

THE EFFECT OF CREDIT APPRAISAL ON LOAN PERFORMANCE OF VIETNAMESE COMMERCIAL BANKS

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ABSTRACT

Credit appraisal plays a very important role in reducing bad debts and increasing the efficiency of banks' lending activities, but there are very few studies on this content in Vietnam. This study aims to evaluate the influence of credit appraisal on the loan performance of Vietnamese commercial banks, specifically, the authors assess the influence of the borrower's personality, ability to repay, the purpose of using the loan, and collateral for loan performance. The data was done by interviewing employees of 30 joint stock commercial banks in An Giang province, with 198 satisfactory questionnaires, coded, using SPSS software. Regression analysis showed that there was a significant positive relationship between credit appraisal factors and loan efficiency at the 95% confidence level and concluded that the customer's ability to repay debt affects loan performance. The study recommends that before loan approvals, factors related to loan repayment ability should be carefully considered to improve customer lending efficiency.

Keywords: Credit appraisal, loan performance, commercial bank.

1. INTRODUCTION

The banking industry plays an important role in economic growth and development through the provision of credit to carry out economic activities [1]. Commercial banks need to lend to consumers in order to exist and foster economic growth. Commercial banks' ability to manage credit effectively is crucial to their profitability because the majority of their revenue comes from interest on loans provided to small and medium-sized enterprises [2]. This revenue can be enhanced by correctly implementing lending policies that, if executed well, affect profitability and financial performance. As a result, commercial banks develop lending policies that guide them to grant loans to their customers. What contributes to financial performance for commercial banks is that lenders use different lending policies to increase the efficiency and coordination of asset investment activities [3].

According to Okoye & Eze (2013), Lending practice in the world can be traced back to the period of the industrial revolution, which increased the speed of commercial and production activities, leading to the need for large capital for projects. Many industry leaders during this period were unable to cope with the sudden increase in financing requirements and therefore turned to banks for assistance [4]. According to Kusi et al (2017), Lending challenges include poor loan enforcement, unclear information about borrowers' ability and willingness to repay, a poor background of potential borrowers, and poor repayment behavior. adequate, collateral, and repayment guarantees are inadequate [5]. According to Njeru et al (2016), the due diligence process involves assessing a borrower's creditworthiness and expected future cash flows given the level of risk associated with a particular borrower [2]. According to Ahmed & Malik (2015), the aspects that are focused on appraisal include the purpose of the customer, the need for honesty, the borrower's ability to repay, the amount of the loan and the security [6].

According to Byusa & Nkusi (2012), to improve loan loss, commercial banks should assess the creditworthiness of customers with the help of the 5Cs: characteristics, capacity, capital, collateral and conditions [7]. According to Ong'era (2016), each type of loan application must go through a loan appraisal process, repayment period, maximum loan amount, and insurance provision. Loans generally must be secured by collateral and the approval channel must be in writing and approved by the Board of Directors. This is because inefficient lending policies and short-sighted credit analysis can have a major negative impact on the profitability and performance of commercial banks [3]. Research evidence shows that commercial banks often struggle with bad loans (NPLs) due to poor credit analysis. The purpose of a credit appraisal is to determine the borrower's ability and willingness to repay the loan required under the terms of the loan agreement [8]. Hasty credit appraisal will not only endanger the bank but also depositors and investors [9]. When properly applied, credit risk assessment methods have the potential to increase the profitability of commercial banks for a time by minimizing losses [10].

The above studies show that credit appraisal is decisive for the lending efficiency of commercial banks, helping banks avoid the risk of generating many bad debts, negatively affecting the source of capital, liquidity of banks, stability of the financial system. However, in Vietnam there are very few studies on the influence of appraisal on the lending performance of commercial banks which are mainly studies on solutions to improve the quality of appraisal of investment projects [11], solutions to improve the quality of credit appraisal of FDI enterprises [12], current status of credit appraisal in consumer lending activities in commercial banks [13]. Therefore, it is necessary to evaluate the influence of credit appraisal on the lending efficiency of commercial banks in Vietnam.

2. LITERATURE REVIEW

2.1. Theoretical background

2.1.1. Credit appraisal

Credit appraisal is a complete activity starting from the moment a potential borrower enters, ending credit provision and monitoring with the goal of confirming, maintaining loan quality and credit risk management [14]. In addition, due diligence is assessing the viability of proposed long-term investments in terms of shareholder wealth, analyzing all project costs and benefits used to measure justify the project proposal. Credit appraisal is the process by which lenders assess the credit value of borrowers, it revolves around personality, ability and capacity [15]. To minimize the risk of bad debt and bankruptcy, banks must have insight into the financial strength of their customers, credit score history, and changing patterns [15].

2.1.2. Loan performance

Lending portfolio efficiency refers to the rate of return or rate of return of an investment in different loan products. It looks at the number of customers applying for a loan, how much they are borrowing, on-time payment of the installment guarantees committed to the borrowed amount, the recovery rate, and the number of loan products on the chain [16]. Causes of default in microcredit programs determined that the main cause of default was found to be poor business performance, low profits or loss-making business, using the unprofitable loan [17].

2.1.3. Credit appraisal and loan performance

Effective credit and loan appraisal activities should be carried out in a systematic manner and accordance with established policies and procedures [18]. Kabamba (2012) believed that proper and complete assessment is the key to controlling or minimizing default, which is a fundamental step in the lending process [19]. The due diligence phase is at the heart of a high-quality portfolio including the borrower's diagnosis [20].

2.1.4. The character of a borrower and the loan performance

The effectiveness of repayment is significantly affected by the characteristics of the borrower, the characteristics of the lender, and the characteristics of the loan [21]. When facing repayment problems that can be in the form of overdue debt and default, in any form, when problems arise, the borrower cannot be held solely responsible, it is necessary to consider the level of compliance. Obligations of both borrower and lender to the loan agreement and the nature, duties, responsibilities and obligations of the parties as reflected in the design of the credit program rather than simply blaming the borrower get a loan [22].

Banks have to protect their interests and therefore must protect themselves against dishonest, incompetent or overly subjective borrowers by investigating their credit history, Other information that can be used to assess a borrower's personality such as records held by the provider and past banking relationships with the customer [15].

2.1.5. The borrower's ability to pay and the loan performance

Measured using income/stability-related information regarding loan repayment. To get a full picture of a borrower's ability to repay, lenders often require proof of income. They may also require proof of employment to prove you have a steady job and therefore a steady source of income. If you don't have a steady job or are self-employed, you may have to submit some other paperwork that shows how much money you have in your bank account or how much you earn each year. For a seasonal working capital loan, cash flow is generated by the orderly liquidation of inventory and accounts receivable [23].

According to Kibui & Moronge (2014), when evaluating a small business for a loan, ideally a lender wants to see a two-year history of performance, a stable management team, a desirable market in the industry, a growing market share, strong cash flow, and the ability to raise short-term capital from other sources to supplement loans [20]. The package of documents provided to potential lenders should include a comprehensive business plan, plus detailed personal and company financial statements. The lender will then evaluate the loan request by looking at a variety of factors. For example, lenders will check a small business's credit rating and look for evidence of that business's ability to repay its debt, in the form of past earnings or earnings projections [21]. The lender will also ask about the amount of equity in the business, as well as whether management has the experience and capacity to run the business effectively. According to Kabamba (2012), causes of default include a lack of willingness to repay along with the borrower's diversion of funds, willful negligence and improper appraisal of credit officers [19].

2.1.6. The borrower's purpose for using the loan and loan performance

Lenders want to limit how money is used. Lending rates typically take into account the risk the lender is expected to accept, and that depends in part on the purpose of the loan. According to Odhiambo (2011), riskier loans have different terms and are more expensive than less risky loans. People borrow for different purposes that affect their repayment rate, for example, a domestic personal loan is mainly used to pay for medical expenses, weddings, home improvements, etc. Since a personal loan is an unsecured loan, credit history often plays an important role in the approval process [24]. In addition, the main causes of default are lack of loans, delayed repayment, high-interest rates, poor loan supervision, unprofitable operation of farm enterprises and excessive government intervention. government with government-funded credit program activities. Moreover, According to Odhiambo (2011) believed that slow loan disbursement and high-interest rates can significantly increase loan transaction costs and can also adversely affect repayment efficiency [24].

2.1.7. Collateral and loan performance

According to Wambugu (2010), collaterals are forms of security or additional security provided by the borrower to the bank. They represent assets that the borrower has mortgaged to the bank that can be sold if he defaults and collection efforts go futile [21]. On the other hand, a guarantee is just that; someone else signs a guarantee promise to repay the debt if the borrower fails to pay [22]. However, debt collection from the guarantor often entails costly litigation and leads to conflicts between the bank, the borrower and the guarantor. It's important to note that strong collateral often doesn't fix character or competency deficiencies. Banks avoid foreclosure because foreclosure is time consuming and costly.

2.2. Literature review

Ndero et al., (2019) studied the relationship between credit appraisal and lending activities of commercial banks in Uasin Gishu district, Kenya. The purpose of this paper is to explain the relationship that exists between credit appraisal lending policy and lending performance of commercial banks in Uasin Gishu district, Kenya. The research sample includes 128 credit officers working at 39 commercial banks. Research results show that 78.1% of commercial banks conduct credit appraisal using 5Cs credit appraisal technique, credit scoring model and credit bureaus. The study also found that there exists a significant positive relationship between credit appraisal and lending performance of commercial banks in Uasin Gishu County, Kenya. The study recommends that commercial banks consider using a cell phone company's financial statements for an individual borrower to check cash flow before granting a specific loan [25].

Muriungi and Muturi (2018) studied the influence of credit appraisal on the loan performance of SACCO, Meru County, Kenya. The specific objectives of the study were to assess the influence of borrower character, ability to pay, availability of collateral and loan usage on loan performance. All independent variables were considered based on dependent variables using previous studies performed by other researchers. A descriptive study design was adopted to analyze the topic thoroughly. The entire staff of eleven SACCOs with headquarters in Meru County was studied. Primary data was collected from executives, chief financial officers, chief credit officers, and chief operating officers using a structured questionnaire. Computer-aided software (SPSS) was used to analyze the data. The research results show that there is a significant positive relationship between credit appraisal factors and loan efficiency at the 95% confidence level and conclude that credit appraisal factors have an influence on loan performance. Regression coefficients are also developed showing a close relationship between dependent and independent variables [26].

In Rwanda, Kagoyire and Shukla (2016) sought to determine the impact of credit management on the financial performance of commercial banks. The study used descriptive survey design. Subjects of the study included 57 employees of the bank in the credit department. Research shows that customer due diligence; credit risk control and debt collection policies have an impact on the financial performance of the bank. Research has determined that there is a strong relationship between a bank's financial performance and customer due diligence, credit risk control, and debt collection policy. Research has determined that customer due diligence, credit risk control, and debt collection policies have a significant influence on a bank's financial performance [27].

Improving the quality of appraisal of individual customers at Military Commercial Joint Stock Bank. The author analyzes the current status of the appraisal content (personal appraisal, financial appraisal, plan appraisal, collateral appraisal) through interview results, then compares with other credit institutions, in addition to In addition, we also use secondary data from financial statements, then use analysis, synthesis, induction and deductive methods to

find out strengths, weaknesses, opportunities, challenges, and recommendations. solutions to improve the quality of credit appraisal [28].

Credit appraisal in consumer lending activities at Vietnam Technological and Commercial Joint Stock Bank. The author researched the basic theoretical issues of perfecting credit appraisal in consumer lending activities of commercial banks, identified and analyzed the factors affecting credit appraisal. Assessing the current status of credit appraisal in credit card activities, the achieved results and the limitations that affected Techcombank's credit appraisal. Proposing recommended tools and solutions to improve credit appraisal in credit card activities of Techcombank [13].

Thus, there are many studies on the influence of credit appraisal on the lending efficiency of banks in countries around the world. However, in Vietnam, there are not many studies on this content. Therefore, the author's study will examine the influence of credit appraisal through the criteria of borrower's personality, solvency, the use of loan capital and collateral on the lending efficiency of bank.

3. METHODOLOGY

3.1. Hypothesis

According to Davies & Kearns (1992), when evaluating the character, the lending officer looks at the age as well as health of the prospective borrower; personal stability of the borrower (thus borrower's dependents, marital status, type of employment, duration of current employment and whether the is a tenant or owner) [29]; integrity and honesty; personal resources or borrower wealth; lifestyle as well borrower as connections Honesty and goodwill of the client are the most paramount factors in a successful loan [30]. Therefore, the first proposed hypothesis is:

Hypothesis 1: There is a positive correlation between borrower's personalities and the loan performance of commercial banks.

To get the full picture of a borrower's ability to repay their debt, lenders typically require proof of income. This is measured using information related to income/stability in relation to loan repayments. They may also ask for proof of employment that will demonstrate you have a steady job and therefore a solid stream of income. If you don't have a steady job or are self-employed, you may be required to submit some other evidence showing how much you have in your bank account or how much money you make each year. The lender will then evaluate the loan request by considering a variety of factors. For example, the lender will examine the small business's credit rating and look for evidence of its ability to repay the loan, in the form of past earnings or income projections [31]. The lender will also inquire into the amount of equity in the business, as well as whether management has sufficient experience and competence to run the business effectively. Therefore, the second hypothesis for the study is:

Hypothesis 2: There is a positive correlation between loan repayment ability and loan performance of commercial banks.

Lenders want to restrict how the funds are used. Loan interest rates typically take into account the risk that the lender expects to take, and that depends in part on the purpose of the loan. According to Odhiambo (2011), riskier loans have different terms and are more expensive than less-risky loans. People borrow for different purposes that affect their repayment rates [24]. According to Kabamba (2012), the causes leading to default include lack of willingness to repay along with the borrower's diversion of funds, willful negligence and improper appraisal of the credit officer [19]. The third hypothesis for this study is:

Hypothesis 3: There is a positive correlation between the purpose of using the loan and the loan performance of commercial banks.

These are additional forms of security or guarantee that are provided by the borrower to the bank. They represent those assets the borrower has made to the bank that can be sold if he defaults and collection efforts have become futile [31]. Although cash flows from the business operation are supposed to be the main source of loan repayment, where sufficient cash flows fail to materialize, the bank can mitigate loss if it has secured a secondary source of repayment [32]. According to Kibanga (2022), giving a lender collateral means that you pledge an asset you own, such as your home, to the lender with an agreement that it will be the main repayment source in case you cannot repay the loan. However, collections from guarantors often require expensive litigation and results in bad blood between the bank, borrower and guarantor. It should be noted that strong collateral should not generally overcome in either character or capacity [33]. Banks avoid foreclosing on collateral because foreclosure entails much time and expense [30]. A guarantee on the other hand is just that; someone else signs a guarantee document promising to repay the loan if the borrower fails cannot [22]. Collateral value should cover the loan amount and the interest due. So, the fourth hypothesis put forward is:

Hypothesis 4: There is a positive correlation between loan collateral and loan performance of commercial banks.

3.2. Research process

Based on the research objectives and previous related theoretical, the authors has proposed hypotheses, proposed research model, built scales, appropriate questionnaires and implemented them. Research is conducted in two phases: preliminary research for questionnaires adjustment and quantitative research for testing hypothesis. SPSS 20 software was used to perform data analysis.

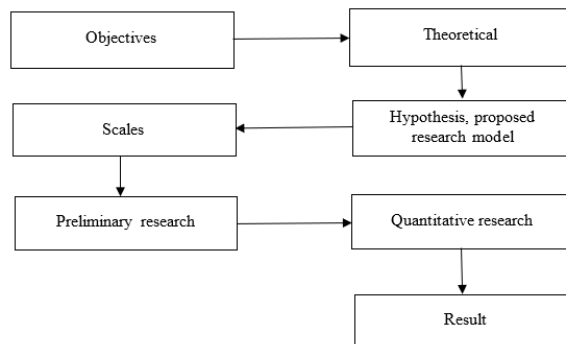


Figure 1. Research process

3.3. Research sample and analytical methods

Data was collected in 3 weeks of November 2022. Respondents answered paper-based questionnaire. These surveys were conducted from a readily accessible pool of respondents from banking staff of commercial banks who were directly or indirectly involved to loan. There were 200 questionnaires. After screening, the sample of 198 repondents were used for testing hypotheses, including 17 heads/deputies of the customer relations department, 98 individual customer relation officers, 24 corporate customer relation officers, 17 credit appraisers, 42 debt collection managers of commercial banks in the area.

This study was carried out through two main phases:

(1) Preliminary research to adjust the questionnaire to suit the research reality. Qualitative data collection method by in-depth interviews with 10 people for the purpose of adjusting,

supplementing and completing the survey scale and questionnaire. The outline of the in-depth interview has two parts: the invitation to participate in the interview and the interview questions. The part of the invitation to interview is to create the trust of the interviewee with the interviewer, to help orient the interview to better follow the topic and interview questions.

(2) Quantitative research to collect information and analyze data for research purposes. Quantitative research is based on survey information collected through questionnaires made on a Likert scale consisting of 5 points, from 1 (strongly disagree) to 5 (strongly agree).

After primary data collection, the data are first checked for correctness, completeness, consistency and accuracy, and then tabulated and analyzed using the Statistical Software Package for Science Society (SPSS) version 22 which was conducted through steps including descriptive statistics, check the scale reliability, exploratory factor analysis (EFA), correlation and regression analysis to evaluate the influence of credit appraisal on the efficiency loans from Vietnamese commercial banks.

3.4. Analytical research model

On the basis of an overview of previous researches [13, 25-28, 34-35] and the above 4 hypotheses, the researcher proposed a linear regression model as follows:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ will be derived to show the relationship between the dependent variable (Y) and the independent variable (X) where:

Y = loan performance is a dependent variable that will be measured using non-performing loans divided by the total number of loans

X1 = character

X2 = ability to repay the loan

X3 = purpose of using the loan

X4 = collateral

β_0 = is a regression Constant

$\beta_1, \beta_2, \beta_3$ = Regression Coefficients

ϵ = Error term normally distributed about the mean of zero

4. RESULTS

4.1. Descriptive statistics

This section presents the respondents' background information, analysis of the borrower's character, ability to repay, purpose of using the loan, collaterals and lastly loan performance.

4.1.1. Research sample characteristics

Respondents were also asked to indicate their highest level of education. Their response is shown in Table 1 below.

Table 1. Education level. (Source: authors' research)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	193	94.1	97.5	97.5
	Master	5	2.4	2.5	100.0
	Total	198	96.6	100.0	

Most of the respondents have a bachelor's degree or higher, 97.5% having a bachelor's degree and 2.5% having a master's degree, this ensures the quality of survey results.

The authors sought to establish also the period with which the respondent has been serving the above-mentioned position. The results of the findings are shown in Table 2 below.

Table 2. Respondents' experience. (Source: authors' research)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less 1 year	31	15.1	15.7	15.7
1 – 3	92	44.9	46.5	62.1
4 – 6	15	7.3	7.6	69.7
7 – 9	44	21.5	22.2	91.9
Over 10	16	7.8	8.1	100.0
Total	198	96.6	100.0	

Out of 198 respondents, there are 31 people have worked for less than 1 year by 15.7%, 92 people have worked for 1-3 years by 46.5%, there are 15 people from 4-6 every year account for 7.6%, there are 44 people from 7-9 years account for 22.2% and more than 10 years, there are 16 people, 8.1%.

4.1.2. The borrower's character and the loan performance

The first objective of the study was to assess the character of a borrower's positive influences the loan performance. The study used a Likert scale to further investigate how the character of the borrower influences the loan performance where several attributes were used and the results presented in Table 3 below.

Table 3. Borrower's character and the loan performance. (Source: authors research)

Attribute	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Bank checks the applicant's loan repayment history before granting the loan	0%	0%	0%	47.0%	53.0%
Bank checks the applicant's credit reference rating before granting a loan	0%	0%	0%	37.9%	62.1%
Bank checks the applicant's experience in using the loan before granting the loan	0%	0%	4.5%	29.3%	66.2%

Through the data in Table 3, we see that the borrower's character influences the loan performance, this is based on 100% of the respondents agreeing that the bank needs to evaluate the borrower's repayment history. Regarding the rating check of the credit reference, a total of 100% agree. A total of 95.5% of respondents agreed that banks check borrowers' experience with loans before lending them, while only 4.5% were neutral. From there, it shows that the borrower's character is the key to the borrower's borrowing and also the influencing factor in the loan performance of commercial banks.

4.1.3. Borrower's ability to repay and loan performance

From the results in Table 4, it can be seen that the ability of the borrower is also a key determinant of loan performance. There are 96% of respondents agree that banks consider income before loans, and only 4% of respondents expressed a neutral opinion. Regarding business expenses, a total of 97% agreed that banks also consider business expenses before loan,

while only 3% expressed a neutral opinion. Finally, 94% of respondents agreed that banks review borrower' payment slips before granting them a loan, while only 6% were neutral.

Table 4. Borrower's ability to repay and the loan performance. (Source: authors' research)

Attribute	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Bank looks at business income before granting the Loan	0%	0%	4%	59.1%	36.9%
Bank looks at the business expense before granting the loan	0%	0%	3%	64.1%	32.8%
Bank looks at borrower pay slip before granting the Loan	0%	0%	6%	53.0%	41.1%

4.1.4. Borrower's purpose for using the loan and loan performance

The third objective of the study is to assess the borrower's purpose of using the loan positively influences loan performance. The survey results are shown in Table 5 below.

Table 5. Borrower's use of loans and loan performance. (Source: authors' research)

Attribute	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Loan used for domestic purpose	0%	0%	1.5%	48.5%	50%
Loan used for industrial purpose	0%	0%	7.6%	64.6%	27.8%
Loan used for agricultural purpose	0%	0%	5.0%	49.5%	45.5%
Loan used for social purpose	0%	0%	5.0%	49.5%	45.5%

From the results in Table 5 above, it can be seen that a total of 98.5% of respondents agree that the loan will be granted to borrowers for domestic purposes while 1.5% of respondents are a neutral opinion on this topic. 92.4% of the respondents also confirmed that the loan was given for industrial use, while 16 people gave a neutral opinion. There are 95% of respondents mentioned the loan is given for agricultural and social purposes and only 5% have a neutral opinion.

4.1.5. Collaterals and Loan performance

The last objective of the study was to establish collateral loan positive influences on loan performance. To assess this all the approval that collateral is always required before a loan is granted and this was so as precautionary mechanism for loan safety. The survey results are shown in Table 6 below.

Table 6. Collaterals. (Source: authors' research)

Attribute	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The bank requires the guarantor's assets as collateral borrower's guarantee	0%	0%	16.7%	53.5%	29.8%
The bank requires the title deed as security for borrower	0%	0,4%	7.1%	56.1%	36.4%
The bank charges a collateral fee for the loan is disbursed	0%	0%	4.0%	49.0%	47.0%

From the results in Table 6 above, it can be seen that the availability of collateral to secure the loan is also a determining factor. A total of 83.3% of respondents agree that banks require guarantor assets as collateral for loans, 16.7% give neutral opinions, banks asking for title deed

as collateral have a total of 92.9% of respondents agreeing, while 94% agree that the bank charges a fee for collateral for the loan to be disbursed.

4.1.6. Loan Performance

Table 7. Loan performance (Source: authors' research)

Attribute	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Bank earns high monthly loan interest	1.0%	0.5%	56.6%	40.4%	1.5%
Bank gives big loan size	0%	0.5%	7.1%	58.6%	33.8%
Debt paid on time	0%	0%	0.5%	45.5%	54.0%

From the results in Table 7 above, the study shows that a total of 41.9% of respondents agree that the lending efficiency through commercial banks collecting monthly loan interest is high. On the other hand, 92.4% of people agree that lending efficiency is also reflected in large-scale lending banks. Besides, 99.5% of survey respondents believe that the timely repayment of loans also shows the bank's lending efficiency. The research results demonstrate that loan performance is a factor of many attributes and the amount of on-time repayment is the biggest influencing factor.

4.2. Correlation and regression analysis

To establish the relationship between borrowers' character, ability to repay, purpose of using the loan, collateral and loan performance. The study performed person correlation analysis and the results are presented in Table 8 below.

Table 8. Correlation. (Source: authors' research)

		Loan performance	Character	Ability to pay	Loan usage	Collateral
Loan performance	Pearson Correlation	1	0.153*	0.366**	0.216**	0.305**
	Sig. (2-tailed)		0.032	0.000	0.002	0.000
	N	198	198	198	198	198
Character	Pearson Correlation	0.153*	1	0.288**	0.408**	0.241**
	Sig. (2-tailed)	0.032		0.000	0.000	0.001
	N	198	198	198	198	198
Ability to repay	Pearson Correlation	0.366**	0.288**	1	0.676**	0.582**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	198	198	198	198	198
Purpose of using the loan	Pearson Correlation	0.216**	0.408**	0.676**	1	0.440**
	Sig. (2-tailed)	0.002	0.000	0.000		0.000
	N	198	198	198	198	198
Collateral	Pearson Correlation	0.305**	0.241**	0.582**	0.440**	1
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	
	N	198	198	198	198	198

*. Correlation is significant at the 0.05 level (2-tailed).

**.. Correlation is significant at the 0.01 level (2-tailed).

The specific objective of the study is to show the extent to which the influence of the independent variables (borrower's personality, ability to repay, purpose of using the loan, collateral) on the loan performance is the main factor. Dependent factors and the above research results show that there is a positive relationship between borrower's personality, ability to repay, purpose of using the loan, collateral and loan performance with correlation coefficients respectively is 0.153; 0.366; 0.216 and 0.305. All independent variables have a significant effect on lending efficiency at 95% and 99% confidence levels, with p-values lower than alpha values

of 0.05 and 0.01. Therefore, the study results determined that there is a positive effect of the independent variables on loan performance. In addition to determining the relationship between the dependent variable and the independent variable, the study also aims to evaluate the influence of the independent variables (character, ability to repay, purpose of using the loan, collateral) on the dependent variable (loan performance) and the regression results shown below.

Table 9. Coefficients. (Source: authors' research)

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.023	0.275		7.369	0.000		
Character	0.036	0.041	0.063	0.863	0.389	0.828	1.207
1 Ability to repay	0.259	0.078	0.332	3.335	0.001	0.443	2.259
Purpose of using the loan	-0.067	0.066	-0.095	-1.011	0.313	0.492	2.032
Collateral	0.107	0.063	0.139	1.695	0.092	0.654	1.530

a. Dependent Variable: loan performance

5. DISCUSSION

The results of the regression model presented in Table 9 show that: there is only one variable that has an impact on loan performance, which is ability to pay with the Sig. < 0.05. Meanwhile, the borrower's character variable has Sig. is 0.389, purpose of using the loan with Sig. is 0.313 and the collateral has Sig. is 0.092, three variables are greater than 0.05 so they are not statistically significant at 5% significance level. Therefore, the remaining model only has 01 independent factor, namely ability to repay (unstandardized beta = 0.259) to the bank's loan performance. The regression equation of the research model has the following form:

$$Y = 2.023 + 0.259X_2$$

This shows that 1% change in the ability to repay will have a significant positive effect on the bank's loan performance of 25.9% at the 95% confidence level. This result is different from the results of previous researches [7, 25-28, 34-35] in that not all contents in borrower's credit appraisal (character, ability to repay, purpose of using the loan, collateral) affect the loan performance of commercial banks, but the findings in Table 4 has provided information for the study of borrower's ability to repay as a factor of loan approval which is similar to result in study of [34, 35] and it can confirm that the bank considers both income stream, business expenses and also pay slips for the case of the individual borrower, all of these are ways to ensure that borrower has the ability to repay the money he has borrowed. In addition, loan performance is measured as bad debts divided by total loans. If customers repay the loan on time, it will ensure a safe loan without bad debt, bringing efficiency to the bank. Therefore, bank staff in An Giang province consider loan repayment ability to have a positive influence on the bank's lending efficiency. This shows that not all factors of credit appraisal affect the bank's lending efficiency, but also depend on the actual situation of the customer, depending on the purpose of using the loan, view of each survey respondents, etc. and this has made a difference compared to previous studies.

6. CONCLUSION

This study focuses on analyzing the influence of credit appraisal on the loan performance of commercial banks. The research results show that one out of four factors is the borrower's ability to repay the loan has a significant positive impact on the commercial banks' loan performance. Banks can use the results of this research to devise strategies to increase the efficiency of customer lending in different regions. In addition, this study is a useful reference

for other researchers who want to do more research on the factors affecting the loan performance of commercial banks.

From the research results is the borrower's ability to repay the loan has a significant positive impact on the commercial banks' loan performance, the authors propose some recommendations to improve the loan performance of commercial banks:

Agencies and departments need to support and connect in the use and sharing of information for commercial banks in order to diversify data sources to serve well for customer appraisal to ensure repay the loan.

The State Bank of Vietnam's credit information center (CIC) sources need to be updated regularly, continuously and quickly because it is an extremely important reference source in customer's repay the loan appraisal.

Loans must be granted with due consideration of ability to repay. This is the key to repaying the loan. Lenders should consider multiple sources of income so that if one fails, the other will succeed in repaying the loan.

The bank needs to accurately and objectively assess the sources of income and expenses of the customer before lending to ensure the feasibility of the loan plan, regularly closely monitor the customer's receipts and expenditures after lending to ensure the ability to repay on time, avoid the arising of bad debts affecting the loan performance.

Banks need to promote the application of digital technology in customer appraisal to ensure the science, and speed and improve the quality and efficiency of credit appraisal activities, contributing to limiting bad debts and affecting the quality of customer lending activities.

This study has some limitations. Lack of generalization due to small sample size of 198 respondents. The sample will also not be fully representative of the banker, which weakens the generalizability from the sample. Future research may include more respondents. It will be beneficial for future researchers to consider some variables such as conditions, contribution, geographic location, inflation and government policies.

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TÓM TẮT

ẢNH HƯỞNG CỦA THẨM ĐỊNH TÍN DỤNG ĐỐI VỚI HIỆU QUẢ CHO VAY CỦA CÁC NGÂN HÀNG THƯƠNG MẠI VIỆT NAM

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Thẩm định tín dụng có vai trò rất quan trọng trong việc giảm thiểu nợ xấu và nâng cao hiệu quả hoạt động cho vay của ngân hàng, tuy nhiên ở Việt Nam còn rất ít nghiên cứu về nội dung này. Nghiên cứu này nhằm đánh giá sự ảnh hưởng của thẩm định tín dụng đối với hiệu quả cho vay của ngân hàng thương mại Việt Nam, cụ thể nhóm tác giả thẩm định ảnh hưởng của tính cách người vay, khả năng thanh toán, việc sử dụng vốn vay và tài sản bảo đảm đối với hiệu quả cho vay. Dữ liệu được thực hiện bằng cách phỏng vấn nhân viên của 30 ngân hàng thương mại cổ phần trên địa bàn tỉnh An Giang, có 198 bảng câu hỏi đạt yêu cầu, mã hóa và xử lý bằng phần mềm SPSS 20.0. Kết quả nghiên cứu cho thấy có mối quan hệ đồng biến đáng kể giữa các yếu tố thẩm định tín dụng và hiệu quả cho vay ở mức độ tin cậy 95% và kết luận là yếu tố khả năng hoàn trả nợ của khách hàng có ảnh hưởng đối với hiệu quả cho vay. Nghiên cứu khuyến nghị rằng trước khi các phê duyệt các khoản vay, cần xem xét thật kỹ các yếu tố liên quan đến khả năng hoàn trả nợ vay nhằm nâng cao hiệu quả cho vay khách hàng.

Từ khóa: Thẩm định tín dụng, hiệu quả cho vay, ngân hàng thương mại.