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IMPACTS OF CREDIT GROWTH AND CREDIT RISK ON THE PROFIT OF VIETNAM JOINT STOCK COMMERCIAL BANKS

Dao Le Kieu Oanh*, Tran Thi Huong Ngan

Ho Chi Minh University of Banking

oanhdlk@hub.edu.vn

Abstract:

The thesis examines the impact of credit growth and credit risk on Return On Assets (ROA) of Vietnamese joint stock commercial banks in the period 2010 - 2022. Based on data from 25 Vietnam Joint Stock Commercial Bank with a total of 325 observations, the article uses pooled least squares model (Pooled OLS), fixed effects model (FEM), random effects model (REM) and estimation method. general moment (GMM). The results show that the GMM model overcomes the defects of the FEM model and is the most suitable model with the observed data. Factors including credit growth rate (LG), credit risk provision (LLPR), liquidity ratio (LIQD) and inflation rate have a positive impact on ROA, while debt ratio NPLs (NPLR) and total cost to total income (CIR) have a negative impact on ROA. In addition, the thesis also provides useful information for bank managers to optimize profits and at the same time contribute to better understanding the impacts of credit growth and credit risk as well. as other micro and macro factors to the business activities of Vietnamese joint stock commercial banks.

Keywords: *Credit growth, credit risk, profit, joint stock commercial bank, Vietnam.*

1. Introduce

Among banks' income sources, credit activities generate the largest revenue and are considered the main source of income. Therefore, credit growth is always the top concern of joint stock commercial banks. After the loosening of the monetary policy, the mandatory provision rate and the interest rates in the stimulus package in 2008 caused credit growth to increase until 2010. Since 2011, the government has applied the policy. monetary tightening to fight inflation as well as promulgating regulations on prudential ratios in credit institution activities. Since then, every year, the State Bank has set a credit growth target at a reasonable rate, considering the operation situation of each bank in the commercial banking system and assigning specific targets accordingly. with the actual situation.

Besides, as a type of enterprise specializing in providing financial services, joint-stock commercial banks are always aware of the types of risks they face when operating in the financial intermediary economy. Credit risk has the greatest impact on the book value of a bank. After Vietnam's economy was affected by the global economic crisis of 2007-2008 and the European debt crisis that started in the second half of 2009, inflation persisted and the bad debt rate increased. By 2014, it was thanks to the strict management policy of the NHBank through the issuance of circulars on regulations on debt classification, use and provisioning at an appropriate level, bad debt ratio in the period 2014- 2021 has a significant drop. However, the bad debt ratio in 2022 was recorded as having a significant increase due to the negative impact from the volatility of the real estate market and corporate bonds.

In the context of a competitive business economy, boosting credit is something that almost every bank does to optimize profits. However, credit expansion can be assessed in two different ways, whether credit growth is really effective and improves profits and how credit risk affects the profitability of banks. Joint Stock Commercial Bank ? Stemming from these reasons , understanding the impact of credit growth and credit risk on the profitability of Vietnamese joint stock commercial banks is considered necessary, with scientific and practical significance.

2. Study overview

2.1 Theoretical basis

2.1.1 Theoretical basis on the impact of credit growth on profitability

Theoretically, credit growth is often accompanied by poor lending decisions and thereby negatively affects the profitability of banks in particular as well as the economy of a country in general. According to Credit Growth and Risk Theory, credit growth also increases the risk of loan failure, pushing banks into financial risk. But if credit institutions have good risk management ability, credit growth will contribute to increasing profits. Rational Expectations has taken a macroeconomic approach to explain why a credit boom is accompanied by poor economic performance. In particular, potential mechanisms for increasing lending are lowering interest rates or relaxing collateral requirements, credit standards, or a combination of the two (Dell'Ariccia, 2006). This leads to a state in which the bank's loan portfolio deteriorates, profitability is lower and the risk of financial instability is greater. In addition, the result of short-term incentives from bank managers to bring about rapid credit growth in the short-term is evidence of the reduction in lending standards. (Rajan, 1994). In addition , research by Berger & Udell (2004) has argued regarding the "institutional memory hypothesis" and argues that bank lending is a cyclical process, where standards Lending decreases during credit booms and increases during credit downturns.

However, contrary to the above hypothesis, the policy of expanding credit growth can have a positive impact on the profitability of joint stock commercial banks. This is explained by the fact that marginal interest income is the driving force and one of the conditions for commercial banks to choose a reasonable credit growth policy. encourage commercial banks to increase credit extension. In addition, according to the Endogenous Growth Theory, which has also proposed a correlation between profitability and loan growth, this theory states that economic growth does not depend only on factors. communication as labor and capital, but also depends on investment in technology as well as innovation, improving operational results. However, the investment requires large financial resources and the extension of credit with reasonable interest rates can encourage banks to invest and generate profits in a sustainable way. Supporting the hypothesis are the results of empirical research by Hamadi and Awded (2012) for commercial banks in Lebanon in the period 1996 -2000. In addition, in the face of high credit demand, banks often increase loan interest rates. This can help banks get loans with high profitability and then credit growth has a positive impact on the bank's performance (Dang Van Dan, 2019).

2.1.2 Theoretical basis of the impact of credit risk on profit

The first view holds that credit risk negatively affects bank profitability. (Alexiou & Sofoklis, 2009) believes that if the bank lends to customers or projects with a high level of risk and does not control credit risks well, the bank will not be able to recover principal and interest, leading to asset loss, reducing the ability to bank profitability. Moreover, it is the provisioning expenses due to credit risks that have the potential to increase the bank's costs and reduce profits (Athanasoglou, Brissimis, & Delis, 2008).

In addition, to support the view that credit risk negatively affects bank profitability, research by Berger & DeYoung (1997) has put forward two hypotheses including: Unlucky theory and management

theory. poor reason. Specifically, the theory of poor management states that when commercial banks generate high profits, it shows that they have performed very well in risk management compared to commercial banks with low profits. High credit risk is a sign that commercial banks are not taking full advantage of their resources to assess credits as well as monitor the process in an unreasonable and strict way or credit risk is a factor that proves the system (Girardone, Molyneux, & Gardener, 2004). Banks are inefficient (Altunbas, Manganelli, & Marques-Ibanez, 2011). Besides that bad luck theory (bad luck theory) that when the credit risk of customers increases, commercial banks will have to spend a part of their resources to make provisions to solve problems related to credit risk. In addition, too high provisioning also affects the bank's reputation and safety, which may be underestimated by market regulators. .

However, when considering the relationship between credit risk and profitability, there is a theoretical basis and studies that prove that these two factors have the same effect. Specifically, the risk-return trade-off theory states that: "The higher the risk of an investment, the higher the return that investors expect to receive from the investment. the bigger it is, and vice versa". This means that when a bank accepts a high level of risk, they will also require a higher interest rate on the loan to compensate for the risk that the bank may take on so that the bank can collect more money. higher-than-normal returns from that risk-taking trade-off (Boahene et al., 2012; Brealey et al., 2008; Ngo Kim Phuong, 2015).

3. Research Methods

3.1 Research models

Based on the research works of Abiola et al (2014), Bhowmik et al (2021), Gizaw et al (2015) and De Leon (2020), the thesis finds that besides credit growth, bad debt ratio and credit risk provision ratio affecting the profits of joint stock commercial banks also have other factors such as the bank's liquidity ratio, bank size, capital adequacy ratio, the cost-to-income ratio, an index that measures economic growth GDP and the inflation rate. Therefore, the research model has the following equation:

$$ROA = \beta_0 + \beta_1 LG_{it} + \beta_2 NPL_{it} + \beta_3 LLPR_{it} + \beta_4 CAR_{it} + \beta_5 SIZE_{it} + \beta_6 CIR_{it} + \beta_7 LIQD_{it} + \beta_8 GDP_{it} + \beta_9 INF_{it} + \mu_{it}$$

In there:

Dependent variable: ROA (Return on Assets)

Independent variables: loan growth rate (LG_{it}), bad debt ratio (NPL_{it}), credit risk provision ratio ($LLPR_{it}$), capital adequacy ratio (CAR_{it}), bank size ($SIZE_{it}$), the ratio of total expenses to total income (CIR_{it}), the economic growth index (GDP_{it}) and the inflation rate (INF_{it}).

With i , t corresponding to the bank and the survey year, β_0 is the intercept, $\beta_1 - \beta_9$ are the slopes of the independent variable and μ_{it} is the statistical redundancy.

Table 3.1 Description of variables in the study

Variable	Variable name	Describe	Previous studies	Recipe	Expected
Dependent variable	ROA	Return on assets	Trinh Quoc Trung and Nguyen Van Sang (2013), Abiola (2014) Rossi et al (2019), Dang Van Dan (2019).	Profit after tax / Total assets	
Independent variables	LG	Loan growth rate	Foos et al (2010), Fahlenbrach (2018), Bhowmik et al (2021)	(Lending balance of this period – Loan balance of the previous period)/	Opposite

				Loan balance of the previous period	
	LLPR	Credit risk ratio	Sufian (2011), Athanasoglou et al (2008), Alexiou and Sofoklis (2009), Gizaw et al (2015)	Provision for credit risk/Total loan balance	Opposite
	NPLR	Bank's bad debt ratio	Athanasoglou et al (2008), Alexiou and Sofoklis (2009), Mekasha (2011)	Bad debt/Total outstanding balance	Opposite
	LIQD	Liquidity ratio	Hassan and Bashir (2003), Dang (2011), Ongore and Kusa (2013).	Total loan balance/Assets	Same afternoon
	CAR	Capital adequacy	Hassan and Bashir (2003), Abiola (2014)	Total Equity/Assets	Same afternoon
	SIZE	Bank size	Alexiou and Sofoklis (2009), Sufian (2011) and Boahene et al (2012)	Log (Total Assets)	Same afternoon
	CIR	Cost/income ratio	Akbas (2012) and Petria et al (2015)	Total expenses / Total income	Opposite
	INF	Inflationary	Pasiouras and Kosmidou (2007), Alalaya and Al Khattab (2015), Chowdhury (2015)	Vietnam's inflation rate (%)	Same afternoon
	GDP	Economic growth rate	Athanasoglou et al (2008), Trujillo-Ponce (2013), Ongore and Kusa (2013)	Real GDP growth rate (%) of Vietnam	Same afternoon

Source: Author's own compilation

3.2 Research data

The thesis studies the impact of credit growth and credit risk on the profitability of 25 joint stock commercial banks out of a total of 31 joint stock commercial banks in Vietnam. The topic uses secondary data to measure the dependent and independent variables of the bank's micro-factors collected from the Fiinpro system. For the data source of the independent variable belonging to the macro factor, the thesis uses data from the General Statistics Office and the World Bank.

The article first uses the following research models: Pooled Regression OLS, FEM and REM. In addition, the article also uses the GMM model to overcome the defects of the previous model as well as to overcome the endogeneity of the variables in the study.

4. Results and Discussion

4.1 Descriptive statistics and correlation analysis

The dataset used in the study is a symmetric panel data type with 325 observations. Descriptive statistics of the variables in the model will draw conclusions about the number of observations, the mean, the standard deviation, the minimum and the maximum between the variables. The results of descriptive statistics of the variables are presented in Table 4.1

Table 4.1 Descriptive statistics of variables

Variable	Number of observations	Medium	Standard deviation	Smallest value	The greatest value
ROA	325	0.0099641	0.0085539	-0.059929	0.055663
LG	325	0.2117175	0.1880469	-0.298636	1.130936
NPLR	325	0.0199139	0.0154172	0.000000	0.1792976
LLPR	325	0.0134166	0.0046491	0.0066091	0.0320701
CAR	325	0.0938479	0.0398034	0.040618	0.256425
SIZE	325	8.093614	0.5172378	6.915157	9.326461
CIR	325	0.7716071	4.761137	0.225069	0.927379
LIQD	325	0.5659568	0.1272534	0.147255	0.800625
GDP	325	0.0609272	0.0159374	0.025616	0.0802
INF	325	0.0530958	0.0459774	0.006312	0.186777

Source: Processed from research data from Fiinpro and Worldbank using Stata 16.0 . software

Before performing regression analysis, the first condition that needs to be performed is correlation analysis to analyze the degree of correlation between dependent and independent variables. If the correlation coefficient is positive, it reflects a positive relationship between the dependent variable and the independent variable, if it is negative, the relationship between the dependent variable and the independent variable is opposite. The results of the correlation coefficient matrix are processed by Stata 16 software, specifically as follows:

Table 4.2 Correlation matrix between variables

	ROA	LG	NPLR	LLPR	CAR	SIZE	CIR	LIQD	GDP	INF
ROA	1,000									
LG	0.1993	1,000								
NPLR	-0.088	-0.027	1,000							
LLPR	0.0311	-0.135	0.254	1,000						
CAR	0.3106	-0.028	0.115	-0.087	1,000					
SIZE	0.2281	-0.087	-0.129	0.3091	-0.576	1,000				
LIQD	0.1645	-0.201	-0.019	-0.064	-0.059	0.369	-0.226	1,000		
GDP	-0.075	0.0762	0.008	-0.082	-0.014	-0.07	0.1213	-0.034 2	1,000	
INF	0.0796	0.0038	-0.014	0.0814	0.2284	-0.29	-0.087	-0.428	0.044	1,000

Source: Processed from research data from Fiinpro and Worldbank using
Stata 16.0 . software

Table 4.2 shows the correlation between the variables in the regression model. The results show that the absolute values of the correlation coefficients are all less than 0.8. In which, the highest correlation

coefficient is 0.3106 showing the relationship between the independent variable CAR and the dependent variable ROA. Therefore, when using this regression model, it is unlikely that multicollinearity will occur. However, to ensure higher reliability for the conclusion about multicollinearity in the model. The author continues to carry out the Variance Inflation Factor (VIF) test.

According to the table 4.3 below, the variance exaggeration factors of all cases calculated according to the results of the subregression of the variables are very small and the VIF is less than 10. This shows that the model does not appear phenomenon. multicollinearity among independent variables.

Table 4.3 Variance magnification factor

Variable	Centered VIF
LG	1.16
NPRL	1.19
LLPR	1.37
CAR	2.15
SIZE	3.29
LIQD	1.57
CIR	1.86
GDP	1.03
INF	1.43

Source: Processed from research data from Fiinpro and Worldbank using Stata 16.0 . software

4.2 Model estimation results

Estimation methods OLS, FEM, REM are used and compared to find a suitable model for the article.

After testing the unchanging variance and autocorrelation in the Pooled OLS model, the study found that the results of the model's variable variance test gave the Sig value. is 0.000 (<5%), so it is concluded that the model has variable variance phenomenon. Besides, considering the results of the autocorrelation test between the variables in the model, the Sig value is obtained. is 0.000 (<5%), so it is concluded that the model has autocorrelation. The test results are clearly shown in the following table 4.6:

Table 4.6 Test of variance and autocorrelation in the model

Pooled OLS

Variance test		Autocorrelation test	
chi2(20)	124.04	F(1, 24)	35.157
Prob > chi2	0.000	Prob > F	0.000

Source: Extracted from data processed by Stata 16.0 . software

In case the Pooled OLS model appears both autocorrelation and variable variance, to overcome this phenomenon, the author continues to choose to test the FEM model, also known as the fixed effect model (Fixed Effects Model) and REM model, also known as random-effects model. Due to different methods, the estimation results of each model are also different. Based on this result alone, it will be difficult to choose the appropriate model to meet the research objectives. Therefore, the study continues to use

Hausman test to choose between 2 models FEM and REM with hypothesis H0: Selection of REM model. The results of Hausman's test are shown in the table below:

Table 4.7 Results of Hausman . test

Test: Ho: difference in coefficients not systematic	
$\chi^2(9) = (bB)'[(V_b - V_B)^{-1}](bB)$	49.83
Prob> χ^2	0.000

Source: Extracted from data processed by Stata 16.0 . software

Table 4.7 shows the results of Hausman test at 5% significance level, we have Prob> χ^2 of 0.000, this value is less than 0.05, so rejecting hypothesis H0 means choosing FEM model. Then, the study uses the Lagrange multiplier with the hypothesis H0: No variable variance/autocorrelation to test the variable variance and autocorrelation in the FEM model. The test results in Table 4.8 below show that the results of the variance test of the model give the Sig value. is 0.000 (<5%), so it is concluded that the model has variable variance phenomenon. Besides, considering the results of the autocorrelation test between the variables in the model, the Sig value is obtained. is 0.000 (<5%), so it is concluded that the model has autocorrelation.

Table 4.9 Results of testing variance and autocorrelation of the FEM . model

Variance test		Autocorrelation test	
$\chi^2(20)$	601.7	F(1, 24)	34,069
Prob > χ^2	0.000	Prob > F	0.000

Source: Extracted from data processed by Stata 16.0 . software

In the study of panel data, FEM and REM are always two traditional models in estimating the research model. However, through the above test, it can be seen that the FEM model occurs both presently. The object is the variable variance and the autocorrelation between the errors. In addition, avoiding omitting important variables is always a matter of concern. Therefore, to overcome this defect, the thesis continues to use the GMM (Generalized Method of Moments) model.

Table 4.9 Results of regression model according to GMM

Independent variables	Dependent variable ROA	
	Coefficient	t-Statistics
LG	0.00765**	[2.09]
NPLR	-0.0566***	[-3.38]
LPPR	0.547***	[3.25]
CAR	0.0329	[1.19]
SIZE	-0.00361	[-0.75]
CIR	-0.0181***	[-3.65]
LIQD	0.0447***	[4.48]

Independent variables	Dependent variable ROA	
	Coefficient	t-Statistics
GDP	-0.00223	[-0.21]
INF	0.0295**	[2.16]
Cons	0.005714	[0.15]
Prob > chi2 = 0.000		
Arellano-Bond test for AR(2) in first differences: z = -1.83 Pr > z = 0.067		
Sargan test of overid. restrictions: chi2(14) = 3.49 Prob > chi2 = 0.998		
Number of groups = 25		
Number of instruments = 25		
Note: *, **, ***: coefficients are statistically significant at 10%, 5% and 1%, respectively.		

Source: Extracted from data processed by Stata 16.0 . software

Regression results by GMM estimation method presented in Table 4.10 show that the model has a significance level of 1% because $Pro>F=0.00$. Therefore, the model is suitable to analyze the impact of the independent variables on the dependent variable. Next, the Arellano and Bond (1991) test has the hypothesis H_0 : There is no autocorrelation phenomenon and is applied to the differential residuals. The results from table 4.10 show that AR(2) with the significance level of P-value = $0.067 > 0.05$, so there is no statistical significance, accept H_0 . Therefore, the model does not have autocorrelation. In addition, the Sargan test has the hypothesis H_0 : the instrumental variables are exogenous and the model has no endogenous phenomena. The test results show that the coefficient P-value = $0.998 > 0.1$, so there is no statistical significance, accepting H_0 . Therefore, the model has no endogeneity and the instrumental variables have no error correlation in the model. Finally, Third, the author is interested in the number of instrumental variables in the model. As a rule, the number of observation groups must be greater than or equal to the number of instrumental variables. The regression results according to the GMM model show that the number of observed groups is 25 equal to the number of instrumental variables.

The results of the GMM test show that the variables of credit growth rate and inflation rate have a positive impact on bank profitability with the significance level of 5%. Besides, the GMM model estimate also shows that the liquidity ratio and credit risk provision have a positive impact on the bank's profit with the significance level of 1%. However, at the 1% significance level, the bad debt ratio and the expense to income ratio negatively affect the bank's profit while the capital adequacy ratio, bank size and economic growth rate are negative. Not statistically significant at 1%, 5% and 10% levels.

The estimated results of the GMM model are presented as follows:

$$ROA = 0.005714 + 0.07765 LG - 0.0566 NPLR + 0.547 LPPR - 0.0181 CIR + 0.0447 LIQD + 0.0295 INF + \mu it.$$

4.3 Discuss the results

4.3.1 Impact of credit growth on profitability

The research results of the thesis provide a clear illustration of the positive impact on profitability of joint stock commercial banks in Vietnam. The GMM regression coefficient of the credit growth variable is 0.00765. Although in hypothesis H_1 , the thesis hypothesized that: "Credit growth negatively affects the profitability of Joint Stock Commercial Banks" and there is enough empirical evidence to show that credit growth is negative. has a negative relationship with bank profitability as studied by Fahlenbrach et al.

(2018), Foos et al (2010). However, in this study, the thesis found a positive correlation between loan growth rate and return on assets (ROA). The results of the positive relationship between credit growth and profit are very consistent with the current practice at Joint Stock Commercial Banks in Vietnam. In the research context, economic growth is still the main goal of the state. Vietnam is a developing country, so the banking sector is also developing at a rapid rate, along with the number of businesses and banks also increasing. At the same time, rising living standards promote people's demand for consumption and capital use to become stronger. Facing high demand for credit, banks often increase lending rates. This can help banks get loans with high profitability and then credit growth has a positive impact on the bank's performance. (Dang Van Dang, 2019). In other words, loan sales contribute to increase loan interest income, thereby increasing the bank's profit. This result is similar to the studies of Amador et al (2013), Dang Van Dan (2019) and Bhowmik et al (2021).

4.3.2 Impact of credit risk on bank profitability

Firstly, the study considers the bad debt ratio: The GMM regression coefficient of the bad debt ratio is -0.0566 with the significance level of 1%, showing that credit risk has a negative effect on the profitability of the banks. Joint Stock Commercial Bank in Vietnam. This shows that the higher the bad debt ratio of the bank, the lower the profit of the bank. The results with 1% confidence are the basis for accepting the hypothesis H2: "Non-debt ratio negatively affects profits of joint stock commercial banks in Vietnam". Research by Athanasoglou et al. (2008), Alexiou and Sofoklis (2009), Million Gizaw et al. (2015), Ebrahim Almekhlafi et al. (2016), Trinh Quoc Trung, Nguyen Van Sang (2013) have also included produce similar results. This relationship suggests that if a joint stock commercial bank has loans that are not repaid on time or cannot be recovered, the bank is under increased pressure on bad debt, having to continue to collect loans and provide legal services, together with incurring the costs involved. This can affect the bank's profitability. In addition, the failure to recover loans can also lead to a decrease in the value of the bank's assets. For example, if a bank holds a lot of real estate loans that don't have a high value due to a decline in value over time, this affects their bank's profit when it comes to receiving this discount.

Second, the study considers the credit risk provision ratio: The GMM regression coefficient of the variable measuring the bank's credit risk provision ratio is + 0.547 with a significance level of 1%, showing that The ratio of provisions for credit risks has a positive influence on the profits of joint stock commercial banks in Vietnam. Although in the H3 hypothesis, the author has assumed that: "The credit risk provision ratio has a negative impact on the profitability of joint stock commercial banks in Vietnam". However, in this study, the author found a positive relationship between the credit risk provision ratio and the profitability of Vietnamese joint stock commercial banks. It can be seen that increasing the provisioning rate for credit risks may reduce the short-term profit of the bank, as a part of the profit will be used to create a reserve fund. However, the provisioning for risks is one of the important measures to ensure stability and sustainability for the future. Having a high reserve fund will help the bank cope with credit risks and protect itself from bad debts and risk losses. This contributes to the confidence of stakeholders such as investors and financial regulators in the bank and thereby brings profits to the bank in the long term. This result is similar to the studies of Liu and Hu (2012), Muhammad et al. (2012), Million Gizaw et al (2015). In which, as explained by Muhammad et al. (2012), it is possible that the positive relationship between LLPR and ROA signals the use of the risk provision ratio for income management purposes.

In addition to finding answers about the impact of credit growth and credit risk on the profits of joint stock commercial banks in Vietnam, the influence of other micro and macro factors on bank profits are also clearly shown in the table below.

Table 4.10 Summary of Study Results

Variable	Expectation sign	Result	Level of significance	Regression coefficient
LG	-	+	5%	0.00765
NPLR	-	-	first%	-0.0566
LPPR	-	+	first%	0.547
CAR	+	+	No statistical significance	0.0329
SIZE	+	+	No statistical significance	-0.00361
CIR	-	-	first%	-0.0181
LIQD	+	+	first%	0.0447
GDP	+	-	No statistical significance	-0.00223
INF	+	+	5%	0.0295

Source: Author's own compilation

5. Conclusion and recommendations

5.1 Conclude

The research topic has conducted research and made initial hypothesis about the impact of credit growth and credit risk on the profitability of joint stock commercial banks in Vietnam in the period 2010 - 2022. Research results Research shows that credit growth and risk provisions have a positive impact on bank profitability, but NPL ratio has a negative impact on bank profitability. Besides, the study also found the positive impact of the liquidity ratio and the inflation rate on profitability and the negative impact of the cost-income ratio on profit.

Recommendations

5.2.1 Suggestions and recommendations on credit growth

To the bank

Firstly, controlling the credit process as well as improving the efficiency of credit appraisal is a very important problem that determines the success of the bank's credit operations. Specifically, depending on the period, region and field of operation, joint stock commercial banks have suitable credit products. Banks need to separate the asset valuation department, credit risk management department and credit granting department to operate in the most effective way. In addition, banks need to maintain credit growth in terms of credit quality. In other words, the important thing is not more or less credit but the quality of that capital flow is good or not. It is necessary to adjust that capital flow to go into production and business activities instead of risky fields such as real estate and stock speculation. In addition, banks must always comply with the regulations of the State bank on credit growth.

On the management side

First, the state needs to manage monetary policy effectively. Specifically, state agencies can use monetary policy to regulate credit growth. This includes interest rate adjustments and reserve requirements. Thereby, state agencies can influence credit growth at a reasonable rate and avoid cases where credit growth is too fast or too slow. In addition, the State should actively direct banks to: (i) actively shift credit structure towards focusing capital on production and business fields and priority areas (ii) create favorable conditions to benefit businesses with development expectations, to arrange capital sources to promptly meet the credit needs of the economy; (iii) develop a credit growth plan for the year in line with the effective credit growth policy of the government and the State Bank.

5.2.2 Suggestions and recommendations on credit risk

To the bank

Regarding customer credit appraisal, commercial banks should strictly adhere to credit policies as well as fully analyze both aspects of customer's ability to repay and goodwill. It is important to consider the personal, legal, reputation and business situation of customers to identify potential customers and potential credit risk customers. Even good loans need to be checked periodically to make sure the loan's condition has not deteriorated. In addition, by allocating capital to many different industries and customers, banks can minimize the impact of changes in a particular industry or customer on the entire loan portfolio. In addition, banks need to seriously classify debts and make provision for credit risks, avoid chasing for profit without complying with debt classification and risk provisioning according to regulations determined. In order for the bad debt ratio to be gradually reduced, for customers whose loans show signs of turning into bad debt, the bank needs to actively coordinate with customers to solve the situation. At the same time, use the risk reserve fund in accordance with the provisions of law. In addition, for bad debts, banks can sell debts to companies and professional organizations such as VAMC. With this option, the bank will save time and costs of handling bad debts, help the bank quickly recover capital, and re-service for customers who need capital.

On the management side

The State Bank needs to perfect the system of legal documents suitable for each period in regulating the process of appraising and assessing the asset quality of joint stock commercial banks, it is necessary to develop a supervision plan, carry out inspection in various forms for banks in order to promptly detect and prevent negative acts occurring in credit activities. In addition, the State Bank should soon make mandatory requirements for commercial banks on the application of Basel III standards. Compared to the previous treaties, Basel III was born with a significant change in improving the proportion and quality of capital sources, improving the ability to catch risks, improving the ability to handle credit risks and focusing on the quality of capital. Focus on high-risk assets. Moreover, the State Bank should continue to improve the credit information database of the Vietnam National Credit Information Center (CIC).

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HO CHI MINH CITY UNIVERSITY OF ECONOMICS AND FINANCE

141 - 145 Dien Bien Phu, Ward 15, Binh Thanh District, HCM City

Website: uef.edu.vn - Hotline: (028) 5422 6666 * (028) 5422 5555