EduB) is the variable reflecting the proportion of board members with postgraduate qualifications of Bank I in year t. Research by Nuviyanti & Herlanto (2014) in more than 3500 banks in Germany from 1994 - 2010 shows that the more the Board of directors holds a doctorate degree, the lower the risk tolerance level. This means

that the higher the qualifications of the Board of Directors, the safer the bank is. Therefore, the relationship between the capabilities of the Board of Directors is positively correlated with the CAR coefficient. Thus, the authors give hypothesis H6 the following:

Hypothesis H6: Educational attainment of the members of the Board positively impacts the capital adequacy ratio of joint-stock commercial banks in Vietnam.

Consumer price index (CPI)

The consumer price index is the variable consumer price index indicator of a country's inflation rate. Inflation reflects the devaluation of the currency, which will affect the nominal interest rate, impacting borrowers and making customers unable to repay their loans. In other words, high inflation can increase banks' credit risk because customers are more prone to default. This can negatively affect the capital ratio of banks. Therefore, the correlation between the capital adequacy ratio and the consumer price index (CPI) is negative, as expected by the authors. Shingjergji & Hyseni (2015) shows that the inflation index harms the capital adequacy ratio of commercial banks in Nigeria. However, in the study of Su-yuan et al. (2017), the consumer price index has almost no impact on the CAR coefficient and is not statistically significant in the research model. In theory, high inflation is a sign of instability in the economy, creating many risks for banking activities and negatively affecting the CAR coefficient. Thus, the authors give hypothesis H7 the following:

Hypothesis H7: The consumer price index negatively impacts the capital adequacy ratio of joint-stock commercial banks in Vietnam.

Gross domestic product (GDP)

Gross domestic product is the economic growth rate variable calculated by dividing the current period's economic size and the previous period's economic length by the earlier period's economic height. The relationship between GDP and CAR in the study of Rafet et al. (2015) showed a negative relationship. Yanne & Fong (2015) also indicates a negative relationship between GDP and capital adequacy ratio CAR when analyzing factors affecting CAR at commercial banks in Pakistan. Rafet et al. (2015), in a study of commercial banks in Thailand, also showed a positive relationship between GDP and CAR. This can be explained by the fact that during a period of positive economic development, banks often underestimate risks and invest in many different industries and fields. When uncertainty occurs, investments and loans become riskier, making banks not have enough reserve capital to deal with risks (Anthonia, 2018). Therefore, the sign expectation for the relationship between the economic growth rate and CAR is inverse. Thus, the authors give hypothesis H8 following:

Hypothesis H8: Gross domestic product negatively impacts the capital adequacy ratio of joint-stock commercial banks in Vietnam

Research method

The authors use the Pooled OLS, FEM, REM, and SGMM methods of least squares to regress the dependent variable of the CAR coefficient according to the independent variables, with the research sample being the listed joint stock commercial banks in the period 2010-2021, using Stata software.

The model, which tests the research hypothesis formulated, is as follows:

$$CAR_{it} = \alpha_0 + \beta_1 SIZE_{it} + \beta_2 BoardS_{it} + \beta_3 IndepB_{it} + \beta_4 FemaleB_{it} + \beta_5 ForeignB_{it} + \beta_6 EduB_{it} + \beta_7 CPI_{it} + \beta_8 GDP_{it} + \pounds_{it}$$

Where:

- CARit: refers to the estimated capital adequacy ratio
- α_0 is the intercept term;
- $\beta_1, \beta_2, \beta_3, \ldots, \beta_8$ are coefficients of regression;
- ε_{it}: is the error term.

Step 1: Preliminary research through secondary data from 25 commercial banks. The authors analyze and synthesize capital and capital adequacy documents and factors affecting capital adequacy. Each research problem's trends are discovered (Osama & Hassan, 2015).

Step 2: Design a data collection table through secondary data collection from joint stock commercial banks.

Step 3: Synthesize data collected from 25 commercial banks and continue to collect data.

To study the influence of factors on the capital adequacy ratio of Vietnamese commercial banks in the period 2010 - 2021. In this step, the authors research official data at 25 commercial banks. The data relating to the bank's characteristics are collected and calculated based on commercial banks' annual reports and audited financial statements. The commercial banks in the sample include 25 commercial banks in Vietnam, including Vietinbank, BIDV, Vietcombank, MB, ACB, Sacombank, Techcombank, SHB, Eximbank, SCB, NCB, Kienlong Bank, VPBank, VIB, HDBank, SGB, SeaBank, PGBank, TPBank, MSB, Viet A Bank, Baca bank, Anbinh Bank, LienVietPostBank, NamA Bank, OCB. The selection of the above banks has eliminated the consolidated, merged banks and the banks that did not guarantee reliable and incomplete data sources during the research period. The study was collected from the General Statistics Office of Vietnam and the World Bank for macro data. Secondary data sources are collected from reliable information sources to ensure objective and scientific research results.

Step 4: Formal research uses secondary data tables to test the research model and hypotheses.

Step 5: Summarize measurement results & analyze results.

Step 6: Conclusion and proposed policy implications. Based on the results of model testing, the authors suggest policy implications.

Micro and macro factors of the economy to capital adequacy of Vietnamese commercial banks, Finally, the authors make conclusions and propose policy implications that contribute to improving the minimum capital adequacy ratio of commercial banks. In the formal quantitative research, the article will use the methods used in previous studies: panel data analysis methods, including the random effects model (REM) and fixed effects model (FEM), pooled OLS, and SGMM methods. This is a foundation-based method and uses p-value statistics to test research hypotheses. In summary, in the paper, the authors' research synthesizes theoretical bases and related studies at home and abroad, thereby building a research model. After having the research model, the authors use quantitative research methods in data collection, descriptive statistics, model testing, estimating variables, and assessing the impact of these variables.

RESEARCH RESULTS

An overview of the capital adequacy ratio of the Vietnamese joint stock commercial banking system

From 2021 until now, the world economy, including Vietnam, has been seriously affected by the Covid-19 pandemic. The implementation of social distancing to prevent and control the Covid-19 epidemic has partly affected the business operations of enterprises and credit institutions, including commercial banks, and the business activities of commercial banks. The capital adequacy ratio is an important measure to measure the safety of a bank's operations, built and developed. The capital adequacy ratio is an economic indicator that reflects the relationship between equity and risk-adjusted assets of commercial banks. Banks must consider maintaining the capital adequacy ratio at an appropriate level by increasing or decreasing profits. Bank administrators should not carefully consider pursuing a policy of growing earnings by investing in risky asset portfolios, thereby reducing the bank's safety. However, applying the above management policies depends on the actual market situation. If the market is in a bull cycle, banks can open their risk appetite to seek profit and accept a lower capital adequacy level.

Testing for regression results from four models

The capital adequacy ratio is considered one of the indicators of a bank's financial health, reflecting the ability of a bank to withstand future unforeseen losses and its use of financial leverage. Thus, the statistical results describe the variables in the research model: This study aims to determine the internal factors of the bank and the macroeconomic factors of the economy that affect the capital adequacy ratio of Vietnamese commercial banks. Therefore, the study uses data from 25 Vietnamese commercial banks collected between 2010 and 2021.

Table 1: Testing statistical results for the variables in the research model

Variables	N	Minimum	Maximum	Mean	Standard Error
CAR	300	0.0930	0.1780	0.1364	0.0009
SIZE	300	6.8620	9.1730	7.9883	0.0300
BoardS	300	4.0000	17.0000	8.5333	0.1313
IndepB	300	0.1000	0.4560	0.3723	0.0045
FemaleB	300	0.0710	0.8570	0.3194	0.0098
ForeignB	300	0.0830	0.8330	0.3082	0.0085
EduB	300	0.0670	0.8330	0.3197	0.0095
GDP	300	2.9100	7.0800	5.9275	0.0651
CPI	300	0.6300	18.5800	5.9108	0.2658

(Source: Data processed by Stata 16.0)

Table 1 shows the descriptive statistics on CAR from 2010 to 2021 of 25 joint stock commercial banks in Vietnam. The average capital adequacy ratio was highest in 2015 at 17.8 percent and the lowest in 2011 was 9.3 percent, respectively. In addition, the standard error of the word CAR does not fluctuate much.

Table 2: Hypotheses testing for regression results from four models

Variables	Pooled OLS Coefficient	P-value	FEM Coefficient	P-value	REM Coefficient	P-value	SGMM Coefficient	P-value
SIZE	-0.025	0.000	-0.021	0.000	-0.022	0.000	-0.024	0.000
GDP	0.006	0.000	0.003	0.000	0.003	0.000	0.004	0.000
CPI	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Boards	0.005	0.000	0.002	0.000	0.002	0.000	0.002	0.000
Indepb	0.007	0.073	0.004	0.214	0.006	0.064	0.005	0.000
Femaleb	0.012	0.000	0.013	0.000	0.012	0.000	0.014	0.000
Foreignb	0.001	0.533	0.002	0.209	0.002	0.218	0.003	0.001
Edub	0.034	0.000	0.029	0.000	0.029	0.000	0.034	0.000
Intercept	0.1305	0.003	0.180	0.002	0.289	0.004	0.196	0.006

(Source: Data processed by Stata 16.0)

Table 2 shows that the quantitative model results of the deposit ratio factor positively influence Vietnamese commercial banks' CAR coefficient. The research hypothesis is that a positive relationship exists between independent variables and the CAR coefficient. The model regression results in the study show that the regression coefficient has a positive sign, indicating a positive relationship between the two variables in the model. The p-value = 0.000 < 0.05 shows that the relationship between the two variables is statistically significant in the study.

The research results show that the Board of directors plays a significant role in the governance of Vietnamese commercial banks and that the structure of the Board of directors affects the motivation and ability of the Board of directors to supervise and provide advice to management and thus influence the capital adequacy ratio. Thereby, it can be affirmed that a quality corporate governance system is an essential key in Vietnam's commercial banking sector, in the context that commercial banks are undergoing a general restructuring process by the Government to gradually transform into modern market-oriented financial institutions and create an available growth engine for the economy.

The relationship between liquidity and CAR of Vietnamese commercial banks in the sample is negative, shown through the SGMM regression model results. Liquidity reserves include assets that are highly liquid and even less profitable. The reason is that because banks ensure liquidity will affect profits, making the increase in equity not commensurate with the increase in risk in assets, the capital adequacy ratio will decrease. Commercial banks consider the balanced relationship between liquidity assurance and CAR.

The analysis results of the SGMM model have overcome the "defects" of the model and reliable estimation results. Thus, the results of the regression model of the impact of the research variables on CAR are entirely reliable because the defects of the model have been overcome: (1) the phenomenon of variable variance, (2) autocorrelation, and (3) the endogenous phenomenon. Based on the results above, the authors have conclusions and policy implications to follow.

Conclusions

Based on analyzing the results of model research on capital adequacy ratio and factors affecting the capital adequacy ratio of Vietnamese commercial banks. With the results of

testing the research model, the article has proposed some policy implications and policy recommendations on the capital adequacy ratio for Vietnamese commercial banks, the State Bank, and the Government to ensure the safe implementation of the capital adequacy ratio capital under the Basel II shortly. In the coming time, all banks need to continue to amend and supplement regulations and standardize safety standards according to international standards as a basis for commercial banks to strive, helping to increase the competitiveness of the whole system.

Policy implications

Policy implications for commercial banks

Commercial banks should not only consider building a strategy of just enough capital based on the minimum capital adequacy ratio but also focus on increasing capital sources in line with the growth rate of the Bank's assets in a period of stable economic growth. Because of the research results, the size of assets is inversely compared with the capital adequacy ratio. The safety coefficient will decrease as the bank's asset size increases. Therefore, commercial banks must always ensure an appropriate growth rate of bank assets.

In addition, banks need to select strategic shareholders, diversify investment cooperation and joint ventures with large foreign banks to increase capital effectively, and at the same time, learn how to use and effective management of capital of strategic shareholders. And to ensure a safe risk limit for the bank in formulating strategies and implementing capital increases, Vietnamese commercial banks need to pay more attention to financial leverage management to achieve efficiency and security.

Commercial banks also need to consider increasing equity and reducing debt, that is, increasing the safety of capital through different methods to increase banks' capital adequacy ratio. This means that once the bank has more significant equity, there will be no pressure to mobilize external capital to maintain the capital adequacy ratios or increase the capital adequacy ratio as desired with the level of expenditure lower deposition costs than raising capital by borrowing and at the same time reducing default risk.

Convenience to meet the increasingly diverse needs of customers. Commercial banks need to provide modern banking services by diversifying banking products and services, increasingly perfecting the features of the products that banks offer to ensure the supply of products to customers. Vietnamese commercial banks should aim to develop banks into digital banks, applying smart devices to banking transactions.

Commercial banks need to strengthen measures to encourage the development of personal accounts and payments through joint stock commercial banks. Joint-stock commercial banks should pay attention to this source of payment deposits because this is a low-cost source of money. Attracting more deposits of this type will help the Bank lower output interest rates, promoting credit activities. In addition to continuing to use and gradually perfecting traditional forms of deposit, joint stock commercial banks need to actively diversify forms of capital mobilization in the direction of satisfying the maximum deposit needs of customers by expanding many forms of mobilizing savings deposits with many terms, many interest rates, many different deposit and payment methods.

Risk management culture needs to be spread to all units in the system. Decisions are made based only on business and profit orientation but need to be considered based on risk,

strengthen communication, and share lessons learned and risk events so that individuals and units throughout the system can understand and learn from experience. And raise awareness of risk management. Accordingly, Commercial banks will continue to promote training so that all individuals understand their separate roles and responsibilities in identifying and controlling risks in areas of operation. In addition, Commercial banks do not stop absorbing learning risk management policy and acquiring technology for building management tools, aiming to grow banking activities to safe, effective, and sustainable products.

Commercial banks, one of the market's largest commercial banks, are constantly perfecting to meet the goals of the community and society's safe, effective, sustainable, and responsible development. Risk management in commercial banks should be recognized as an outstanding issue and given full attention, accompanying throughout the process of bank scale development. Commercial banks in Vietnam need to constantly update new risk management models and tools of developed countries in the world, put them into use in a way suitable to the characteristics of domestic business models, and ensure a practical and cost-effective way of implementing risk management.

Policy implications for the Government

The Government needs sustainable economic development. Look beyond growth content; on sustainable development and shared prosperity; pay attention to programs on ethnic minorities, gender equality, urbanization, limitations of transport infrastructure, and air pollution. Solving these problems will create growth and higher incomes. To avoid falling into the middle-income trap and to transition to an advanced modern economy, Vietnam needs to focus on inclusive growth and sustainable development. Building systems and tools: The implementation and construction of systems have actively supported debt quality monitoring and financial impacts assessment, such as the Risk Profile system, which includes components for early warning of customer credit risks, monitoring components for credit risk, and risk assessment, monitoring risk appetite criteria.

The Government needs to improve and build an effective and synchronous legal corridor between legal documents. There should be consistency in the policies of the State. Especially in ensuring macroeconomic stability, attaching importance to the efficiency and sustainability of development, and creating an equal and transparent competitive environment. The Government needs to have sanctions to ensure the publicity and transparency of information on production and business activities and the annual financial performance of enterprises. Strictly handle reporting and financial information mistakes, specify responsibilities for the head of the bank, and improve bank management capacity.

Policy implications for the State Bank

The State Bank of Vietnam continues to operate monetary policy proactively and flexibly in close coordination with fiscal policy and other macro-economic policies to control inflation and maintain macro stability and market; continue to support to remove difficulties for people and businesses, contributing to the rapid recovery of the economy in the years after the Covid-19 pandemic. The State Bank should prioritize removing problems for industries heavily affected by Covid-19 and, simultaneously, ensure the safety of capital sources and not put pressure on increasing bad debts. Proactively deploying monetary and credit solutions to promote economic recovery, concentrating credit capital for projects and fields with pervasive power, and creating motivation for economic development. In addition, in the coming time, the State Bank needs to continue to amend and supplement regulations and standardize safety

standards according to international standards as a basis for commercial banks to strive, helping to increase the competitiveness of the whole system.

Improve capital management capacity and implement Basel II: Enhancing risk management capacity does not mean focusing on reducing bad debts. Improve capital capacity through additional capital to create buffers for risk losses and promote measures to resolve bad debts; promote activities of collecting fees from value-added services, cross-selling products, and earning interest from traditional credit activities. Above all, Commercial banks must improve their capital capacity and meet the usual capital adequacy ratios to withstand shocks in future business operations, helping to minimize risks and losses.

Basel II is an international set of standards that includes risk quantification through indicators and models and the requirements to perfect the governance structure and policies, enhance the risk culture and increase market transparency. Therefore, Basel II standards are the optimal solution for commercial banks to withstand unpredictable financial market fluctuations.

Up to now, Commercial banks have basically met the requirements of Basel II standards regarding governance structure, processes, internal control regulations, and information technology systems. In the coming time, after being approved by the Government to increase capital and charter capital, Commercial banks will fully meet the requirements of Basel II standards.

Based on a combination of qualitative and quantitative research methods, the article has explained, demonstrated, and analyzed the research problems to achieve the research objectives and answer the research questions. However, each research topic has its results and limitations. With the scope and time of the study, the study still has some limitations: Legal factors related to the management of CAR have changed during the study period. The article has not analyzed how this legal change affects the CAR coefficient to propose recommendations for a closer management mechanism. Further research needs to be conducted to investigate how this legal change affects the CAR coefficient to present recommendations related to a closer regulatory agency. This is also an extended research direction for the topic to more fully assess the factors affecting the CAR of Vietnamese commercial banks. This is also a comprehensive research direction for the subject to more fully consider the factors affecting the CAR of Vietnamese commercial banks.

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