



## **THE VARIOUS FACTORS INFLUENCING THE BUSINESS RISK OF THE COMMERCIAL BANKS IN HO CHI MINH CITY**

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### **ABSTRACT**

*The main objectives of this paper were to identify the various factors influencing the business risk of the commercial banks in Ho Chi Minh City and to propose recommendations in order to decrease the business risk of the commercial banks in Ho Chi Minh City. The data analysis for this study is a quantitative type. This paper conducted during the period from November 2014 to July 2015, using qualitative methods to interview 500 individual customers of 5 commercial banks to examine the content and meaning of the words used in the scale. The results from data analysis revealed that respondents consider the following factors as the most influential factors: (1) The procedure (PR); (2) The technology (TE); and (3) The human resource (HR). All three most influential factors related to the business risk of the commercial banks with significance level of 5 %. In addition, the research results processed from SPSS 20.0 software. The parameters of the model estimated by Least - Squares Method tested for the model assumption with 5% significance level. At the same time, the results were also a scientific evidence and important information for researchers, and policy makers who apply them for the effectiveness management of the business risk of the commercial banks in the future.*

**Keywords:** Business risk, bank, commercial, Ho Chi Minh City and risk management.

### **Introduction**

Vietnam's GDP expanded by 6% in 2014 (on the year before), up from 5.4% growth in 2013 – beating market expectations and the government's 5.8% target. Manufacturing is the star-performing sector, with growth accelerating to 8.7% last year from 7.3% in 2013 and 5.8% in 2012. Construction, led by foreign investment, has also shown some signs of recovery. On the expenditure side, domestic private consumption continues to recover gradually, growing by 6.1% in 2014, up from 5.2% in the previous year. Besides, Vietnamese economy in the first decade of the 21st century has a significant

development in the banking sector. Commercial banks represent a big role in this development. The banks' capital rose rapidly and became an important factor in Vietnamese economic growth. However, a negative side always follows the result of any growth. Expanding operation leads to debt rate increase in most commercial banks. Especially bad debts rate rose rapidly. Bad debts became a serious problem for the Vietnamese economy.

The risks that are faced by businesses can be categorized into financial and non-financial risks. Both of these types of risks are very vital in order to safely run any business. This study will scrutinize business risk of commercial banks having its financial nature and operational risk with its non-financial nature in context to Vietnam, as financial market of Vietnam is among volatile markets of the world which is filled with anonymity and escapade performances. In addition, during two recent years, the Vietnamese Government has been taking many actions to reform the banking system. However, there is not any clear strategy to solve the bad debt problem and the credit risk management of commercial banks is still very weak. Combined with the practical requirements of the teaching job, the researcher had chosen the title: *the various factors influencing the business risk of the commercial banks in Ho Chi Minh City* as a paper for applying in risk management of the commercial banks.

## **literature review**

Over the last few decades, risk management has become an area of development in financial institutions. The area of financial services has been a business sector related to conditions of uncertainty. The financial sector is the most volatile in the current financial crisis. Activities within the financial sector are exposed to a large number of risks. For this reason, risk management is more important in the financial sector than in any other sectors (Carey, 2001). Carey regards financial institutions as the main point of risk-taking in an uncertain environment.

**What is risk:** Risk is a function of the likelihood of something happening and the degree of losing which arises from a situation or activity. Losses can be direct or indirect. For example, an earthquake can cause the direct loss of buildings. Indirect losses include lost reputation, lost customer confidence, and increased operational costs during recovery. The chance of something happening will impact the achievement of objectives (Partnerships BC, 2005 and NIST, 2004).

**Risks** are usually defined by the adverse impact on profitability of several distinct sources of uncertainty. While the types and degree of risks an organization may be exposed to

depend upon a number of factors such as its size, complexity business activities, volume etc” (SBP, 2003). **Risk** can be classified into systematic and unsystematic risk (Al-Tamimi and Al-Mazrooei, 2007). Systematic risk refers to a risk inherent to the entire system or entire market. It is sometimes called market risk, systemic risk or un-diversification risk that cannot be avoided through diversification. Whereas, unsystematic risk is risk associated with individual assets and hence can be avoided through diversification. It is also known as specific risk, residual risk or diversifiable risk.

**What is the risk management:** Risk management can be defined in many ways. For example, Anderson and Terp (2006) maintain that basically, risk management can be defined as a process that should seek to eliminate, reduce and control risks, enhance benefits, and avoid detriments from speculative exposures. The objective of risk management is to maximize the potential of success and minimize the probability of future losses. Risk that becomes problematic can negatively affect cost, time, and quality and system performance. The Committee of Sponsoring Organizations of the Treadway Commission (Committee of Sponsoring Organizations, 2004) defines risk management as follows:

Enterprise risk management is a process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

Risk management is the process to manage the potential risks by identifying, analyzing and addressing them. The process can help to reduce the negative impact and emerging opportunities. The outcome may help to mitigate the likelihood of risk occurring and the negative impact when it happens (Partnerships BC, 2005).

**Business risk of the commercial bank:** According to Sealey and Lindley, business risk can be defined as ". . . the uncertainty inherent in projections of future operating income, or earnings before interest and taxes (EBIT)." This uncertainty or variability arises in part from the variability of expected sales or operating revenue, and in part from the use of operating leverage. These concepts, especially operating leverage, are less clear in commercial banking than in other industries. In examining business risk in banking we utilize a view of the commercial banks as a depository financial institution as expressed by Sealey and Lindley, That is, the output of a bank is measured by its earning assets and its inputs consist of loanable funds that are acquired or produced by the operations of the firm (its deposit and borrowing activities). The earning assets of a bank represent contracts to "rent"

credit under specified conditions. These rentals produce a flow of revenues and a flow of costs due to the continuing activity of the bank to maintain the source (or inventory) of and the demand for loanable funds.

**The procedure (PR):** The procedures of risk management have recently been published in a few papers. According to SBP (2003), a risk management framework encompasses the scope, the process/system/procedures to manage risks and the roles and responsibilities of the individual related to risk management. The effective risk management framework includes the risk management policies and procedures that cover risk identification, acceptance, measurement, monitoring, reporting and control.

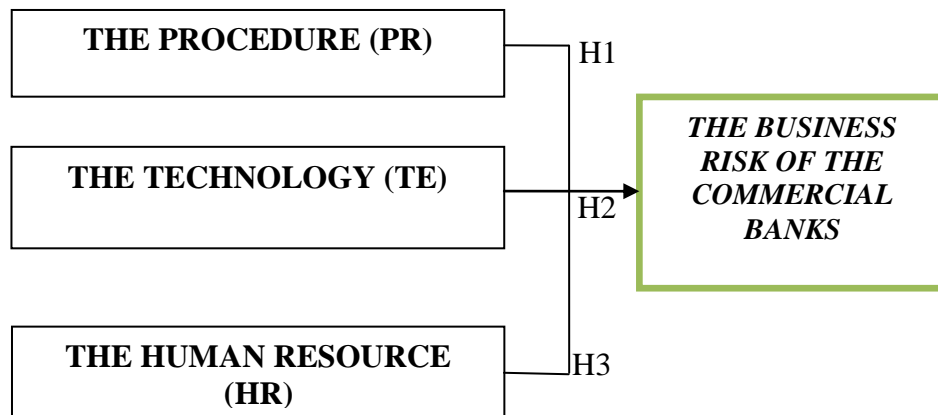
**The technology (TE):** an organization is on such a large scale that it would be difficult for members to communicate and share information without an information technology infrastructure (Hasanali, 2002). Information technology (IT) can enable prompt searches, the access of and retrieval of data, and support communication in an organization.

Rolland (2008) suggests using IT to drive effective risk management. IT can create an important link between risk management and corporate performance. IT provides data security by employee level, limiting a user's access by time, line of business, business activity and individual risk. IT tools collect data used in the past so companies can learn through experience and avoid repeating the same mistakes. The effective risk management information make more valuable for decision making. Therefore, Information Technology (IT) is another imperative factor for successful risk management.

**The Human Resource (HR):** Carey (2001) showed that the ability to respond to changing conditions in an organization's operations relates to a range of activities including the development of risk training courses and the involvement of staff in responding to early warning systems. Besides, NSW Department of State and Regional Development (2005) suggested that effective risk management become a part of good business practice and include training staff appropriately. The main reason for an education and training program is not only to ensure that members are comfortable with the system, but also to increase their expertise and knowledge. Training not only uses the new system, but also new processes and understands the integration within the system - how the work of one employee influences the work of others.

## Research model for the various factors influencing the business risk of the commercial banks in Ho Chi Minh City

Research model showed that the business risk of the commercial banks is the dependent variable but (1) The procedure (PR); (2) The technology (TE); and (3) the human resource (HR) that are independent variables following:



**Figure 1: Research model for the various factors influencing the business risk of the commercial banks in Ho Chi Minh City**

### Hypothesis of the Study

The hypothesis of this study based on the aforementioned research questions the following hypotheses used to investigate each question.

#### Hypothesis:

H1: There is a positive relationship between the procedure (PR) and the business risk of the commercial banks.

H2: There is a positive relationship between the technology (TE) and the business risk of the commercial banks.

H3: There is a positive relationship between the human resource (HR) and the business risk of the commercial banks.

### Research methods

The relationships identified through the literature review were synthesized and the resultant framework was used to generate a number of propositions for empirical testing. In this research, the methods also provide qualitative and quantitative researches are mainly used to study. This research consists of two phases:

First of all: It is a preliminary study and the second phase is a formal and more comprehensive study. This study is done by qualitative methods. The research is done by formal quantitative methods. Unit of analysis is an individual customer. Study subjects are individual customer of commercial banks in Ho Chi Minh City. The preliminary study for individual customer conducted in December 2014, using qualitative methods to interview 30 individual customers to examine the content and meaning of the words used in the scale.

Secondly, following this, the formal study conducted in April 2015, using qualitative methods to interview 500 individual customers of 5 commercial banks in Ho Chi Minh City to examine the content and meaning of the words used in the scale. The researcher should select one of these methods of collecting the data taking into consideration the nature of investigation, objective and scope of the inquiry, financial resources, available time and the desired degree of accuracy. However, the researcher should pay attention to all these factors but much depends upon the ability and experience of the researcher. The 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 was processed by SPSS 20.0 version. Multiple linear regressions were used in this research.

## Research results

### Descriptive Statistics for the various factors influencing the business risk of the commercial banks in Ho Chi Minh City

**Table 1: The various factors influencing the business risk of the commercial banks**

Items	N	Min	Max	Mean	Std. Deviation
PR1: The center bank encouraging the commercial banks self-assessment of business in risk management	465	1	5	3.13	1.012
PR2: The center bank encouraging the commercial banks strengthen the news report and the declaration by electronic means (IT) in risk management	465	1	5	3.07	.990
PR3: The center bank encouraging the commercial banks in complying internal risk management	465	1	5	3.10	.972
PR4: The center bank encouraging the commercial banks in complying new procedures for safety for customers	465	1	5	3.08	1.007
TE1: The banks increase the use of safety information systems and business records of the business for risk management	465	1	5	2.94	.879

TE2: The bank of information processing is to ensure accuracy and security for risk management	465	1	5	2.78	1.563
TE3: The bank of the system automatically updates the information of the enterprises and customers	465	1	5	2.72	1.425
TE4: The bank of technology system is friendly, modern, fast, accuracy and security and easy to use for enterprises and individual customers	465	1	5	2.72	1.410
HR1: The bank leaders create the best conditions for staff professional development and expertise in risk management	465	1	5	3.49	.881
HR2: The bank leaders from central to local processes uniform risk control and have a specialized department of risk management	465	1	5	3.58	.923
HR3: Audition staffs trained the specialized skills and meet job demand in risk management	465	1	5	3.49	.938
HR4: The bank leaders often update professional knowledge to the bank officials in risk management	465	1	5	3.45	.890
BR1: The customers completely satisfied with the credit service of the commercial banks in Ho Chi Minh City	465	2	5	3.36	.560
BR2: The customers completely satisfied with the risk management of the commercial banks in Ho Chi Minh City	465	1	5	2.37	.585
BR3: The customers will continue saving the money for the commercial banks in Ho Chi Minh City	465	2	5	4.30	.660

(Source: The researchers processed by SPSS 20.0)

The results of the table 1 revealed that there were 500 individual customers of 5 commercial banks interviewed but 465 individual customers processed because of 35 samples lacked the information and answered 15 items. There were minimum value was 1, maximum value was 5. Std. Deviation was from 0.560 to 1.563; mean is from 2.37 to 4.30. This data was very good for regression analysis.

**Table 2: Cronbach's Alpha for factors**

Variables	Code	Factors	Cronbach's Alpha
Independent variables	PR	The procedure	0.911
	TE	The technology	0.901
	HR	The Human Resources	0.895
Dependent variable	BR	The business risk of the commercial banks	0.938

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

Table 2 showed that the test results of scales are highly accuracy with Cronbach's alpha coefficient > 0.7 and the correlation coefficients of the total variables of measurement

variable factors are standardized allowed ( $> 0, 3$ ), the scale are accepted. The model with 15 observed variables is satisfactory to EFA in the next step for the 3 groups as initial factors.

### **Exploratory Factor Analysis (KMO) and Bartlett's Test for the business risk of the commercial banks in Ho Chi Minh City**

KMO & Bartlett's test play an important role for accepting the sample adequacy. While the KMO ranges from 0 to 1, the world-over accepted index is over 0.6. For factor analysis recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05.

**Table 3: KMO and Bartlett's Test for the business risk of the commercial banks**  
**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.713
Bartlett's Test of Sphericity	Approx. Chi-Square	5731.216
	df	66
	Sig.	.000

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

The results of the table 3 revealed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.713  $>$  0.6). This result was very good for data analysis.

The results showed that cumulative percent was statistically significant and high data reliability was 77.871 % ( $>$  60 %). As a result, the total variance explained by the solution is smaller; however, the addition of this structure to the factor model makes these methods ideal for examining relationships between the variables.

**Table 4: Components of the business risk of the commercial banks**

Code	Component		
	1	2	3
PR4	.932		
PR2	.921		
PR3	.856		
PR1	.843		
TE3		.940	
TE4		.936	
TE2		.907	
TE1		.727	
HR1			.899
HR4			.881
HR2			.870
HR3			.841

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

The results of the table 4 revealed that the structure matrix for the various factors affecting the business risk of the commercial banks above mentioned had 3 Components



which included of factors following Component 1 (X1) is the procedure (PR). Component 2 (X2) is the technology (TE). Component 3 (X3) is the human resource (HR).

### Regression Analysis results

Regression analysis method is the study of the influence degree of one or more independent variables to one dependent variable to predict outcome variables based on the values of the variables which are known before explaining. To measure the business risk of the commercial banks, analyzing multiple linear regressions is to test the hypotheses of models with 3-element group which is independent variables to measure the impact level of the group factors to the business risk of the commercial banks. The study results showed that the influence degree of these factors reflected multiple regression coefficients following.

**Table 5: Various factors affecting the business risk of the commercial banks  
Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.651	.424	.420	.76139272	1.887

a. Predictors: (Constant), X3, X1, X2

b. Dependent Variable: Y

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	196.750	3	65.583	113.129	.000
	Residual	267.250	461	.580		
	Total	464.000	464			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X1, X2

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.978E-016	.035		.000	1.000		
	X1	.165	.035	.165	4.663	.000	.993	1.007
	X2	.415	.036	.415	11.646	.000	.983	1.018
	X3	.543	.036	.543	15.169	.000	.977	1.024

a. Dependent Variable: Y

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

Table 5 showed that Adjusted R Square = 0.420 (verification F, sig. < 0.05) Showed that the compatibility of the model with independent variables and the dependent variable, is 42.0% of the variable of the business risk of the commercial banks variation is explained by three independent variables (Xi). Coefficient Durbin - Watson (d) = 1.852 < 3.

The test results have value and  $F = 113.129$ ,  $\text{Sig.} = 0.000 < 0.05$  showed the building model is consistent with the data set and the variables included in the model are related to the dependent variable. Generally, regression analysis with selected reliability is 99 %, corresponding to the selected variables which are statistically significant at the  $p < 0.01$ ; results also showed that all variables are satisfying demand. Verification of conformity of the model shows the multicollinearity does not violate ( $\text{VIF} < 10$ ).

## **Conclusions and recommendations**

### **Conclusions:**

Risk management is a keystone of discreet banking practice. More appropriately today, banking is a business of risk. For this basis well-organized and competent risk management is utterly requisites. This study examined the variables having significant affect on business risk on five commercial banks of Ho Chi Minh City.

The purpose is creating better conditions for customers ta save money safety, taking into account the recommendations of experts, and improving customers' service including the raising of awareness of the business risk of the commercial banks that was approved in the future. The results from data analysis revealed that respondents consider the following factors as the most influential factors: (1) the human resources (HR); (2) the technology (TE); and (3) the procedure (PR). All three most influential factors related to the business risk of the commercial banks with significance level of 5 %.

We had the component 1 (X1): the procedure (PR) affecting on the business risk of the commercial banks with significance level of 5%.

We had the component 2 (X2): the technology (TE) affecting on the business risk of the commercial banks with significance level of 5%.

We had the component 3 (X3): the human resources (HR) affecting on the business risk of the commercial banks with significance level 5 %.

### **Recommendations:**

Recommendation is for the procedure (PR): the commercial banks continued to improve the procedure quality by choosing good staffs send to foreign countries to study the training program of risk management in the bank. Each staff continues to retrain specialized knowledge of the training program of risk management in the bank, qualified skills, management ability and soft skills such as computer science. Besides, the commercial banks' managers are encouraged to implement risk-based control procedures that are informed by intelligence and information holdings. The aim of these procedures is to identify reliable

operators/persons and low risk consignments/transactions that may benefit from greater facilitation as opposed to those that require higher levels of control.

**Recommendation is the technology (TE):** the commercial banks continued to improve facility quality in order to help staffs working more easily. The commercial banks continued to buy many new computers and improve internet, Wifi... Besides, the commercial banks should develop and complete network of organizations and institutions providing services to enterprises towards liberalization, socialization, promote competition to achieve the goal is to develop services to serve best for business development and enterprise in customs.

**Recommendation is the human resource (HR):** the human resource should continue to improve the human resource quality in order to reflect current and future social demand, especially enterprises demand of risk management in the bank. Besides, each staff should continue to have many soft skills in order to help the commercial banks working better in risk management. The human resource should have human resource development planning that is a critical management function in that it provides management with information on resources flow which is used to calculate, among other things, recruitment needs and succession and development plans.

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