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# Factors affecting Non-Performing Loans (NPLs) of banks: The case of Vietnam

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ARTICLE INFO	ABSTRACT

<b>DOI:</b> 10.46223/HCMCOUJS. econ.en.10.2.967.2020	This study aims to identify factors affecting Non- Performing Loans (NPLs) of commercial banks in Vietnam. To address the research problem, data of commercial banks in							
Received: May 30th, 2020	Vietnam from 2008 to 2017 were collected. This study applied a							
Revised: July 31 <sup>st</sup> , 2020	fixed-effects model in comparison with a random-effects model on a panel data of 200 observations. Results from the firmly							
Accepted: August 15 <sup>th</sup> , 2020	fixed-effects model indicated that NPLs were positively affected							
	by its lag of the previous year, capital structure, and interest rate. Additionally, returns on asset, inflation rate, and credit growth							
Keywords:	were found to have negative impacts on NPLs. However, impacts							
Non-Performing Loans, longitudinal data, commercial banks, firmly fix-effects model	of firm size and gross domestic product were not found across the models. Based on the results, this research suggested several policy recommendations for the management of NPLs in the commercial banks.							

# 1. Introduction

Badar and Javid (2013) assumed that it is difficult for a country's economy to develop sustainably if its financial system is inefficient and unstable and it is expressed largely through the operation of the state budget. To limit this weakness, the Government and the State Bank of Vietnam (SBV) are very concerned with the bad debts of banks, especially joint-stock commercial banks. Therefore, the SBV has issued the legal and policy framework which is proposed to be implemented by commercial banks; at the same time, banks also introduced many procedures to control internal procedures in the process of credit extension to limit bad debts.

For commercial banks, bad debts can affect liquidity risks, reduce operating profits, and the bank's reputation with customers. Non-Performing Loans (NPLs) are referred to as the "blood clot" of the economy, when rising bad debts put banks in danger of bankruptcy, which has been done in research by some typical authors, such as Demirgüč-Kunt (1989), Barr and Siems (1994) on the cause of bankruptcy of a bank.

Currently, research on NPLs is still being carried out by scientists and researchers due to its enormous impact on the economy in general and the banking system in particular, such as crisis, GDP growth, inflation, exchange rate, interest rate, unemployment, capital adequacy, return on assets, credit growth, bank size, loan loss reserves. Therefore, it is essential to understand the factors that influence the bad debts in the banking system.

For those mentioned reasons, there is an emerging need for the research topic that what

factors determine non-Performing Loans (NPLs) of commercial banks. Addressing this research question might help policymakers and bank administrators to devise policies and solutions to minimize risks, limit non-performing debts, and improve the efficiency of banking operations.

#### 2. Literature review

According to Bank for International Settlements (2004), Non-Performing Loans are loans that customers that not meet the bank's ability to repay debts for more than 90 days. Also, the International Monetary Fund - IMF (2009), referred bad debts as any loan with interest and principal payments overdue for more than 90 days; or more than 90 days with the interest rate being refinanced, restructured or delayed as agreed. However, Agíc and Jeremić (2018) emphasized that there does not exist a general definition of bad debts and it is considered that these loans can be considered in the broad and narrow sense. In a narrow sense, they are loans that are overdue and not repaid for more than 90 days. In a broad sense, they are low-value loans (Bexley & Nenninger, 2012). According to Circular No. 02/2013/TT-NHNN dated January 21, 2013, bad debts are debts of group 3, group 4 and group 5. Therefore, the bank bad debt data with groups 3, 4, and 5 were used in this research.

There are several causes of bank bad debts. This was evidenced from empirical studies conducted by Messai and Jouini (2013), in the research of micro and macro determinants of non-performing loans with a sample of 85 banks in three countries, Italy; Greece; and Spain, from 2004 through 2008. Using FEM estimates, the research results indicated that the macroeconomic variables represented by GDP growth harm on non-performing loans, whereas the unemployment rate and the real interest rate have opposite results and all variables are statistically significant. Besides, bank-specific variables measured by return on assets have a negative impact on non-performing loans, but loan loss reserves have a positive impact on non-performing loans. In addition, there is no statistical evidence of the relationship between changes in loans and non-performing loans.

In the research on determinants of non-performing loans, the case of Eurozone, Makri, Tsagkanos, and Bellas (2014) used the final sample consisted of an unbalanced panel of 14 countries with 120 observations for the period 2000-2008 and the generalized method of the moments (GMM) estimation. The study had proved that with the literature as, in terms of bank-specific variables, the rate of non-performing loans of the previous year (NPL<sub>it-1</sub>), the capital ratio (CAP) and return on equity (ROE) appear to exert a powerful influence on the non-performing loans rate. At the same time, from a macroeconomic perspective, variables such as public debt (DEBT), GDP, unemployment (UNEMP) rate, inflation rate (INF), and government budget deficit or surplus as % of GDP (FISCAL) affected on the NPL. Particularly, GDP has a negative correlation with NPL, whereas public debt and unemployment rate have a positive relation with NPL. In addition, variables such as the loans to deposit ratio (LTD), return on assets (ROA), FISCAL, and INFL is not statistically significant in all research models.

In Vietnam, Doan and Hoang (2016) used panel data analysis estimation for 29 Vietnamese commercial banks for the period from 2005 to 2014 with Pooled OLS, FEM and REM models found out that last year NPL (NPL<sub>t-1</sub>), inflation rate (INF), and last year short-term loan (STL<sub>-1</sub>) have a positive effect on NPLs. In contrast, growth rate (GDP), ROE, loan-to-deposit ratio (LTD), credit growth (CREDIT), and short-term loans (STL) are statistically significant and negatively related to NPLs. Size and Equity have no significant correlation with NPLs.

This is an important basis for the authors to devise a research model to analyze the factors affecting Non-Performing Loans (NPLs) of the commercial banks in Vietnam.

### 3. Research method

### 3.1. Research model

Based on the theory of non-performing loans and the empirical research model of Messai and Jouini (2013), Makri et al. (2014), the authors have adjusted several independent variables to suit the reality of the situation of the commercial banks in Vietnam and proposed two general research models to test the impact of factors on NPLs of 20 the commercial banks of Vietnam in the 2008-2017 periods.

**Model 1:** General model affecting NPLs dependent variables and independent variables: P\_NPL, SIZE, ROA, CAP, INF, GDP, IR

 $NPL_{i,t} = \beta_0 + \beta_1 * P_NPL_{i,(t-1)} + \beta_2 * SIZE_{i,t} + \beta_3 * ROA_{i,t} + \beta_4 * CAP_{i,t} + \beta_5 * INF_t + \beta_6 * GDP_t + \beta_7 * IR_t + u_{it}$ (1)

In addition, to consider whether the impact of the credit growth variable (CGR) has affected the NPLs or not, the article takes the addition of the NPLs variable and removes the economic growth (GDP) variable from the model 1. According to the authors, as economic growth, banks will increase loans to enterprises. These two variables often have very high correlations, so these two variables will be included in two different models with other independent variables unchanged.

**Model 2:** General model affecting NPL dependent variables and independent variables: P\_NPL, SIZE, ROA, CAP, INF, CGR, IR

 $NPL_{i,t} = \beta_0 + \beta_1 * P_NPL_{i,(t-1)} + \beta_2 * SIZE_{i,t} + \beta_3 * ROA_{i,t} + \beta_4 * CAP_{i,t} + \beta_5 * INF_t + \beta_6 * CGR_t + \beta_7 * IR_t + u_i$ (2)

The dependent and independent variables are measured and summarized in Table 1.

### Table 1

Variable name	Formula	Variable	Authors
NPLs	(loan balance group 3 + loan balance group 4 + loan balance group 5)/Total loan balance	NPL	Fofack (2005); V. T. T. Dinh (2012); The bank of Viet Nam (2013); Doan and Hoang (2016)
Previous year's NPLs	A lagged variable of NPL	P_NPL	Salas and Saurina (2002); Makri et al. (2014); V. T. H. (2015); Doan and Hoang (2016); Raiha (2016)
Bank size	Ln(Total Asset)	SIZE	Tarron and Sukrishnalall (2009); V. T. H. Nguyen (2015); Rifat (2016); Gabeshi (2017)
Return on assets	Profits /total asset	ROA	Al-Smadi and Ahmad (2009); Messai and Jouini (2013); Agíc and Jeremić (2018)
Capital structure	Equity capital /total asset	CAP	Salas and Saurina (2002); Makri et al. (2014); Bui and Dang (2015)
Inflation rate	(CPIt - CPIt-1)/CPIt-1	INF	Bui and Dang (2015); V. T. H. Nguyen (2015); Doan and Hoang (2016)
The growth rate of Gross domestic	$(GDP_t - GDP_{t-1})/GDP_{t-1}$	GDP	Salas and Saurina (2002); Saba Kouser, R., and Azeem (2012); Messai and Jouini (2013); Makri et al. (2014); Baholli, Dika,

Measurement of variables

Variable name	Formula	Variable	Authors
product			and Xhabija (2015); Doan and Hoang (2016); K. T. Nguyen and P. H. Dinh (2016)
Credit growth	$\begin{array}{llllllllllllllllllllllllllllllllllll$		Salas and Saurina (2002); V. T. H. Nguyen (2015); Agíc and Jeremić (2018)
Interest rate	The real interest rate at year t	IR	Tarron and Sukrishnalall (2009); Dash and Kabra (2010); Messai and Jouini (2013); Bui and Dang (2015)

Source: The researcher's data analysis

### 3.2. Data collection

The study used balance panel data (collected by subjects and time) with secondary data and collected from annual financial statements (audited) of 20 listed and unlisted the commercial banks on Vietnam's stock market are in operation by the end of the accounting year 2017 on reputable websites: www.hsx.vn, www.hns.vn. Thus, the article has 200 observed variables (20 banks \* 10 years = 200), which have been synthesized, processed, and designed using Excel software for estimation by Stata 14.0 software by the following methods REM, FEM tests and eventually use FEM with robust estimates.

# 4. Data analysis and findings

# 4.1. Descriptive analysis

The results in Table 2 show that most of the variables have relatively low dispersion. However, the CGR variable produces the opposite result with dispersion in the range of -0.9554 to 1.2203 and the standard deviation is 0.2714 with an average value of 0.2481, which can be explained: As the economy grows, motivate borrowers to expand business activities or consumer loans, and this makes credit growth of banks more signals.

# Table 2

Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
NPL	200	0.0241	0.0183	0.0034	0.1622
P_NPL	200	0.0232	0.0185	0.0008	0.1622
BSIZE	200	13.9826	0.5046	12.4682	15.08
ROA	200	0.0087	0.0060	0.0002	0.0473
CAP	200	0.0985	0.0495	0.0346	0.3563
CGR	200	0.2481	0.2714	-0.9554	1.2203
INF	200	0.0851	0.0675	0.0088	0.2312
GDP	200	0.0601	0.0053	0.0525	0.0681
IR	200	0.1085	0.0355	0.0696	0.1695

Source: Data analysis result of the research

### 4.2. Correlation analysis

The results in Table 3 show that among the pairs of independent variables, the correlation is very low. This can be said that variables in the model have no collinear phenomena with each other.

# Table 3

	P_NPL	BSIZE	ROA	CAP	CGR	INF	GDP	IR
P_NPL	1.000							
BSIZE	0.0422	1.000						
ROA	-0.2293	-0.1932	1.000					
CAP	-0.0515	-0.7243	0.3538	1.000				
CGR	0.0148	-0.0708	0.1455	-0.0790	1.000			
INF	-0.1679	-0.3335	0.3105	0.2557	-0.0790	1.000		
GDP	-0.0838	0.2526	-0.1126	-0.1912	-0.0492	-0.3124	1.0000	
IR	-0.1271	-0.3018	0.3578	0.2241	-0.0340	0.4199	-0.3353	1.000

Correlation coefficients

Source: Data analysis result of the research

# 4.3. Regression analysis

After performing the tests, the results showed that all data series of each variable stopped and were statistically significant. However, it also reveals that there is a phenomenon of variance change and autocorrelation so the article using Fixed Effects Model estimation (FEM-firm estimates) is most suitable, therefore, analysis of results also follows this estimate.

# Table 4

Results of regression analysis

Non-performing	REM		F	FEM		FEM (Firm estimates)	
loans	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	
P_NPL	0.297***	0.303***	0.187**	0.199***	0.187*	0.199**	
	(-4.34)	(-4.51)	(-2.51)	(-2.74)	(-2.05)	(-2.21)	
SIZE	0.00136	-0.00045	0.00992	0.00533	0.00992***	0.00533	
	(-0.37)	(-0.12)	(-1.32)	(-0.75)	(-3.06)	(-1.27)	
ROA	-0.658***	-0.531**	-0.727**	-0.564*	-0.727***	-0.564***	
	(-2.70)	(-2.13)	(-2.58)	(-1.94)	(-10.43)	(-4.97)	
CAP	0.0409	0.019	0.0947*	0.0734	0.0947***	0.0734***	
	(-1.02)	(-0.46)	(-1.95)	(-1.49)	(-9.07)	(-3.84)	
INF	0.00017	-0.00184	-0.00087	-0.00301**	-0.000870**	-0.00301***	
	(-0.21)	(-1.46)	(-0.99)	(-2.16)	(-2.24)	(-4.20)	
GDP	0.00042		-0.00091		-0.000908		
	(-0.17)		(-0.33)		(-0.92)		

Non-performing	REM		FEM		FEM (Firm estimates)	
loans	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
CGR		-0.00968**		-0.0101*		-0.0101**
		(-2.06)		(-1.97)		(-2.45)
IR	0.00102**	0.000922**	0.00118**	0.00102**	0.00118***	0.00102***
	(-2.52)	(-2.39)	(-2.59)	(-2.22)	(-10.02)	(-6.33)
Cons	-0.0137	0.0186	-0.129	-0.0656	-0.129***	-0.0656
	(-0.24)	(-0.33)	(-1.24)	(-0.62)	(-3.09)	(-1.09)
$\mathbb{R}^2$	0.0966	0.1165	0.1120	0.1309	0.1120	0.1309

Note: \*, \*\* and \*\*\*denote the level of significance at 10%, 5% and 1%, respectively. Statistical value t in () Source: Data analysis result of the research

#### 5. Discussion

To clarify how the variables in the model affect NPLs, the independent variables are divided into three groups to discuss research results.

#### 5.1. The variable group has a positive effect on NPLs (Table 5)

*The previous year's NPLs (P\_NPLs):* The research results in models 1 and 2 both have the same results. Previous year's NPLs positively affect the current NPLs and significant level of 10% and 5%, respectively. This means as the previous year's NPLs (P\_NPL<sub>t-1</sub>) increased by 1 unit and the other variables in the model remained constant, NPLs increased by 0.187 units (model 1) and 0.199 units (model 2). This may explain that if bad debts of the previous periods are not handled well, they will affect bad debts of the next period. This implies that the credit process of some banks is incomplete, inconsistent, and the risk management capacity is limited, so bad debts arise in lending. In addition, during the research period, banking policies were not stable, interest rates and inflation changed rapidly, leading businesses to have difficulties in the process of production and business activities affect their ability to repay debts, so some customers evade debt repayment obligations. This is consistent with the studies of Salas and Saurina (2002), Makri et al. (2014), Bui and Dang (2015), V. T. H. Nguyen (2015), Doan and Hoang (2016) and Raiha (2016).

**The bank size (SIZE):** The research results in models 1 show bank size has a positive impact on NPLs and has a 99% confidence level. This means, the size of the bank (SIZE) increases by 1 unit and the other variables in the model remain constant, the bad debt increases by 0.00992 units. Usually larger banks, in terms of assets, tend to lend as much. So if the bank does not effectively control and manage loans effectively, NPLs will increase. However, the research results in model 2 show that there is not enough statistical evidence of the impact of the bank size (SIZE) on NPLs. This result is also consistent with the studies of Raiha (2016) and Kotiso (2018).

**The capital structure (CAP)**: The research results of the two models indicate that the capital structure has a positive impact on NPL with a 99% confidence level. This means that if the capital structure (CAP) increases by 1 unit and the other variables in the model remain constant, non-performing loans increase by 0.0947 units (model 1) and 0.0734 units (model 2). Banks with high equity, often have a "dependency" mentality so they can relax credit quality, lack of strict lending conditions for customers ... NPLs will be likely to arise. This result is in line with the expectations of the authors.

The interest rate (IR): The research results of the two models show that the interest rate has a positive impact on NPLs with a 99% high confidence level. This means when the Interest

rate (IR) increases by 1 unit and the other variables in the model remain constant, the NPLs increases by 0.00118 units (model 1) and 0.00102 units (model 2). When the NPLs have not been completely resolved, the liquidity of banks is reduced, especially small banks are required to mobilize high-interest rates. As a result, lending interest rates must also be higher, and it makes it impossible for borrowers who previously borrowed to repay debts, leading to a rise in NPLs. Moreover, in the periods of 2015 - 2017, the Federal Reserve System (FED) decided to raise interest rates, the global USD interest rate will increase, including the USD exchange rate in Vietnam. There have been significant impacts on importing enterprises, especially those whose loans are denominated in this currency, increasing the liabilities of enterprises, leading to reduce repaying debts to banks. This result is supported by several authors such as Messai and Jouini (2013), Bui and Dang (2015), and it is also consistent with the expectations of the authors.

### Table 5

Non-performing	REM		FEM		FEM (Firm estimates)	
loans	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
P_NPL	0.297***	0.303***	0.187**	0.199***	0.187*	0.199**
	(-4.34)	(-4.51)	(-2.51)	(-2.74)	(-2.05)	(-2.21)
SIZE	0.00136	-0.00045	0.00992	0.00533	0.00992***	0.00533
	(-0.37)	(-0.12)	(-1.32)	(-0.75)	(-3.06)	(-1.27)
CAP	0.0409	0.019	0.0947*	0.0734	0.0947***	0.0734***
	(-1.02)	(-0.46)	(-1.95)	(-1.49)	(-9.07)	(-3.84)
IR	0.00102**	0.000922**	0.00118**	0.00102**	0.00118***	0.00102***
	(-2.52)	(-2.39)	(-2.59)	(-2.22)	(-10.02)	(-6.33)

The variable group has a positive effect on NPLs

Note: \*, \*\* and \*\*\*denote the level of significance at 10%, 5% and 1%, respectively Source: Data analysis result of the research

# 5.2. The variable group has a negative effect on NPLs (Table 6)

**The return on assets (ROA):** The research results in models 1 and 2 both reveal that return on assets hurts NPLs with a 99% reliability. It is understood that when the return on assets increases by 1 unit and the other variables in the model remain constant, the NPLs decreases by 0.727 units (model 1) and 0.564 units (model 2). This problem shows that ROA is considered as a "source of life" to enhance the prestige and bank value. Also, comprehensive restructuring of the banking system is an important foundation for reforming banks, diversifying products, ensuring liquidity, improving quality of control, managing credit operations, and actively handling bad debts. In addition, when the bank has a high ROA, the employees' income including salary and additional income will be improved and the credit experts will examine the application more carefully, as well as actively remind and collect loans. These contribute to reduce the NPL. This finding is in line with the expectation of the authors and is supported by other researchers such as Messai and Jouini (2013) and Agíc and Jeremić (2018).

*The inflation rate (INF):* The research results of the two models show that the inflation rate harms NPLs. It means when the inflation rate goes up by 1 unit and the other variables in the model remain constant, the NPLs decreases by 0.000870 units (model 1) and 0.00301 units (model 2). This can be explained that the global economic recession has a strong influence on Vietnam.

To stabilize the macroeconomy, the State Bank of Vietnam has implemented tight monetary policy and reduced interest rates. Besides, the government stimulated consumption, expanded investment, and the State Bank of Vietnam proposed measures and tools to handle NPLs such as the establishment of Vietnam Asset Management Company (VAMC), requiring banks to sell bad debts to VAMC, and increase provisioning risks. As a result, bad debts are reduced. However, this finding does not match the expectations of the authors.

The credit growth (CGR): Research results in model 2 show that credit growth has a negative impact on NPLs at a level of 5%. It is understood that as credit growth increases by 1 unit and the other variables in the model remain constant, the NPLs decreases by 0.0101 units. Banks' credit largely depends on production, business, real estate, agriculture, and rural areas... to stabilize the market, stimulate economic growth. The State Bank of Vietnam has flexibly used monetary policy instruments as well as required joint-stock commercial banks in particular and the banking system in general to improve credit quality. Therefore, ineffective projects will not be allowed to lend but effective projects are encouraged to lend. Borrowers operate effectively and raise income, thereby, they will pay the principal and interest to the bank when it is due. This helps to reduce bad debts. This result is supported by authors such as Doan and Hoang (2016), K. T. Nguyen and P. H. Dinh (2016), and Gabeshi (2017).

### Table 6

Non-performing	REM		FEM		FEM (Firm estimates)	
loans	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
ROA	-0.658***	-0.531**	-0.727**	-0.564*	-0.727***	-0.564***
	(-2.70)	(-2.13)	(-2.58)	(-1.94)	(-10.43)	(-4.97)
INF	0.00017	-0.00184	-0.00087	-0.00301**	-0.000870**	-0.00301***
	(-0.21)	(-1.46)	(-0.99)	(-2.16)	(-2.24)	(-4.20)
CGR		-0.00968**		-0.0101*		-0.0101**
		(-2.06)		(-1.97)		(-2.45)

The variable group has a negative effect on NPLs

Note: \*, \*\* and \*\*\*denote the level of significance at 10%, 5% and 1%, respectively Source: Data analysis result of the research

# 5.3. The variable group has no significant correlation on NPLs (Table 7)

Research results show that there is not enough scientific evidence on the influence of the economic growth measure by the growth rate of gross domestic product (GDP) on NPLs. This result is also consistent with the research of Rifat (2016), Kotis (2018), and Agíc and Jeremić (2018).

# Table 7

The variable group has no significant correlation on NPLs

Non-performing	REM		FEM		FEM (Firm estimates)	
loans	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
GDP	0.00042		-0.00091		-0.000908	
	(-0.17)		(-0.33)		(-0.92)	

Note: \*, \*\* and \*\*\*denote the level of significance at 10%, 5% and 1%, respectively Source: Data analysis result of the research

### 6. Conclusions and policy implications

### 6.1. Conclusions

The paper highlighted theoretical bases as well as empirical studies on the factors affecting bank non-performing loans. The research results have provided important information on the effect of several factors such as bank-specific characteristics and macro-economic on NPLs. The study results showed that there are three bank-specific factors including the previous year's NPLs, bank size, and capital structure and only one macro variable (interest rates) has a positive effect on NPLs.

Also, the research results also show that there are two bank-specific factors including return on assets and credit growth along with a macro variable (inflation rate) has a negative effect on NPLs. Especially important macro factors such as the growth rate of GDP hurts NPLs but it is not statistically significant. Based on that, the article proposes several policy implications in selecting factors with the aim of both controlling loan risks and reducing bad debt, contributing to improving the efficiency of bank operations in particular and the banking system in general.

### 6.2. Policy implications

The study on determinants of NPLs has greatly affected not only the state policies in general but also the bank administrators in particular. If NPLs in Vietnam banks increase, businesses, borrowers will be hard to access bank loans to ensure production and business activities as well as family spending, this will make it difficult for the economy to develop stably. Based on the research results to reduce NPLs for banks, the authors mentioned some related policy implications for commercial banks and the State Bank of Vietnam.

#### The commercial banks in Vietnam

According to the research results, the NPLs of the previous year had a positive effect on the NPLs of the following year. So, to reduce the risk of non-collection of debts as well as an increase of NPLs, joint-stock commercial banks should manage credit risk in line with asset size which is constantly increasing over time. In addition, they also need to conduct in-depth analysis before granting credit and monitoring borrowers' ability to pay debts effectively. Vietnamese commercial banks need to set up a task force to collect debts methodically and scientifically, ensuring a balance between profit and risks which to reduce bad debts. In case, customers are late paying debts due to their insolvency or lack of cooperation, banks should coordinate with functional agencies to handle according to regulations.

#### The State Bank of Vietnam

From the findings of this research, several suggestions for the management of the State Bank of Vietnam are recommended. First, the SBV should have an appropriate monetary policy to control inflation at a reasonable level with the goal of both stimulating the economic development and reducing bad debts. Second, the SBV needs to require banks to implement a uniform interest rate policy as well as reduce costs to reduce lending rates and contribute to reducing bad debts. Third, restructuring the financial system is a particularly important task of the SBV in particular and the Government in general. Fourth, a very important issue is that the SBV needs to coordinate closely with joint-stock commercial banks to actively build institutions and strategies to deal with bad debts in the long term and transparency in public dealing with bad debts, being ready to eliminate/merge weak-performing banks from the industry to reduce bad debts and reduce instability to the national finance. Finally, the SBV proposed the Government to develop a legal framework for Asset-Backed Security (ABS), in this way, allowing banks to consolidate smaller bad debts and sell them to one unit, turning illiquid assets into high liquidity securities, contributing to reducing bad debts.

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