

## **MACRO – MICRO FACTORS AFFECTING THE BAD DEBT OF COMMERCIAL BANKS IN HO CHI MINH CITY**

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**ABSTRACT:** *Lending activities of commercial banks always contain risks and the possibility of arising bad debt is a clear manifestation of credit risk. Bad debt will have consequences not only to banking but also to the economic development in Vietnam. Therefore, taking the risk to take measures to prevent risks and to deal with losses is a necessary and effective way of banking credit in general and lending activities in particular. The study results showed that there were 250 credit managers who interviewed and answered about 12 questions. Data collected from July 2016 to April 2017. This study had been analyzed Cronbach's Alpha, KMO testing and the result of KMO testing used for the next research of the regression. Managers' responses measured through an adapted questionnaire on a 5-point Likert scale (Conventions: 1: Completely disagree, 2: Disagree, 3: Normal; 4: Agree; 5: completely agree). Hard copy and online questionnaire distributed among 5.000 credit managers of commercial banks in Ho Chi Minh City. In addition, two components affecting the bad debt of commercial banks in Ho Chi Minh City with significance level 5 percent and then the researcher has policies improving the business success of the commercial banks in Ho Chi Minh City in the future.*

**KEYWORDS:** Commercial Banks, Ho Chi Minh City, Bad Debt And Hutech

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### **INTRODUCTION**

Over the past time, bad debt of commercial banks has been a serious problem for the economy in general and commercial banks in particular. Besides, high bad debt ratio does not allow banks to grow outstanding loans. This affects the implementation of the macroeconomic targets set by the government. The task of dealing with bad debt is an important requirement in the restructuring of the banking sector, creating a prerequisite for the growth of commercial banks in Vietnam, from which new economies are deeply integrated. Moreover, this problem is that bad debts of commercial banks have been bought by Vietnam Asset Management Company (VAMC), but this is not the final step of the bad debt process. So how will VAMC deal with bad debts bought back?

Dealing bad debt is considered by the leadership of the State Bank of Vietnam as an important task of the banking industry in 2017. Although the bad debt of the entire banking system has fallen to less than 3% credit for VAMC processing is still slow due to mechanism problems. Bad Debt of the commercial banks has a major impact on the functioning of the banking system, affecting economic growth and state budget revenues. The above mentioned things, the researcher had chosen topic “**MACRO – MICRO FACTORS AFFECTING THE BAD DEBT OF COMMERCIAL BANKS IN HO CHI MINH CITY**” as a paper. This paper helps managers

of commercial banks who apply the research results for improving policy on the quality of bad debt in the future.

## LITERATURE REVIEW

Amiri A (2003). A bad debt is an amount owed to a creditor that is unlikely to be paid and, or which the creditor is not willing to take action to collect because of various reasons, for example due to a company going into liquidation or insolvency. There are various technical definitions of what constitutes a bad debt, depending on accounting conventions, regulatory treatment and the institution provisioning. In the USA, bank loans with more than ninety days' arrears become "problem loans". Accounting sources advise that the full amount of a bad debt be written off to the profit and loss account or a provision for bad debts as soon as it is foreseen.

Bakhtiari P and Pasban F (2004). Doubtful debts are those debts which a business or individual is unlikely to be able to collect. The reasons for potential non-payment can include disputes over supply, delivery, the condition of item or the appearance of financial stress within a customer's operations. When such a dispute occurs it is prudent to add this debt or portion thereof to the doubtful debt reserve. This is done to avoid over-stating the assets of the business as trade debtors are reported net of Doubtful debt. When there is no longer any doubt that a debt is uncollectible, the debt becomes bad. An example of a debt becoming uncollectible would be:- once final payments have been made from the liquidation of a customer's limited liability company, no further action can be taken.

Allowance for bad debts are amounts expected to be uncollected, but still with possibilities of being collected (when there is no other possibility for collection, they are considered uncollectible accounts). For example, if gross receivables are US\$100,000 and the amount that is expected to remain uncollected is \$5,000, net current asset section of balance sheet will be:

Gross accounts receivable: \$100,000

Less: Allowance for bad debts: \$5,000

Net receivables: \$95,000

In financial accounting and finance, bad debt is the portion of receivables that can no longer be collected, typically from accounts receivable or loans. Bad debt in accounting is considered an expense.

There are two methods to account for bad debt:

Direct write off method (Non-GAAP) - a receivable which is not considered collectible is charged directly to the income statement.

Allowance method (GAAP) - an estimate is made at the end of each fiscal year of the amount of bad debt. This is then accumulated in a provision which is then used to reduce specific receivable accounts as and when necessary.

Central Bank of the Islamic Republic of Iran (2013). The matching principle of accounting, revenues and expenses should be recorded in the period in which they are incurred. When a sale is made on account, revenue is recorded along with account receivable. Because there is an inherent risk that clients might default on payment, accounts receivable have to be recorded at net realizable value. The portion of the account receivable that is estimated to be not collectible is set aside in a contra-asset account called Allowance for doubtful accounts. At the end of each accounting cycle, adjusting entries are made to charge uncollectible receivable as expense. The actual amount of uncollectible receivable is written off as an expense from Allowance for doubtful accounts.

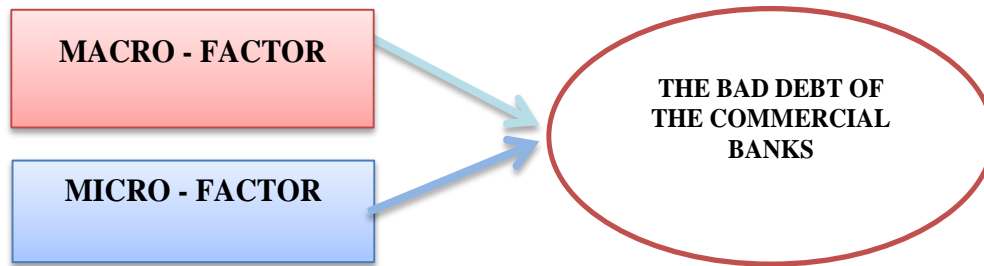
A debt is defined as a debt which arises from a debtor-creditor relationship based upon a valid and enforceable obligation to pay a determinable sum of money. The debt in question must also be considered worthless. This distinction is further broken down into the level of collectibles. One must determine whether the qualifying debt is completely or partially worthless. A partially worthless status means a portion of the debt may be recovered in future periods. Numerous factors are taken into consideration including the debtor's insolvency status, health conditions, credit standing, etc.

## **METHODS OF RESEARCH**

In this study, the bad Debt of the commercial banks is the dependent variable but Macro – Micro factors are independent variables. Methods and techniques of the study satisfy the need for methodological consideration and tools for data collection, analysis and presentation in virtual communities. This paper covers studies on various types of virtual communities, making this reference a comprehensive source of research for those in the social sciences and humanities.

After preliminary investigations, formal research is done by using quantitative methods questionnaire survey of 250 credit managers who related and answered nearly 12 questions. The reason tested measurement models, model and test research hypotheses. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower  $< 0.30$  and variable coefficient Cronbach's alpha  $< 0.60$ ), factor analysis explored (remove the variable low load factor  $< 0.50$ ). The hypothesis was tested through multiple regression analysis with linear Enter method. Conventions: 1: Completely disagree, 2: Disagree, 3: Normal; 4: Agree; 5: completely agree. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower  $< 0.30$  and variable coefficient Cronbach's alpha  $< 0.60$ ), factor analysis explored (remove the variable low load factor  $< 0.50$ ). The data collected by the researcher and be analyzed by SPSS 20.0.

This study is applied based on the classification of purpose of research. The results can be used to improve management performance and change management methods and motivational management practices. This study is descriptive based on classification of data collection and research.

**Research model for the Bad Debt of the commercial banks**

**Figure 1: Proposed research model for the factors affecting the Bad Debt of the commercial banks in Ho Chi Minh city**

Figure 1 showed that the bad Debt of the commercial banks is the dependent variable but Macro - Micro factors are independent variables. Based on the above research questions the following hypotheses used to investigate each question: There are all of two factors that have positive with the bad Debt of the commercial banks. According to the SPSS output of this hypothesis in tables following, the significance level for the test result is less than or equal to 0.05, so null hypothesis is rejected and there is a significant relationship between Macro – Micro factors and the bad Debt of the commercial banks.

**RESEARCH RESULTS**

**Table 1: Descriptive Statistics and Cronbach's Alpha for the Macro – Micro factors affecting the bad Debt of the commercial banks**

No	Macro factor (AF)	Mean	S.D
1	AF1: Inadequate financial required resources of facilities receiver	3.1319	1.00194
2	AF2: Lack of access of facility receiver to other sources of credit	3.1404	1.04261
3	AF3: Duration of the repayment period	3.2596	.98962
4	AF4: Lack of side revenue and outside the projects	3.0809	.95958
5	AF5: GDP, CPI and Economic activity of facility receiver	3.1872	.99090
6	AF6: Government finance policies about bad Debt	3.4851	1.08348
	<b>Cronbach's Alpha is 0.897</b>		
	<b>Micro factor (IF)</b>	<b>Mean</b>	<b>S.D</b>
7	IF1: Payment to those with outstanding debts to the banking system	2.7106	1.41772
8	IF2: Disproportion between the income of the recipient with the amount of the installment facility	2.9277	1.32008

9	IF3: Short-Term bank account of loan	2.6723	1.29722
10	IF4: Income per person	2.8340	1.22741
	<b>Cronbach's Alpha is 0.921</b>		
	<b>The bad Debt of the commercial banks (BD)</b>	<b>Mean</b>	<b>S.D</b>
11	BD1: Macro factor affecting the bad Debt of the commercial banks	3.2681	.60663
12	BD2: Micro factor affecting the bad Debt of the commercial banks	3.2723	.74699
	<b>Cronbach's Alpha is 0.538</b>		

(Source: The researcher's collecting data and SPSS 20.0)

Table 1 showed that there were 250 credit managers who interviewed and answered about 12 questions but 235 samples processed and 15 samples lack of information. Data collected from July 2016 to April 2017. Std. Deviation (S.D) is around 1.00. Table 01 showed that all of Cronbach's Alpha is high  $> 0.5$ ; this is very high reliability statistics. All of variables surveyed Corrected Item-Total Correlation greater than 0.3 and Cronbach's Alpha if Item deleted greater than 0.5 and Cronbach's Alpha is very reliability. Such observations make it eligible for the survey variables after testing scale. This showed that data was suitable and reliability for researching. Table 1 showed that reliability refers to the extent to which a scale produces consistent results, if the measurements are repeated a number of times. The analysis on reliability is called reliability analysis. Reliability analysis is determined by obtaining the proportion of systematic variation in a scale, which can be done by determining the association between the scores obtained from different administrations of the scale. Thus, if the association in reliability analysis is high, the scale yields consistent results and is therefore reliable. The researcher has KMO test of table 2 following:

**Table 2: KMO and Bartlett's Test for the Macro – Micro factors affecting the bad Debt of the commercial banks**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.804
Bartlett's Test of Sphericity	Approx. Chi-Square	1875.795
	df	45
	Sig.	.000

**Total Variance Explained**

Com.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.315	43.152	43.152	4.315	43.152	43.152	4.126
2	3.037	30.371	73.523	3.037	30.371	73.523	3.358
3	.784	7.842	81.365				
4	.540	5.405	86.770				
5	.354	3.542	90.312				
6	.320	3.202	93.514				
7	.239	2.389	95.903				
8	.207	2.074	97.977				
9	.134	1.342	99.319				
10	.068	.681	100.000				

(Source: The researcher's collecting data and SPSS 20.0)

Table 2 showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.804 > 0.6). This result was very good for data analysis. Table 2 showed that Cumulative percent was statistically significant and high data reliability was 73.523 % (> 60 %). There are 10 items for the Macro – Micro factors affecting the bad Debt of the commercial banks.

**Table 3: Structure Matrix for the Macro – Micro factors affecting the bad Debt of the commercial banks**

Code	Component	
	1	2
AF3	.901	
AF4	.892	
AF2	.882	
AF5	.846	
AF1	.816	
AF6	.535	
IF3		.941
IF1		.930
IF4		.903
IF2		.813

(Source: The researcher’s collecting data and SPSS 20.0)

Table 3 showed that Structure Matrix had two Components. Component 1 was Macro factor (X1) include: AF1, AF2, AF3, AF4, AF5 and AF6. Component 2 was Micro factor (X2) include: IF1, IF2, IF3 and IF4. Table 3 showed that there are 10 items and they divided into two components.

**Table 4: KMO and Bartlett's Test for the bad Debt of the commercial banks**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	35.387
	df	1
	Sig.	.000

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.376	68.787	68.787	1.376	68.787	68.787
2	.624	31.213	100.000			

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

Code	Component
	1
BD2	.829
BD1	.829

(Source: The researcher’s collecting data and SPSS 20.0)



Table 4 showed that the result was very good for data analysis. The bad Debt of the commercial banks showed that Cumulative percent was statistically significant and high data reliability was 68.787 % (> 60 %). Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization. KMO and Bartlett's Test for the sustainability showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.500). Y: the bad Debt of the commercial banks.

**Table 5: Macro – Micro factors affecting the bad Debt of the commercial banks**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.616 <sup>a</sup>	.380	.374	.44503	1.717

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.143	2	14.071	71.048	.000 <sup>b</sup>
	Residual	45.949	232	.198		
	Total	74.091	234			

**Bootstrap for Coefficients**

Model	B	Bootstrap <sup>a</sup>					
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval		
					Lower	Upper	
1	(Constant)	1.565	.009	.138	.000	1.304	1.850
	X1	.364	-.003	.033	.000	.295	.426
	X2	.192	.000	.023	.000	.146	.237

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

(Source: The researcher's collecting data and SPSS 20.0)

Table 5 showed that Adjusted R Square (= 0.374) was statistically significant and high data reliability. In addition, Adjusted R Square reached 37.4 %. The results showed that all Sig value < 0.00 was statistically significant and high data reliability. Besides, the regression coefficients were positive. Variance Inflation Factor (VIF) and Tolerance are two measures that can guide a researcher in identifying MC.  $VIF < 10$  ( $1 < VIF < 10$ ). This showed that there was not Multicollinearity. Macro – Micro factors affecting the bad Debt of the commercial banks with significance level of 5%. Besides,  $F = 71.048$ ,  $sig = 0.00$ . This model is very good for policies improving the bad Debt of the commercial banks.



## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Vietnam commercial banking system has faced many difficulties and challenges, which typically bad debt problems. Bad debt has become a permanent concern of many commercial banks not only in the world but also in the system of credit institutions, commercial banks in Vietnam. Bad debt will continue to impact negatively on the flow of capital into the economy. This is considered a major cause of inhibition, limiting the circulation of the flow of credit in the economy. In addition, the disposal of bad debts is not good or the occurrence of bad debts complicated movements will affect the safety and efficiency of business operations of credit of commercial banks in Vietnam. Besides, the handling of bad debts with the system of commercial banks has achieved satisfactory results, but the law on dealing with bad debts and security assets is still inadequate; lack of resources and specific mechanism for VAMC to operate. As a result, commercial banks need to continue and soon have strong solutions in the coming time so as not to adversely affect the system safety and ensure the performance of the bank's business targets. Besides, the study results showed that there were 250 credit managers who interviewed and answered about 12 questions. Data collected from July 2016 to April 2017. This study had been analyzed Cronbach's Alpha, KMO testing and the result of KMO testing used for the next research of the regression. Managers' responses measured through an adapted questionnaire on a 5-point Likert scale (Conventions: 1: Completely disagree, 2: Disagree, 3: Normal; 4: Agree; 5: completely agree). Hard copy and online questionnaire distributed among 5.000 credit managers of commercial banks in Ho Chi Minh City. In addition, two components affecting the bad debt of commercial banks in Ho Chi Minh City with significance level 5 percent and then the researcher has policies improving the business success of the commercial banks in Ho Chi Minh City following.

### Recommendations

There are 3 major recommendations that commercial banks need to continue to implement in the coming time to help actively address the number of bad debts following:

**Commercial Banks strengthen self-dealing bad debt:** Up to this point, Commercial banks have bought bad debt from Vietnam Asset Management Company (VAMC) and some commercial banks are also planning to buy back bad loans sold. This year is to clean up the bad debt portfolio at VAMC. In addition to the above commercial banks, many other commercial banks also determine the task itself to promote the handling of bad debt. Specifically, commercial banks in Ho Chi Minh City have processed and recovered more than 3 trillion dong of bad debt, significantly reducing the total debt it sold to VAMC from 17 trillion dong to 14 trillion dong at the end of 2017.

There are many reasons for commercial banks to take aggressive ways to handle bad debt aggressively this year. In particular, the main reason is that some commercial banks have reduced the bad debt ratio on the board, business activities recorded better profits in 2017 and higher profit plan in 2017 and 2018, set aside a full risk reserve fund for bad loans. The real estate market is warming up in many segments from 2016 to the present also is a cause, especially ground segment not only in the inner city but also in the surrounding provinces of Ho Chi Minh City, Hanoi...

offers a good opportunity to handle real estate collateral - this is the collateral for most bad debts at commercial banks. Commercial banks should continue to set up units in charge of the project implementation (Steering Committee, Project Implementation Unit and a dedicated Basel II Unit in Risk Management Unit which is in charge of the project. Coordination of sub-projects related to Basel II). It can be seen, the system of commercial banks in Vietnam has identified risk management in accordance with international standards are indispensable trend.

**Commercial Banks continue selling bad debt at market price:** VAMC is piloting the purchase of non-performing loan (NPL) at market value and is progressively carrying out specific tasks such as assessing the current status of debt to look at the effectiveness of debt purchase at market prices, looking for partners buy debt, negotiate with banks to agree on the implementation plan.

After that, VAMC will sell the debt together with collateral at market price. The basic selling method is public auction on the principle that the selling price is higher than the purchase price. Buyers of mortgages and mortgages from VAMC have the right to claim a debt from the debtor. VAMC, the debt collector and the debt consolidation bank, are responsible for monitoring the debt and requesting the debtor to continue repaying the debt. Thus, the organization or individual debt repurchase from VAMC stood before two possibilities: either sold the debt to the new buyer at a higher price (profit), lower (loss); or claim all or part of principal and interest depending on the debtor's ability to repay.

In addition, for each commercial bank, it is necessary to improve financial capacity such as ownership, asset quality. Commercial banks especially small banks now need to urgently implement the roadmap to increase equity. In addition to finalizing bad debt with a risk reserve fund, asset trading, banks can transfer their debt to specialized bad debt companies. In order to improve the quality of the loan, the bank needs to strictly follow the lending process and perform the proper supervision and supervision of the loan.

**Commercial Banks continue to cooperate with VAMC to continue dealing with sold debts:** many commercial banks will still maintain bad debts sold at VAMC this year and continue to work together to solve them effectively. The handling of bad debts at VAMC is also facing many difficulties and has made the processing speed of debt here is very slow in the past. The commercial banks has brought together a number of legal difficulties and problems in dealing with collateral assets, dealing with NPLs of VAMC, and has included in the draft Law on Assistance to Restructure Nongovernmental Organizations Credit and bad debt management.

This bill will be submitted to the National Assembly, which includes provisions on the disposal of security assets to recover debts when the old regulations are still inadequate to limit progress and efficiency. The handling of debts, such as entanglement of property seizure, the right to receive security assets being land use rights and assets attached to land; the fee for enforcement of the judgment, the distraction of security assets...

Therefore, the openings in dealing with bad debt by the change and improvement of the legal system coming, the commercial banks should closely cooperate with VAMC and its customers to continue to actively and efficiently handle the bad debts. More quickly, the outstanding debt is not only at VAMC but also on the balance sheet of the bank. Commercial Banks should improve the internal credit rating system. Currently, most banks have applied the internal credit rating

system, but over time, the assessment between banks is not uniform. The same customer but through the system of different banks will give different "points". Therefore, it is necessary to set up a system of financially and non-financially unifying the standards, applying the internal credit rating model for the whole system.

The bad debts are in the system of commercial banks that is a big problem. There are solutions are to resolve this situation, the need for the participation of the parties to share the situation, thereby finding the appropriate solutions. Actively participate in settlement of government, commercial banks, and individuals and organizations critical of bad debt. Government facilitates financial markets develop properly and timely; building economic environment, political stability with attractive investment opportunities. Meanwhile, enterprises and banks are the subjects directly involved and have a large impact on the valuation of bad debt, the deal debt, and especially the recovery period/recovery the value of the toxic assets acquired. If the only source of risk reserves of banks, e that block other bad debt can not be resolved soon fundamental and radical. Therefore, socialization is a solution resources should be considered in the context of the economy of our country is. The contributing of components, social class in handling bad debts in the banking system of trade will help curb this activity and limit increase, developed in the future.

The above-mentioned things, the next research should survey more than 250 credit managers. This helps the data that is more significant. The study topic is very big area. The next research should survey more than 12 the questions (items) of other commercial banks in other provinces of Vietnam.

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