School year 2016 – 2017

TOPIC

“SOME SOLUTIONS TO UPGRADE THE ENTERPRISE CREDIT SYSTEM OF VIETNAM MARITIME COMMERCIAL JOINT STOCK BANK, THAI NGUYEN BRANCH”

Student: CAO VĂN HƯNG

Instructor: Ph.D VŨ ĐỨC NGHĨA

Hanoi June, 2017
TABLE OF CONTENTS

TABLE OF CONTENTS .................................................................................................................. 2
LIST OF FIGURES AND TABLES ................................................................................................. 4
INTRODUCTION ............................................................................................................................ 6

CHAPTER 1: THEORETICAL BACKGROUND OF DEVELOPMENT OF ENTERPRISE CREDIT SYSTEM AT BANK ............................................................................................ 9

1.1 ENTERPRISE CREDIT SYSTEM AT BANK ........................................................................ 9
  1.1.1 Definition of Enterprise Credit at bank ......................................................................... 9
    1.1.1.1 Definition of Credit .................................................................................................. 9
    1.1.1.2 Definition of Bank Credit ....................................................................................... 9
    1.1.1.3 Definitions of enterprise, bank, and commercial bank ......................................... 10
    1.1.1.4 Definition of Enterprise Credit at Commercial Bank ........................................... 10
  1.1.2 Definition of Enterprise Credit System at Bank ............................................................ 11
  1.2 Structure of enterprise credit system at bank ................................................................... 11
    1.2.1.1 Analysis System of Enterprise Credit ................................................................. 11
    1.2.1.2 Rating System of Enterprise Credit ..................................................................... 13
    1.2.1.3 Enterprise Credit Levels ...................................................................................... 15
  1.2.2 Work Cycle of Enterprise Credit System at Bank ........................................................ 15
    1.2.2.1 Seeking and Receiving Loan Document from Enterprise .................................... 15
    1.2.2.2 Investigating, Collecting, and Summarizing Information on Customer and Loan Method .............................................................. 16
    1.2.2.3 Customer Evaluation and Loan Method Appraisal .............................................. 17
    1.2.2.4 Approval and Signing Credit Agreement .............................................................. 18
    1.2.2.5 Disbursement ........................................................................................................ 18
    1.2.2.6 Checking and Monitoring the Loan of the Customer ......................................... 18
    1.2.2.7 Debt Collection and Handling Problematic Debt .............................................. 19
    1.2.2.8 Final Settlement, Summary, and Preservation of Loan Records .......................... 20
  1.2.3 Main Services of Enterprise Credit System at Bank ...................................................... 20
    1.2.3.1 Service of Enterprise Credit Information Report ............................................... 20
    1.2.3.2 Service of Enterprise Credit Rating ................................................................... 21
    1.2.3.3 Service of Enterprise Credit Granting .................................................................. 22

1.3 DEVELOPMENT OF ENTERPRISE CREDIT SYSTEM AT BANK ...................................... 24
  1.3.1 Definition and Development Trend of Enterprise Credit System at Bank .................... 24
    1.3.1.1 Definition of Development of Enterprise Credit System at Bank ....................... 24
    1.3.1.2 Development Trend of Enterprise Credit System at Bank ................................... 25
  1.3.2 Criteria for Evaluating Level of Development of Enterprise Credit System at Bank .......... 26
    1.3.2.1. Qualitative Criteria ............................................................................................. 26
    1.3.2.2. Quantitative Criteria ......................................................................................... 27
  1.3.3 Factors Affecting on the Development of Enterprise Credit System at Bank ............... 29
    1.3.3.1 Capacity of the Entity Joining Enterprise Credit System at Bank ...................... 29
    1.3.3.2 Information Technology and Communication ...................................................... 29
    1.3.3.3 Bank Credit Information Market ......................................................................... 30
    1.3.3.4 International Integration and Cooperation ............................................................ 30
    1.3.3.5 Some Other Factors ............................................................................................ 31

CHAPTER 2: ACTUAL STATE OF ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN .............................................................................................................. 33

2.1 GENERAL INTRODUCTION OF MARITIME BANK .......................................................... 33
OVERVIEW OF THE ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

2.2.1 Enterprise Credit Activities at the Bank During the Innovation Period
2.2.2 Latent Risks and Formation of the Enterprise Credit System
2.2.3 Enterprise Credit Activity Over Different Periods and History of Credit System

ACTUAL STATE OF THE ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

2.3.1 Legal Framework and Organization of Enterprise Credit System
2.3.2 Actual State of the Credit Enterprise System
2.3.3 Achievements of the Enterprise Credit System
2.3.4 Drawbacks and Difficulties of Current Enterprise Credit System
2.3.5 Evaluation of Development of the Enterprise Credit System

COMPARISON OF ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN TO SOME BIG COMMERCIAL BANKS IN VIETNAM

CHAPTER 3: SOME SOLUTIONS TO UPGRADE THE ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

SOLUTIONS TO THE INFORMATION SYSTEM AND ENTERPRISE CREDIT RATING
SOLUTIONS TO THE ENTERPRISE CREDIT SYSTEM
SOLUTIONS TO ORGANIZING STAFF TO OPERATE ENTERPRISE CREDIT SYSTEM
SOME RECOMMENDATIONS FOR THE STATE BANK OF VIETNAM

REFERENCES
# LIST OF FIGURES AND TABLES

<table>
<thead>
<tr>
<th>Titles</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1: The Work Cycle of Enterprise Credit System at Bank</td>
<td>20</td>
</tr>
<tr>
<td>Figure 2.1: Operational Structure of Maritime Bank</td>
<td>36</td>
</tr>
<tr>
<td>Figure 3.1: Proposed Credit Analysis Procedure</td>
<td>67</td>
</tr>
<tr>
<td>Figure 2.2: Organization Diagram of Personnel System of Maritime Bank Thai Nguyen</td>
<td>50</td>
</tr>
<tr>
<td>Chart 1.1: Quarterly and Yearly Credit Growth of Banking Sector in 2014 - 2016</td>
<td>26</td>
</tr>
<tr>
<td>Chart 2.1: Net Gain Structure of Business Activities of Maritime Bank in the period of 2014 – 2016 (Unit: billion VND)</td>
<td>38</td>
</tr>
<tr>
<td>Chart 2.2: Deposit Structure of Maritime Bank in the period of 2014 – 2016</td>
<td>39</td>
</tr>
<tr>
<td>Chart 2.3: Mobilized Capital Contribution of Maritime Bank Thai Nguyen to total Mobilized Capital of the Whole System in the Innovation Period</td>
<td>41</td>
</tr>
<tr>
<td>Chart 2.4: Credit Loan Balance Contribution of Maritime Bank Thai Nguyen to the Whole System In the Innovation Period</td>
<td>42</td>
</tr>
<tr>
<td>Chart 2.5: Total Mobilized Capital Contribution of Maritime Bank Thai Nguyen into the Total Mobilized Capital of the Whole System in the Period of 2013 - 2014</td>
<td>45</td>
</tr>
<tr>
<td>Chart 2.6: Credit Outstanding Balance Contribution of Maritime Bank Thai Nguyen into the Credit Outstanding Balance of the Whole System in the Period of 2013 – 2014</td>
<td>45</td>
</tr>
<tr>
<td>Chart 2.7: Credit Service Ration at Maritime Bank Thai Nguyen in the Period of 2011 – 2016</td>
<td>47</td>
</tr>
<tr>
<td>Chart 2.8: Structure of Enterprise Surveyed by Equity</td>
<td>50</td>
</tr>
<tr>
<td>Chart 2.9: Some Achievements of the Enterprise Credit System at Maritime Bank Thai Nguyen</td>
<td>56</td>
</tr>
<tr>
<td>Chart 2.10: Credit Development Speed in 2012 – 2016</td>
<td>58</td>
</tr>
<tr>
<td>Chart 2.11: Customer Growth Rate in 2012 – 2016</td>
<td>58</td>
</tr>
<tr>
<td>Table 2.1: Some Main Financial Criteria in the period of 2014 – 2016</td>
<td>37</td>
</tr>
<tr>
<td>Table 2.2: Some Criteria for Credit Activity in the Period of 2014 – 2016 of</td>
<td>39</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2.3</td>
<td>Enterprise Credit Activities at the Maritime Bank Thai Nguyen During the Innovation Period</td>
</tr>
<tr>
<td>2.4</td>
<td>Main Business Sectors of the Surveyed Enterprises</td>
</tr>
<tr>
<td>2.5</td>
<td>the Ratio of Borrowing Money from Banks of the Surveyed Enterprises</td>
</tr>
<tr>
<td>2.6</td>
<td>Total Amount of Transactions through the Bank</td>
</tr>
<tr>
<td>2.7</td>
<td>Used Enterprise Credit Services</td>
</tr>
<tr>
<td>2.8</td>
<td>Satisfaction of Enterprises with the Enterprise Credit Services of Maritime Bank Thai Nguyen</td>
</tr>
<tr>
<td>2.9</td>
<td>Comparison of the Enterprise Credit Systems of Maritime Bank, Vietcombank, and Vietinbank – Thai Nguyen Branches</td>
</tr>
</tbody>
</table>
INTRODUCTION

1. Rationale:

- In recent years, the great development at bank, especially that of joint stock banks in general and the development of credit operation in particular, has greatly contributed to the development of the economy. Credit operation is one of the main operations at bank which accounts for a great ratio in comparison to others yet it has the most potential risks. Minimizing the risks caused by credit operation is a constant concern and a “hot” issue for each and every bank. In order to minimize the risks caused by credit operation, banks need to complete the credit lending procedure.

- Since the early years of the twenty-first century, other than state-owned banks, the banking system has seen great development of various urban joint stock commercial banks. Maritime Bank is an urban joint stock commercial bank like that. With its 26 years of existence, being in the top ten of the leading commercial banks in Vietnam and reaching out for the world, Maritime Bank has strong financial potential and modern technology, provides diverse personal, enterprise, and investigator services and banking commercial products. Maritime Bank has completed the model for modern agencies, professional and friendly customer services with the message “Building a bank that is so good that EVERYBODY WANTS TO JOINT AND NO ONE WANTS TO LEAVE” for customers and social community.

- Like most other banks, Maritime Bank mostly focuses on calling and lending with a lot of pressure and risks. In reality, the risks in the credit operation that commercial banks are taking are associated with the lack of connection before, during, and after lending. To ensure that the lending to a specific customer is safe and good, a bank or more specifically the customer relationship specialist must understand and follow the credit lending procedure. Therefore, commercial banks are concerned with completing the credit lending procedure in order to improve effectiveness of credit management, preventing and minimizing credit risks, and maintaining bad debts of the Branch in the safe level pursuant to the regulations of Maritime Bank and to those of the State Bank.

- As the world economy is experiencing complicated changes, Maritime Bank has changed its strategy from fast development to cautious development; designing a modern lending procedure suitable with new situations. Sticking with the lending procedure, the credit officers of the Branch have been reviewing and managing the lending amount to the enterprise. Therefore, quality of credit management has improved greatly and the needs for using capital to maintain and expand production scale of economic sectors are being met, creating good conditions for business activities to occur quickly and effectively. However, in the process of credit lending at Maritime Bank, there still exist some difficulties and drawbacks. Knowing this problem, the author who is working at Maritime Bank, Thai Nguyen Branch has
chosen the topic “solutions to upgrade the enterprise credit system of the Vietnam Marinetime Commercial Joint Stock Bank, Thai Nguyen Branch” to study.

2. Objectives:
- Studying the theoretical background of credit, enterprise credit system and rating system of Enterprise Credit at bank and conditions to develop credit system.
- Analyzing and evaluating the actual state of the credit system of Maritime Bank, analyzing disadvantages and their causes, and evaluating the development level of the credit system of Maritime Bank.
- Studying and proposing solutions to complete and upgrade the enterprise credit system of Maritime Bank (main focus on rating system of Enterprise Credit).
- The study will show some achievements as well as current drawbacks of the credit system (including rating system of Enterprise Credit) of Maritime Bank Thai Nguyen; and then propose some solutions to complete the credit system (focus on rating system of Enterprise Credit) of Maritime Bank Thai Nguyen by learning from experience advances in applying credit process of other big banks in Vietnam and all over the world.

3. Subject and Scope of Study:
a. Subject:
- The credit system of Maritime Bank, Thai Nguyen Branch (focus on rating System of Enterprise Credit).
b. Scope:
- In space: The study focuses on studying the Vietnam Maritime Commercial Joint Stock Bank, Thai Nguyen Branch in comparison relation with some commercial joint stock banks in Vietnam.
- In time: Studying data from 2014 to 2016.

4. Research Questions:
The study will answer the following questions:
- Can the theoretical issues of credit system of Maritime Bank Thai Nguyen be systemized?
- What are the experience lessons on credit system of the big Banks in Vietnam and other developed countries in the world?
- Evaluate the process and achievements of credit system of Maritime Bank Thai Nguyen in recent years.
- Find the drawbacks and their causes in the credit system of Maritime Bank Thai Nguyen.
- What are solutions and instructions to complete and improve efficiency of the credit system (especially rating system of Enterprise Credit) of Maritime Bank Thai Nguyen.
in the future?

5. Methodology to Study and Approach of the Problem:
- Studying situations to approach the subject in the aspect of content and method of credit procedure at some commercial banks in Vietnam.
- Quantitative method to analyze data to clarify the actual state of internal credit procedure.
- Comparison method with common evaluation criteria in the market on international and national credit procedure, through which the study shows comments and proposes solutions to complete the credit procedure at Maritime Bank Thai Nguyen.
- Data collection method: Investigation, statistics (interviewing customer relation specialist, interviewing professionals in the banking field, sending questionnaire, etc.,) induction and deduction (collecting data and comparing credit processes among the commercial join stock Banks, getting data to report, analyzing financial reports, etc.).

6. Detailed Structure of the Study:
   Apart from the introduction, conclusion, appendixes and references, the study consists of three chapters:
   
   Chapter 1: Theoretical Background of Development of Enterprise Credit System at Bank
   
   Chapter 2: Actual State of Enterprise Credit System of Maritime Bank Thai Nguyen
   
   Chapter 3: Some Solutions to Upgrade the Enterprise Credit System of Maritime Bank Thai Nguyen
CHAPTER 1: THEORETICAL BACKGROUND OF THE DEVELOPMENT OF ENTERPRISE CREDIT SYSTEM AT BANK

1.1 ENTERPRISE CREDIT SYSTEM AT BANK

1.1.1 Definition of Enterprise Credit at bank

Around 700 years ago, the first organization (whose operation was similar to that at bank today) was established with the main activity of lending reference nations high interest loan. This can be considered as the first form of credit in the history.

In order to study and define the definition of enterprise credit at bank, first of all, the author has studied the relevant definitions.

1.1.1.1 Definition of Credit

History has shown that credit is not just an economic entity, product of commodity economy, but it also an important motivation to enhance commodity economy. Formed and developed throughout different periods of the socio-economy, credit can be understood in many different ways:

According to the Dictionary of Modern Economics (David W. Pearce - 1999), “Credit is a wide term used in connection with operations or states involving lending, generally at short term.”

According to Professor Assistance and Ph.D. Assistance Vu Van Hoa (1998), “Credit is an economic aspect reflecting the relation of capital uses between the cause and effect in commodity economy.”

According to Cambridge Dictionary, “Credit is a method of paying goods or services at a later time, usually paying interest as well as the original money.”

Therefore, it can be understood that credit is a deal where the Debtor receives a certain amount of money or valuable property associated with a commitment to pay back both interest and the original money at a later time. As far as meaning is concerned, definition of credit is wider than that of lending.

1.1.1.2 Definition of Bank Credit

Also according to the Dictionary of Modern Economics (1999), “Bank credit is the lending by the banking system by whatever means: bank advances, discounting bills, or purchasing securities.”

According to the author Le Nguyen Phuong Ngoc (2007), in his Economic Master Thesis “Credit Risk Management in lending small and medium-sized enterprises at Vietnam Technological and Commercial Joint Stock Bank, Ho Chi Minh Branch”, “Bank credit is the relation of transferring capital ownership from a bank to its customer pursuant to certain binding terms and conditions”

According to Ph.D Nguyen Minh Kieu, “Bank credit is the relation of
transferring capital ownership from a bank to its customer in a certain time with a certain fee.”

Although there are many definitions of bank credit, in general bank credit is the sum that a bank can meet the demand of an individual or enterprise.

**1.1.1.3 Definitions of enterprise, bank, and commercial bank**

- Definition of enterprise:

  Pursuant to the Enterprise Law No. 68/2014/QH13 dated on November 26, 2014 of National Assembly of Vietnam Communist Party, “Enterprise is an organization with its own name, has property, has headquarter, and is register pursuant to the law in purpose of trading”.

- Definitions of bank and commercial bank:

  Pursuant to Law on Credit Institution No. 47/2010/QH12 dated on June 16, 2010 of National Assembly of Vietnam Communist Party, “Bank is a credit institution that can carry out all banking operations pursuant to this Law. Based on its attribute and operation purpose, types of bank include commercial bank, social policy bank, and co-operative bank”.

  Also pursuant to Law on Credit Institution No. 47/2010/QH12, “Commercial bank is a bank which carries out all banking operations and other business activities pursuant to this Law for beneficial objective”.

**1.1.1.4 Definition of Enterprise Credit at Commercial Bank**

From the relevant definitions above, it can be understood that enterprise credit at commercial bank is a product of commercial bank which creates flexibility in supplying working capital and fixed capital demand of enterprise.

Enterprise credit at commercial bank exists in form of enterprise loan. Pursuant to the Circular No. 39/2016/TT-NHNN date don December 30, 2016 by State Bank of Vietnam, mandating on lending activity of credit institution, foreign bank branch to customers, “Lending is a form of issuing credit, at which credit institution grant or commit itself to grant its customer a certain amount of money to spend on predetermined purpose in a certain time pursuant to an agreement with the principle of returning both interest and the original money.”

* Principles to grant credit to enterprise customer at commercial bank:

  - Credit granting for enterprise customer must be done pursuant to an agreement (through credit agreement) between bank and enterprise, suitable with the law.

  - Enterprise who borrows loan must ensure to use the capital on the right purpose and return interest and the original money in time stated in the agreement with the bank.
Criteria to grant credit to enterprise customer at commercial bank:

Since it is related to the relation of granting capital between bank and enterprise, the bank will grant credit to the enterprise when it meets all the following criteria:

(1) The representative of the enterprise who signs the credit agreement must have civil capacity pursuant to the law.
(2) Has the need to borrow loan to use for legal purposes.
(3) Has feasible method of capital use.
(4) Has financial capacity to pay the loan.
(5) Is evaluated as having clear and safe financial status.

The criteria above can be specified differently depending on a particular commercial bank.

1.1.2 Definition of Enterprise Credit System at Bank

Credit System mentioned in the The Great Soviet Encyclopedia – 1979 has two approaches:

In a wide meaning, “Credit system is all credit relations; credit forms and methods done in different fields of one or some socio-economic organization”

In a narrow meaning, “Credit system is a system of credit institutions of a country in a certain historical period.”

So, credit system of a country usually consists of: (1) State bank; (2) commercial bank; (3) Investment bank; (4) Credit institution; (5) Non-bank credit institutions; (6) Financial, insurance companies.

In Vietnam, there is no official document that offers a definition on enterprise credit system at bank. However, it can be understood that the enterprise credit system is a sum of all credit relations, credit forms and methods done between two entities, bank and enterprise, in a certain time.

1.2 STRUCTURE, OPERATION, AND RELATION IN THE ENTERPRISE CREDIT SYSTEM AT BANK

1.2.1 Structure of enterprise credit system at bank

In general, it can be understood that the structure of enterprise credit system at bank consists of: (1) Analysis system of enterprise credit; (2) Rating system of enterprise credit; (3)Granting enterprise credit.

1.2.1.1 Analysis System of Enterprise Credit

Analysis of enterprise credit (or analysis of credit) is the process of gathering and handling data in a scientific way to understand more about enterprise and business method in order to serve the decision-making process in granting credit to enterprise.

For the enterprise credit system at bank to work effectively, enterprise credit
Analysis is one of the important steps to evaluate accurately and objectively the solvency of the enterprise, helping the bank to make the right decision in whether to grant credit to the enterprise or not.

Analysis system of enterprise credit includes: data collection system which serves credit analysis; Criteria system of analyzing financial status of the enterprise; Analysis of feasibility and effectiveness of production method; Criteria system of analyzing attitude of the enterprise on paying the loan.

(1) Data Collection System which Serves Credit Analysis

Data serving credit analysis needs to be valuable since the input of analysis will affect directly on the outcome as well as the decision to grant credit of the bank to the enterprise. Value of data is shown by their attributes: fullness, punctuality, and accuracy. Those data are collected via the following four resources:

- Data collected from the profile of the enterprise asking for credit: Based on this profile, the bank can collect data related to enterprise capacity, financial and accounting status, business strategies, effectiveness of using loan, loan solvency shown in production method of the enterprise. However, the drawback of these data is low reliability since it is provided by the enterprise itself.

- Saved data at the bank: These are data that the bank saved before as the enterprise worked with the bank. This is an important source of information since it is undergone experience and reliable. However, their drawback is that it is out of date as time goes by and its suitability for analysis is not high.

- Data from interviewing and investigating the enterprise: It helps to reduce drawbacks of the two recourses above,

- Data from other sources: These data may include data from other banks, information from market researched companies, from client’s partner, from the competitor, etc.

(2) Criteria System of Analyzing Financial Status of the Enterprise

Analyzing Financial Status of the Enterprise is the process of using financial reports of the enterprise to analyze and evaluate financial status of the enterprise. This analysis is to evaluate financial status and operation of the enterprise in order to make suitable decisions.

Criteria system of analyzing financial status of the enterprise includes:

- Liquidity ratios: the measurement ratio of short term solvency of the enterprise. This kind of ratio includes: current liquidity ratio and quick liquidity ratio. These two ratios help the bank evaluate solvency of the enterprise.

- Financial Leverage or Debt Ratios: It is the measurement ration that use debt to support company activities. It includes: debt to equity ratio, debt to asset ratio, and
long term debt ratio.

- Coverage Ratio: the ratio measuring enterprise’s capacity to use turnover to pay the interest.

- Activity Ratios: the financial ratios are determined based on data on the balance sheet and income statement, including days of sales outstanding, payable turnover, inventory turnover, total asset turnover, and profitability.

- Development ratios: these ratios show the possible development of the enterprise in a long term, including: Accumulated turnover ratio and sustainable development ratio.

After using the financial ratio above to analyze enterprise financial status, the bank needs to use analysis technique by comparing calculated financial ratios to ratios of previous terms and average ratio of the industry. In addition to that, the bank also needs to use technique of structure analysis and index analysis.

(3) Analysis of Feasibility and Effectiveness of Production Method

Production method is one of the requirements that the enterprise needs to show to the bank so that the bank can evaluate the paying loan capacity of the enterprise. However, to grant credit to the enterprise, the bank needs to analyze this production method. When analyzing, the bank needs to focus on three factors: market status, anticipated revenue, and production expenses.

(4) Criteria System of Analyzing Attitude of the Enterprise on Paying the Loan

Beside analyzing financial status, feasibility, and effectiveness of production method, the bank also needs to conduct an analysis on attitude of the enterprise on paying the loan. In analyzing attitude, the bank usually focuses on the following criteria:

- Character
- Capacity
- Capital
- Collateral
- Conditions to pay the loan

1.2.1.2 Rating System of Enterprise Credit

Rating enterprise credit is when the bank makes evaluation on financial reliability, as well as credit risk on the enterprise who has credit relation with the bank.

Rating enterprise credit depends on several factors like capacity to meet financial commitment, possibility to go broke when business conditions change, attitude on paying the loan.

Rating enterprise credit is an extremely important job in order to gain
information for credit evaluation and credit decision.

Information sources used during the evaluation and rating process are collected via financial reports the enterprise submits to the bank, including balance sheet, income statement, balance due status, and non-financial information.

Credit evaluation and rating to enterprise is done in a method of comparison based on types of enterprise and predetermined financial criteria.

To evaluate and rate enterprise credit, bank usually takes the following three steps:

Step 1: Determining scale of enterprise

Scale of enterprise is determined based on criteria for capital, revenue, tax liability, and labor. Based on this understanding, the bank will classify enterprises into several groups and then build a marking system corresponding to each group.

Step 2: Evaluating financial criteria.

After determining enterprise scale, bank will analyze and evaluate the financial criteria for the enterprise. These financial criteria include criterion for evaluating liquidity, criterion for performance effectiveness, criterion for solvency, and criterion for evaluating revenue. Enterprises in different fields with different scales have different financial criteria. Thus, for each field, each industry, and each scale, the bank will build systems of criteria and suitable measurements.

Step 3: Summarizing results and rate the enterprise

Being the one to grant credit to enterprise, banks usually tend to focus on criteria like revenue, receivables turnover ratio, and inventory turnover as they are tightly related to receiving interest and the original money of the loans. Thus, when calculating the score, different financial criteria will be embedded with different score value depending on their importance. From bank’s point of view, capital adequacy is the most significant criterion therefore the criteria related to capital safety will have higher score.

After scoring the criteria, the result of enterprise credit evaluation will be summed according to the formula:

\[ \text{Total score} = \sum_{i=1}^{n} W_i T_i \]

Where \( W_i \), \( T_i \) are weight and value of the financial ratio \( i \); \( n \) is the number of used financial ratios.

The outcome of the total score is the basis for rating enterprise credit. Enterprise rates are often in levels depending on the way to symbolize of each bank.

Level 1 (Highest): Enterprises in this level are the ones work extremely well,
gain high effectiveness, and have promising potential and low risks.

Level 2: Enterprises in this level are the ones work effectively, have clean finance, and have potential development. It is low risk.

Level 3: Enterprises in this level work effectively and has potential development. However, they have certain limitations on financial resources and have unseen threats. It is low risk.

Level 4: Enterprises in this level work ineffectively, have low self-control of finance, have unseen threats. It is medium risk.

Level 5: Enterprises in this level have low performance, weak finance, lack of self-control of finance. It is high risk.

Level 6 (Lowest): Enterprises in this level have long term loss, weak finance status, no self-control of finance, and have high possibility to go broke. It is high risk.

### 1.2.1.3 Enterprise Credit Levels

This is the third component in the enterprise credit system at bank. This component plays an irreplaceable role in the system since it contains decisions of banks on granting credit to enterprise.

### 1.2.2 Work Cycle of Enterprise Credit System at Bank

Work cycle of enterprise credit system at bank is a process consisting of various uninterrupted periods in a certain order since receiving demand, request for loan, until the bank makes decision to grant credit, disburses, and terminates the credit agreement. In the work cycle, the steps are highly related to one another. This cycle consists of the following eight steps:

#### 1.2.2.1 Seeking and Receiving Loan Document from Enterprise

When an enterprise needs to borrow money, credit officer will instruct the client on conditions and terms and create loan document. After receiving document, credit officer will check it on its fullness, reliability, legality, and uniformity, and then create document category. A loan document set includes:

- **Loan request letter**: Pursuant to the bank policy. It consists of the following main information: purpose of loan, capital need, loan term, interest, loan safety measures.

- **Legal documents**: including the documents to prove juridical capacity, decision of establishing, business registration certificate, license to practice (if any); export license or quota (if stated by the law); rule of regulation and operation; decision of appointing manager, chief accountant, financial regulations, resolution of board of directors, etc. These documents are applied to enterprises who borrow money for the first time or have changes during loan process.

- Document on the loan: production method, service and other relevant documents.

  + For the short term loan in Vietnamese Dongs: production method, borrowing plan, paying plan, documents to verify borrowing and paying method.

  In business plan, enterprise must show the following contents: description of necessary business activity (production method’s contents); evaluation of market status and effect of market on production method; resources to carry out the plan like human, equipment, material sources; effectiveness according to the plan (expected revenue, expected expense items, business outcome); management plan and administration of production method.

  + For loans in foreign currency: enterprise must send more document, certificates to prove the need to borrow loan in foreign currency pursuant to the law like import license, quota, foreign trade agreement, etc.

  - Document for securing the loan (in case of property assurance): A statement of the loan security properties, documents proving the legal and complete ownership of the security property and documents certifying the value of the security assets by independent evaluation agencies.

  - Other documents related to lending.

1.2.2.2 Investigating, Collecting, and Summarizing Information on Customer and Loan Method

Information of enterprise can be collected from many sources like interviewing the Debtor, the documents submitted by the customer, reality check, customer, exploited from State Bank of Vietnam’s Center for Information on Preventing Financial Risk, information from other credit institutions related to the enterprise, information from the press, public, national offices, etc. Among them, there are three most important channels: loan document, interviewing the Debtor, and reality check on customer.

- Interviewing the Debtor: The interview by credit officer to the Debtor occurs when the client submits the loan request letter or according to the arrangement of the credit officer. Interviewing the Debtor is important since it can evaluate the style, honesty, and his understanding on his own need to borrow money.

- Reality check on the customer: after receiving loan documents, the credit officer conducts reality check on the customer. The results of reality check are summarized in reality check report. Purpose of this check is to gather information on
customer’s operation and loan method. Banks want to add more information stated in financial to evaluate most accurately the enterprise’s financial capacity. Collecting necessary information is to clarify enterprise’s intension to use the loan, therefore evaluating reputation and capacity to pay of the customer.

Things needed to be done in a reality check:
+ Evaluating management capacity of the customer via: infrastructure, work attitude of employees, workers, leaders, and administration system, etc.
+ Collecting detailed documents on items on financial reports: information on inventory items, assets, receivable amount, payable amount, other current assets, turnover, etc.
+ Collecting information related to loan method and paying method like necessity of the loan, conditions to make data to be the base for calculating revenue of the loan methods.
+ Collecting information on asset to ensure the loan (if any): number, type, code, status, and position of the asset.

1.2.2.3 Customer Evaluation and Loan Method Appraisal

Customer evaluation is done as soon as the credit officer meets the customer. Based on the collected data, the credit officer evaluates to see whether the customer is qualified to borrow money pursuant to the regulations or not, and then makes decision on the loan of the customer.

- Customer evaluation: customer evaluation focuses on clarifying the issues: personal capacity and juridical position (juridical profile); reputation of the enterprise and the leader; competitive advantages and some other non-financial information like: credit relation with credit institutions; business actual state; actual financial capacity, etc.

At least the following things must be done:
+ Evaluating suitability to borrow money.
+ Calculating feasibility, effectiveness, and risk potential (if any) related to production method of the customer.
+ Solvency of the customer.
+ Credit assurance measures.
- Making appraisal report and propose credit based on the following principles:
+ Enterprise must be full, clear, honest to request for credit.
+ Appraising risks of the credit.
+ Showing precisely, clearly, without erasing.
+ Summarizing risk on:
+ Credit granting value;
+ Credit granting method;
+ Other conditions of credit granting;
+ Credit assurance measures;
+ Appraisal report and credit proposal must be approved by authority at the credit institutions.

1.2.2.4 Approval and Signing Credit Agreement

Based on the appraisal of loan proposal, the authority at credit institution considers and approves the appraisal report and credit proposal. The comment must show clearly on the appraisal report and credit proposal, in which it is must stated whether the authority approves or not.

After the authority approves, the bank informs the customer the result of the appraisal to carry out the next procedures.

- Finishing the procedures and signing the agreement: Credit officer will add more information, documents requested in the loan approval document, get confirmation on the compete profile to submit it to the authority for official approval. Based on the contracts made credit officer, the authorized person, together with the customer, will sign the credit agreement and loan assurance contract (if any). The bank informs management office on assets of loan assurance, opens customer loan profile, and saves the original version of assets of loan assurance.

1.2.2.5 Disbursement

Pursuant to the signed agreement, the bank requests the customer to complete all necessary procedures of withdrawing the money and instructs the customer to do so.

When the customer withdraw the money, the bank staff must recheck the purpose of using the loan on the documents to withdraw money like contract an invoice of purchasing material, equipment, technology, service, minutes of confirming the done construction; minutes of goods delivery; received docket, etc. Based on that, the bank makes debenture and disbursement document, approves and disburses.

In case the deadline of disbursement is over according to the agreed schedule but the customer has not got the money in the credit agreement, if he wishes to continue to withdraw money, the customer must submit a written request for the bank to extend the deadline.

1.2.2.6 Checking and Monitoring the Loan of the Customer

For the bank, reality checking is a must. Credit officer can conduct a reality check under the following forms:
- Checking loan withdraw: usually applied to the withdraw to make payment for the purchased goods, construction work done in reality in fundamental construction investment.

- Regular check: usually done in a monthly or quarterly basis, applied for short term loan. Checking contents is: actual use of the loan, production state, business, state of loan assurance, actual state of commitment implementation, income resource, solvency, etc.

- Sudden check: done when the bank finds it necessary or when the enterprise shows suspicious action on using the loan.

After each check, credit officer makes report of loan implementation. When the loans show any suspicious signs or evidence of business difficulties, violating the customer’s commitments, the credit officer shall make the lending documents and submit them to the competent authorities. The right to be dealt with in the following cases: suspension or termination of lending; debt recovery before maturity in whole or in part; debt extension; Adjusting debt term; Transferring of overdue debts; Changing the loan security properties, etc. According to the loan deal approval, credit officer announces implementation in writing to the customer.

1.2.2.7 Debt Collection and Handling Problematic Debt

- Debt collection: credit officer must do the following things: controlling the income resources of the customer to ensure debt collection plan, speeding up debt payment, calculating interest, collecting interest in predetermined period; making and sending announcement on due debt to the customer at each period and at the end od a financial year; updating professional records with arisen documents and new information on the loan and customer; reporting and sorting loan types in each period as regulated.

- Resolving dispute on assets of loan assurance: The bank only accepts the maximum assets to ensure equivalent loan with the debt collection ratio (original money, interest, and other liabilities) after re-determining the value of all assets belonging to the assets of loan assurance.

- Handling problematic debt: If the customer does not pay interest and the original money pursuant to the credit agreement and commitment on other documents, the case can be handled as follow:

  + Transferring overdue debt: if the debt is due and the customer cannot pay the debt and is not allowed to adjust the deadline or extension, the bank will transfer all the unpaid debt to overdue debt. However, the overdue interest only applies for the debt which is due in slow paying period.
1.2.2.8 Final Settlement, Summary, and Preservation of Loan Records

- Final Settlement: The bank will only settle the loan when the customer has paid all debt. At that time, credit officer makes comparison table and announces the settlement of the bank loan.

- Summary and preservation of loan records: After finishing, credit officer summaries the loan and makes a report of summary with the following contents: comment on the customer, experience in controlling loans, suggestions on relationship with the customer. Based on that, the credit officer updates information on settlement of loans and summarizing into professional records, and preserves professional records.

The work cycle of enterprise credit system at bank can be summarized in Figure 1.1.

![Diagram of the work cycle of enterprise credit system at bank](image-url)

Figure 1.1: The Work Cycle of Enterprise Credit System at Bank

(The author’s summary)

1.2.3 Main Services of Enterprise Credit System at Bank

1.2.3.1 Service of Enterprise Credit Information Report

Credit information report or credit report was first established in 1843 when
Mercatile Agency was born. This report is used for all types of enterprises. The report provides all information on enterprise customer like credit relation, juridical document, financial status, operation state, solvency in the future, etc. This report can be simple or complicated with detailed information depending on the need of user. One of its vital role is to collect and provide information of the foreign enterprises. When the economy is in the integration process, this mission has become more important to avoid business risks.

The current credit information system in Vietnam is still focusing on supporting the credit institutions on exploiting credit reports of individual, household business, and small and medium-sized enterprises. The user can assess to the credit system and use 1 out of 3 online functions: Accessing new loan contract, accessing available loan contract, and accessing customer’s information to get his credit information. Based on the input, the system will do a “match” research in the database of the corresponding customer. If the information on the customer was sent and saved in the database, the system will create a credit report consisting of the following data:

- Customer information: name, current address, related customer information, etc.
- Loan contract information: containing detailed information of each loan contract group (regular loans, overdraft and credit cards), information related to loan contract, information on loan assurance, and information on payment history of each loan.

1.2.3.2 Service of Enterprise Credit Rating

According to the Organization United Credit – Education Services, credit rating is opinions on credit risks and credit quality, showing solvency and paying intention (original money, interest, or both) of the Debtor to meet financial liabilities in full and in time via rating system in signs. Nowadays, there are two methods of rating in mathematic model and professional method.

According to Moody’s, credit rating is the comments on credit quality and capacity to pay of an individual or granted entity based on the basic credit analysis result and shown via the sign system from Aaa to C.

Nowadays, enterprise credit rating has a significant meaning to the credit institutions in risk management. An effective rating system will control customer customer's credit rating by checking and monitoring over debt classification in each group of rated clients, so that they can be adjusted and the special policies are given to secured customer groups.

Credit rating helps enterprise expand capital market not only in Vietnam but also in foreign countries, reducing dependence on bank loans. It helps maintain the sponsored sources for companies. Especially for the enterprises listed on the stock
market, the higher the rating is, the more attention will be given to enterprises.

Credit rating process is built by the credit intuitions based on credit policies and related decisions. A credit rating process normally undergoes three basic steps:

**Step 1:** Collecting information related to predetermined evaluation criteria. Information needed to be collected includes financial information like financial reports; status of credit relation of the customer, etc. and non-financial information like address, business registration No., decision of establishing, business license, type of enterprise, information on board of directors, organizational structure, etc.

**Step 2:** Launching input and analyzing by model to come to conclusion. Though there is no standard for selecting the criteria as well as scoring the enterprise credit criteria, it can be rated via the following groups of criteria:

- Analyzing non-financial criteria: analysis is mostly based on professional method to analyze each criterion for the enterprise, comparing different periods to see the development principle. It can be compared among same-field, same-scale enterprises to see advantages of each enterprise.

- Analyzing financial criteria: the financial criteria are usually divided into two groups. Group 1 includes criteria for solvency, ratio of payable debt to total assets, ratio of debt to capital, days of sales outstanding, asset use coefficient, ratio of total revenue before tax to turnover, etc. Group 2 consists of criteria like business outcome, bad debt, assets of loan assurance, development speed of profit, turnover increment, etc.

- Building score table and weight for each criterion: the building principle is to be based on each criterion. The more important a criterion is, the higher score it gets.

- Calculating score for the criteria: Once we have standard score table for each economic sector, in each scale, the rating office starts to compare the analyzed criteria against standard score table to evaluate each enterprise. After analyzing and summarizing scores compared to the rating table, the rating officer shows the temporary result of enterprise credit rating, comments, and suggestions. In addition, the rating officer needs to use additional professional method to evaluate rating outcome. If there are differences, he must review the above results.

**Step 3:** Monitoring credit status of rated entity. Periodically, the rating officer must make analysis reports, analyze, and compare rating outcome with actual state. Based on recalculated results, the ratings can be changed.

1.2.3.3 Service of Enterprise Credit Granting

*Credit granting* is a deal for an organization or individual to use a certain amount of money or commitment of allowing the use of a sum of money on the principle of repayment in the form of loans, discounts, financial leases, factoring, bank guarantees
Credit granting is the main and most important operation of commercial banks. Credit granting usually takes one of the following forms:

* Direct loan: Based on the following criteria to classify:
  - **Criterion for credit deadline:**
    - Non-term credit is the one that creditor does not state the deadline and can request Debtor to pay at any time. This source of credit is mostly temporarily idle capital that is not currently in use or money that cannot be invested before risk due to devaluation. This kind of credit is quite “loose”, so bank or Debtor must create a cash reserve fund sufficiently large to cover the sudden withdrawal of customers.
    - Short term credit is the one that has term of less than one year. This kind of credit usually serves mobilizing and supplementing the working capital of enterprises or serving the urgent consumer demand of people.
    - Medium term credit is the one that has term of one to five years. This kind of credit is used for purchasing fixed assets, investment on production expansion in a small scale, quick capital recovery.
    - Long term credit is the one that has term of more than or equal to five years. This kind of credit is usually used to invest in the development of the national economy's infrastructure, to make intensive investments to improve labor productivity and to position the key industries and the ability to cooperate in a multi-disciplinary and multi-disciplinary industry, contributing to the renovation of the structure of the national economy.
  - Based on the subject of credit, credit includes the following types:
    - Credit in kind is the type of credit when loans are used to pay for items such as rice, rice, brick, and so on. This type of credit appeared earliest and is maintained until today. It is mainly used in the operation of the citizens.
    - Monetary credit is the type of credit that is borrowed and paid in monetary terms, including the borrowing relation with valuable papers. The scale of monetary credit can be enormous. The term of monetary credit is also very flexible, which can be either non-term or term.
    - Mixed type of credit, both in kind and in monetary, including types of credit borrowed in kind and paid by cash or vice versa.
+ Consumer credit is a mixed credit in which the subject of the loan is commodity and reimbursed in cash. Consumer credits are often small and short-term and are often given by businesses to one another to promote the purchase and sale of goods or services, so it is called commercial credits.

+ The hire-purchase loan is another form of mixed credit. This is the type of credit that credit institutions and finance companies buy the machinery and equipment required by the lessee for rent. The lessee uses the equipment and pays rent as agreed.

- Based on the repayment assurance, there are two types of credit:

+ Unsecured credit is a form of credit where the lending is based on the promise to pay of the Debtor to ensure repayment. This type of credit applies in case where the relationship between the creditor and the Debtor is extremely close, or the Debtor is a very prestigious and well-respected individual, such as the state.

+ Mortgage credit is a loan whose repayment is guaranteed not only by the reputation of the Debtor, but also by the Debtor's or guarantor's assets.

- Based on occupied territory

+ Domestic credit is a loan that arises between parties operating within a national territory.

+ International credit is a loan between parties operating in different territories, such as between two governments, two businesses, two individuals in two different countries or with an international organization. Unlike domestic credit, international credit is governed by complex national and international laws and practices. International credit is linked to trade relations between nations and has a great influence on the reputation of a nation on the international stage. Therefore, all international credit activities must be closely monitored.

- Based on the entity joining credit

Based on the entity of credit, credit is divided into commercial credit, bank credit, state credit and consumer credit. These are also typical forms of credit and are of interest in a market economy. So, we will learn more about these forms of credit.

For consumer credit to develop and thrive, it is important to understand the current and future Debtor's income. In addition, the creditor must set reasonable profit margins, which can encourage consumers to boldly use consumer credit.

1.3 DEVELOPMENT OF ENTERPRISE CREDIT SYSTEM AT BANK
1.3.1 Definition and Development Trend of Enterprise Credit System at Bank
1.3.1.1 Definition of Development of Enterprise Credit System at Bank

At the beginning of the twentieth century (after the First World War) the concept of development was given in the sense of civilization. By the 1930s, the concept of
new development was closely linked to economics, but at this time even prominent economists such as Francois Perroux and Samir Amin did not make a clear distinction between economic growth and development. Until the late 1980s, there were new theories about economic development associated with human development, the main driver of economic and social development. This stage also mentioned the theory of sustainable development. A term coined in 1987 by the World Commission on Environment and Development (Brundtland Commission) emphasizes the responsibility of all people in the world, while meeting the needs of the present generation, must not compromise the fulfillment of the needs of future generations.

Up until now, the concept of development is still a matter that continues to be debated between academic researchers and policymakers around the world.

Based on the analysis, the study to evaluate the concept of development, the concept of enterprise credit system at bank, the author suggests that the development of enterprise credit system at banks is an extension of both depth and breadth of forms, methods, as well as credit relations between banks and businesses.

1.3.1.2 Development Trend of Enterprise Credit System at Bank

The development trend of enterprise credit system at bank depends directly on development trend of the bank as well as the development of credit services.

Nowadays, the banking development has gradually become a global concern. As it can be seen, the development trend of this sector is towards the private credit sector which is holding an increasingly important position in the credit operations. Banking services are developed based on information technology applications. At the same time, banks are focusing their attention on integrated financial services, financial consulting for business development and customer relations.

About current credit service trend: credit growth in the period of 2014 - 2016 of the entire banking sector is no longer negative growth as in previous years. To solve the problem of increasing demand for credit, since the middle of 2015, State Bank of Vietnam has increased the credit growth limit for banks from 30-36% on the basis of assessing the status and financial capacity to promote the development of credit in a clean way. The credit structure continues to change positively, with a shift towards key manufacturing and business sectors, including prioritized areas of the State.
Enterprise credit at Vietnamese banks is quite diverse, including more than 10 types of credit products like short-term loans, medium-term loans, long-term loans, project investment loans, enterprise financing by sector, export financing, import financing, enterprise overdraft, foreign currency loan support, valuable papers, fixed asset investment, financial leasing and some other credit products. With this diversity, there are more options for enterprise customers to meet their business capital needs. However, to further promote the development of enterprise credit systems at bank, the current trends that banks should be concerned about are:

(1) Developing enterprise credit services on the stock market.

(2) Developing wholesale bank services (banks for enterprises) in depth, which means enhancing the quality of service packages, providing integrated package services and consulting the enterprises in need of loan. In addition, banks should increase the convenience of credit services for enterprises based on modern banking technology.

(3) Enhancing enterprise credit services in an international trend.

**1.3.2 Criteria for Evaluating Level of Development of Enterprise Credit System at Bank**

The development of enterprise credit system at bank must be based on improving the quality of the system. To assess the level of development of the enterprise credit system, banks can use a combination of qualitative and quantitative criteria.

**1.3.2.1. Qualitative Criteria**
- Enterprise customer satisfaction with credit services provided by bank. In a market economy, banks are always looking for ways to maximize their assets, through market expansion, market share, quality and performance. Therefore, in order to expand credit, banks must continuously improve their competitive capacity, adopt appropriate credit policies, diversify their credit products with high degree of flexibility with various utilities to meet the needs of customers.

- Satisfaction of customers on technology and qualifications of bank officers. In the globally integrated trend, high-tech science is one of the most essential and important elements to all areas, especially to the banking sector. Banks must constantly innovate their modern equipment and technology so that they can make transactions quickly, conveniently, safely and accurately. In order to acquire new science and technology, bank officers must improve their knowledge and professional skills. The professional level of bank officers along with modern technology will increasingly satisfy the needs of customers.

1.3.2.2. Quantitative Criteria

* Criterion for expanding enterprise credit scale

- Outstanding loan growth = \( \frac{E_1 - E_0}{E_0} \times 100\% \)

Where: \( E_1 \): enterprise outstanding credit balance this year.
\( E_0 \): enterprise outstanding credit balance last year.

Outstanding loan growth is an important criterion to evaluate the development level of credit activates. For outstanding loan growth to occur, it is necessary to increase loan amount higher than debt collection. In order to achieve sustainable outstanding loan growth, the growth of outstanding loan must be stable over the years. At the same time, in order to increase the outstanding credit balance, it is necessary to increase the investment level suitable for each project and increase the number of customers.

- Customer growth = \( \frac{C_1 - C_0}{C_0} \times 100\% \)

Where: \( C_1 \): the number of enterprises who borrow money this year
\( C_0 \): the number of enterprises who borrow money this year

Turnover from enterprise loan is mostly interest after subtracting capital expense and other expenses used in enterprise lending. Turnover growth in enterprise credit lending is that the turnover of a year is higher than that of the last.

* Criterion for expanding enterprise credit forms
Credit forms mean short, medium or long term credits, loans, bank guarantees, overdrafts, and financial leases. It also mean the modes of credit extension such as each time, limit, overdraft, investment project.

Expanding enterprise credit forms means banks must increase new forms and methods of credit granting.

* Criterion for expanding debtors
Credit expansion is also shown in expansion of debtors. Banks can expend the number of customers via choosing different debtors, any type of debtor except for those that are prohibited by the law in trading, trading, and transferring.

* Criterion for increasing loan resources
One of bank's most important functions is its credit intermediary function in economy. With this function, a bank will mobilize capital and use it for lending, so in order to expand bank lending, it must expanding capital mobilization. The mobilized capital of each bank determines its operation scale and credit investment structure. Through its multi-purpose operations as well as various forms of mobilization, banks will mobilize all the idle capital in society to invest in developing the economy. Thus, credit expansion will be reflected through the expansion of capital.

Wider credit scale and more diversified credit form means greater credit performance. Expansion of credit scale and credit form will help banks exploit the potential of all economic sectors, all industries as well as all territories, enhancing economic development.

In addition to that, looking at the entity and loan source, we can assess whether credit expansion and credit form will help banks exploit the potential of all industries and regions, enhancing economic development.

* Criterion on improving credit quality (reducing bad debt ratio in total credit balance)
Bad debt is substandard debt and is likely to lose capital

Bad debt ratio = \( \frac{\text{Bad debt last year} - \text{Bad debt this year}}{\text{Bad debt last year}} \times 100\% \)

Decrease in bad debt = Bad debt this year – Bad debt last year < 0

When extending credit scale and form of credit and debtors to develop credit activities, it is necessary to take into account the efficiency from high credit. Bank must limit the scope of credit extension. Expansion beyond the allowable limits will result in lower credit quality.

For customers, they want their borrowing needs to be met. If the need is accepted with a great attitude and simple procedures, it will attract a lot of good customers and
make credit easier and credit quality will be guaranteed. In addition, bank must have clear, appropriate credit policy, scientific organization, high quality staff, credit procedures, etc. that meet the needs of customers. Only then can the bank improve credit quality and reduce bad debt ratio in total outstanding loans.

The factors above will help expand bank credit yet still guarantee good quality of credit investment.

1.3.3 Factors Affecting on the Development of Enterprise Credit System at Bank

1.3.3.1 Capacity of the Entity Joining Enterprise Credit System at Bank

Two entities joining banking enterprise credit system are creditor (bank) and debtor (enterprise). Banking juridical credit relation is the relation of assets and goods arising during the process of using temporary capital between credit institutions and organizations and individuals on the principle of repayment based on trust or assurance, mandated by the law.

Capacity of the creditor is shown in the asset value that he holds and the ability to finance the debtor.

The capacity of the debtor is reflected in his juridical civil capacity, civil capacity and capacity of being liable before the law.

The ability of the entity to join the enterprise credit system at the bank is considered one of the prerequisite conditions for enterprise to choose bank and for bank to consider whether to lend money to enterprise.

1.3.3.2 Information Technology and Communication

For credit institutions, information technology (IT) is an effective tool in business management and ensuring safety. Enhancing the application of information technology in banking is a vital factor for banks. Increasing the application of information technology in order to renovate operation of management and administration, improve the effectiveness of internal control and enhance the risk management capacity is a key task in the renovation and modernization of banking system. Applying information technology to the credit system usually includes:

- Application of information and communication technologies to develop the administration management and internal management system: In addition to completing the core banking system to carry out daily transactions, banks set up the management system and internal management. Depending on management requirements, strategies, and development objectives, banks build their management systems in various levels. The daily transaction information of each customer is summarized and put into the report system.

- Risk management innovation: In parallel with the implementation and application of information technology in management and internal management, banks
are also interested in promoting the application of information technology to innovate and improve the quality of risk management. Many banks implement IT solutions in credit risk management, market risk, liquidity risk and operational risk.

- Enhancing check, internal control on IT activities: Credit industry is one of the riskiest so banks have done some technical solutions to ensure safety and information security. With IT application, banks can detect weaknesses and shortcomings in operation of enterprise customers, threats, possible risks, and evaluate correctly actual business operation of the customers.

- Profession management automation: IT applications help banks reduce time and expenses on dealing with profession relations, improve flexibility, and enhance performance. Several commercial banks have invested in research, project launch and some actually have implemented.

- Integration between IT systems.

- Data warehouse and information systems for operations: one of the most important solutions for analyzing, evaluating, forecasting and making decisions is building a bank data warehouse and information management and internal report system.

**1.3.3.3 Bank Credit Information Market**

Credit information activity is the collection, processing, and storage of credit information and provision of credit information products by credit information companies.

Bank credit information market is a place to store and provide necessary credit information to banks as well as those interested in this information system. This is a quite new concept in Vietnam.

At the beginning of 2010, the State Bank of Vietnam issued Decree No. 10/2010 / ND-CP on credit information activities and Circular No. 16/2010 / TT-NHNN as guidance of this Decree, which encouraged private organizations participate in the establishment of credit information centers. This is the right step to establish a credit market for enhancing the ability of commercial banks to monitor their finances and minimize risks.

**1.3.3.4 International Integration and Cooperation**

It is in 2015 that the ASEAN Economic Community (AEC) was established. The objective of the AEC is to form a single market for member states, including five key pillars: free flow of goods, free flow of services, free flow of skilled labor, free flow of investments and capital. Obviously, in the five pillars above, free flow of financial sector is one of the priorities that the AEC is aiming for. Accordingly, in the banking
sector, Vietnam accepts free flow of deposits, loans in various forms, free flow of means, payment forms and guarantees.

Obviously, together with WTO, AEC gives Vietnam not only countless opportunities, but also many challenges. With a number of commitments in the AEC, especially commitments in the service sector, Vietnam’s banking sector in general and commercial banks in particular with their credit services are strongly affected by this common market. Enterprise credit is one of the important services and it is the lifeblood of commercial banks. But can it develop or not? Is it in the right track? And can it compete when it comes to international integration and cooperation? It is directly affected by the environmental conditions caused by international integration.

1.3.3.5 Some Other Factors

* Objective Factors

- Socio-political environment: political and social stability enables enterprises to make investment decisions and scale up their production, thereby increasing the demand for loans. In the contrary, in unstable political-social environment, enterprises have to narrow their production scale so demand for capital will decrease accordingly.

- Economically developed environment: economic environment is a factor affecting the efficiency of business operations of enterprises. When the economic environment is stable in all aspects, banks and enterprises are well operating, credit is expanded. On the other hand, when the economy is deteriorating and losing stability, enterprises and banks will face a lot of difficulties.

- Juridical environment: legal system in general and particularly laws related to banking operations have a considerable impact on banking operations and development of credit system. In the developing countries like Vietnam, the legal environment is in the process of completion, there are many loopholes, despite the implementation, creating conditions for a group of enterprises to take advantage and do illegal business, fraud, and cheating. Banks are prudent or too cautious while making decision on lending.

In addition to that, the legal documents are constantly changing, so the benefits of banks and enterprises are not assured, which has a negative impact on credit development.

- Competitive environment: it is safe to say that this factor strongly affects the credit performance in particular and business of the bank in general. The impact occurs in two directions: first, to take advantages in competition, a bank always have to pay attention on investing in good equipment, increasing the qualified staff, consolidating and promoting its prestige and strength. This direction has facilitated the improvement of credit quality. However, in the second direction, under the pressure of fierce
competition, banks may leave out necessary credit conditions, which increases risks and reduces credit performance.

- Factors belong to enterprises: nowadays, most enterprises still have financial difficulties, limited access to credit due to low or insufficient assets; managerial experience is lacking due to newly established, poor financial management level, having family feature. Financial reports lack transparency and are inaccurate. Thus, banks are having difficulty in loan appraisal procedure.

Besides, the level of socio-economic and legal understanding of enterprise owners has positive implications for bank's credit expansion. Therefore, level of knowledge will leave impact on socio-economic development, affect bank policy mechanism on enterprise credit, access to banking products and services, and compliance with the credit rules, etc.

*Subjective Factors:*

Apart from objective factors, the subjective factors belonging to banks have a great influence on the expansion of credit to the enterprise, including the following factors:

- Organizational structure and operation structure of the bank system: The organizational structure and operation structure of the bank directly affects the expansion of the bank credit activities. The system of branches and transaction offices is reasonably distributed according to population density, which is a prerequisite condition for customers to have access to banking products and services. Customers will have difficulties in approaching if the bank is too far away from their production area. However, to open a branch or transaction office, banks have to spend a lot of money. Therefore, the bank must establish a balance between cost and benefit.

- Operational strategy and credit policies of the bank: based on the actual situation and each stage of development, bank develops operational strategies, which is concretized by policies such as credit policy, customer policy, etc. The credit policy reflects bank’s financing platform and has a direct impact on the development of credit services. A correct strategy with a long-term perspective and strong steps, a suitable credit policy will be a guideline for lending in the right direction, boosting credit to grow sustainably growth. Otherwise, it will hold back growth and credit expansion.

- Capital scale of a bank: the scale of the bank's capital represents the potential and strength of the bank, so the higher the capital itself, the stronger the bank's ability to develop its business in less restrictive areas. Currently, in Vietnam as well as many countries in the world, banks are only allowed to provide maximum loans to a single customer not exceeding a certain proportion of their own capital. This ratio depends on the regulations of each country.
Capacity and character of staffs: this is the most important factor that determines the success or failure of the expansion or reduction of activities of each bank in general and of credit activities in particular. With trained staffs who master and apply profession processes flexibly, credit activities will have many opportunities to develop and the risks will be curbed.

CHAPTER 2: ACTUAL STATE OF ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

2.1 GENERAL INTRODUCTION OF MARITIME BANK

2.1.1 Operation and Development Process

Vietnam Maritime Joint - Stock Commercial Bank (MSB) was established on July 12, 1991 in Hai Phong City pursuant to Business License No. 0001 / NH-GP. Its business activities include: monetary trading, credit and financial, monetary and banking services, etc. as stated in the Establishment and Operation License of Maritime Bank, License of Enterprise Registration and Compliance with Regulations of the Law on Credit Institutions and relevant current regulations of the law in order to serve customers in accordance with the predetermined business strategy.

Over the course of more than 25 years of existence and development, with the continuous efforts of the leaders, staffs of Maritime Bank have achieved many successes, creating their own strengths as well as self confidence to become one of the best commercial joint stock banks in Vietnam. It is possible to review important milestones of Maritime Bank on the recent development as follows:

Officially established in 1991 under the License No. 0001 / NH-GP dated on June 08, 1991 by the Governor of the State Bank of Vietnam, Maritime Bank became one of the first joint stock commercial banks in Vietnam; On July 12, 1991, Maritime Bank officially opened and came into operation with 24 shareholders and charter capital of 40 billion VND; It has developed several branches in big cities and provinces such as Hai Phong, Hanoi, Quang Ninh and Ho Chi Minh City.

In 2005, after the Asian Financial Crisis, Maritime Bank regained its balance and thrived since then. Also in 2005, the Bank officially moved its headquarter from Hai Phong City to Hanoi City with 16 transaction offices throughout Vietnam, opening a new stage of development with a significant expansion.

In 2007, its network increased to 39 transaction offices, twice as much as those in 2006, expanding transactions to provinces such as Da Nang, Nha Trang, Can Tho; At the same time, it signed strategic cooperation agreement with Vietnam Posts and Telecommunications Group (VNPT), opening a period of close co-operation between the two parties.
In 2009, Maritime Bank increased its charter capital up to 3000 billion VND; Formally signed the consultant agreement with McKinsey to develop a development strategy; And reached 109 transaction offices all over Vietnam.

In 2010, it continued to increase its charter capital to 5000 billion VND; launched a new brand identity, new logo with an impressive combination of red and black; move its headquarter to new a location - the Sky City Building, 88 Lang Ha, Hanoi; increased the number of transaction offices to 144 offices all over Vietnam.

In 2011, Maritime Bank increased its charter capital up to 8000 billion VND; With 202 transaction offices in Vietnam and a total number of 230 ATMs, it successfully connected with the International Master Card Organization; It was perfecting and upgrading products and services; Technology activities were increasingly focused to support network development and business development.

In 2014, it finalized and expanded the business model of the Community Bank; It successfully implemented the business finance model and consumer credit; It was selected as one of the first 10 banks to deploy Basel II; It was chosen to be one of the 5 most popular e-banking banks of 2014.

In 2015, it reached the position of one of the five largest commercial joint stock banks in Vietnam, after merging into Mekong Development Bank on August 12, 2015. It gained a total value of assets 104311 billion VND, with a charter capital of 11750 billion VND, a network of nearly 300 branches and transaction offices, and nearly 500 ATMs all over Vietnam.

It was in 2016 that Maritime Bank reached the milestone of 25-year development. In 2016, the Bank focused on investing in the base system to improve the quality of its products and services, to meet the strong and sustainable development scale of the bank at that time, as well as in the following years.

In 2017, Maritime Bank was rated by the Global Finance Magazine as the best bank in Vietnam in 2017. This is not only an honor for the bank, but it also affirms the efforts made by staffs of Maritime Bank.

Also during more than 25 years of construction and development, with endless efforts to improve and raise the quality of products and services to meet the needs of customers, with non-stop investment on technology, as well as charity activities contributing to the society and developing its brand, Maritime Bank has received honorable recognition from the community through the awards and noble titles. The continuous efforts of Maritime Bank staffs are to make Maritime Bank "a bank that is so good that everybody wants to join and no one wants to leave".

2.1.2 Operational Structure

With the vision of becoming the best commercial joint stock bank in Vietnam,
Maritime Bank determines that its fundamental strategy is to develop based on competitive advantage and always bring the best experience for users in all of the Bank operations. One of its competitive advantages is that the management capacity which is ensured throughout the maintenance of a good administration structure, good organizational model, and development of a strong core staff (Figure 2.1).
*In charge of assigned units*

**Figure 2.1: Operational Structure of Maritime Bank**


With the direction of law compliance and being consistent with the vision, mission and business strategy, the organizational structure of Maritime Bank is built up of multiple levels to ensure the management and implementation of strategic objectives in the most effective way. Where, the head of Bank's organizational structure is the General Assembly of Shareholders, followed by the Board of Directors (with its affiliated committees including the Credit and Investment Board, Board Higher Risk Committee, Board Risk Committee, HR Committee, Strategy Committee), Supervisory Board (with attached Internal Audit Unit). The Bank's Director General is also the Chairman of the Executive Board, directly managing the Bank's daily operations with 06 specialized banks and 08 support divisions / boards.

Maritime Bank assigns appropriate development strategies for each specialized bank, thereby providing customized products and services to meet the needs of each target group. In addition, 08 support divisions / boards with specialized functions are responsible for supporting and promoting business activities for specialized banks and ensuring stable operation of the Bank.

Maritime Bank's network of business units has been managed vertically, from headquarters to units, and horizontally managed by a cooperation of business units and support units. This model has confirmed its real effectiveness: policies are implemented synchronously and quickly from headquarter to business units and business results across the network are also closely managed, promoting promptly by the business management units at the headquarter. Despite this achievement, Maritime Bank is constantly researching and finding organizational improvement initiatives towards a more optimal model that is suitable for the next stages of development.

Operation method via a well-organized apparatus, scientific and high quality HR management, together with high quality control system, generates a strong foundation for Maritime Bank to deploy the vision-oriented strategy of becoming the best commercial bank in Vietnam.

**2.1.3 Performance in the Period of 2014 – 2016**

The performance of Maritime Bank in the period of 2014 - 2016 was reflected through a system of typical criteria reflecting the Bank's financial status, business outcome and credit activities. Regardless of domestic and international economic conditions, Maritime Bank always strives to pursue the goal of improving the quality
of its assets, focusing on exploiting its low capital sources to improve profitability, increasing service fee revenue and strengthening risk management and enterprise management.

2.1.3.1 Financial Status and Business Outcome

With the motto of sustainable development, in the past three years, instead of focusing on scale growth, Maritime Bank has paid more attention on managing its financial report system.

Table 2.1: Some Main Financial Criteria in the period of 2014 – 2016

<table>
<thead>
<tr>
<th>Criteria</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>104368741</td>
<td>104311276</td>
<td>92605862</td>
</tr>
<tr>
<td>Equity</td>
<td>9445683</td>
<td>13616249</td>
<td>13599986</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>162024</td>
<td>158032</td>
<td>164031</td>
</tr>
<tr>
<td>Mobilization</td>
<td>92369746</td>
<td>83312401</td>
<td>72341087</td>
</tr>
<tr>
<td>Deposits from customers</td>
<td>63218853</td>
<td>62615688</td>
<td>57586806</td>
</tr>
<tr>
<td>Deposits and loans from other credit institutions</td>
<td>25495893</td>
<td>17399382</td>
<td>10536234</td>
</tr>
<tr>
<td>Issuance of valuable papers</td>
<td>3655000</td>
<td>3297331</td>
<td>4218047</td>
</tr>
<tr>
<td>Net Profit Ratio / Total Assets</td>
<td>0.14%</td>
<td>0.11%</td>
<td>0.13%</td>
</tr>
<tr>
<td>Net Profit Ratio / Average Equity</td>
<td>1.51%</td>
<td>1.01%</td>
<td>1.03%</td>
</tr>
<tr>
<td>Bad debt ratio</td>
<td>2.61%</td>
<td>2.16%</td>
<td>2.17%</td>
</tr>
</tbody>
</table>

(Regular: The author’s summary)

Total assets at the end of 2015 equaled to that of the year 2014, which was 104.311 billion. By the end of 2016, total assets of the bank, decreasing slightly by 11% compared to that in 2015, reached 92.606 billion. The scale was adjusted according to the characteristics of fluctuations in 2016 and predetermined business orientation.

Equity in 2015 increased by 44% compared to 2014 and was maintained in 2016. The increase in equity strengthened the capital adequacy ratio for the Bank, which was very good before the merger. At the same time, it created a foundation for the growth of the following years.

In the mobilization of capital, Maritime Bank always focused on ensuring that the capital structure was efficient, stable and safe for operation. However, with the emergence and development of many new banks, capital mobilization in the period 2014 - 2016 tended to decrease, in which the sharpest decrease was in deposits and loans from other credit institutions.

The ROA, ROE, and bad debt ratios have been relatively stable over the years.
Profit before tax in 2015 fell 2.5% compared to that in 2014, partly due to the merger taking place that year. But by 2016 it increased again. The main cause of these changes was because the Bank continued gathering resources to handle bad debts, debt classification and provision for credit losses according to its aim to ensure strong financial stability in the coming years. Maritime Bank's net operating margin from 2014 to 2016 is shown clearly in the Chart 2.1.

Chart 2.1: Net Gain Structure of Business Activities of Maritime Bank in the period of 2014 – 2016 (Unit: billion VND)

(Recourse: Annual report of Maritime Bank in the period of 2014 - 2016)

2.1.3.2 Credit Performance

In parallel with the decline in total assets in the period of 2014-2016, Maritime Bank's credit performance also declined. The bank's mobilization structure for 2014-2016 is shown in the Chart 2.2. The decrease of the value of bank deposits is caused by reduced impact of the customer deposits and deposits of other credit institutions. Private issuance of valuable papers increased but not much. Although total deposits declined, Maritime Bank achieved certain successes in restructure its capital, gradually moving to a cost-effective, time-saving deposit source to optimize its profit.
In contrast to the decline of mobilizing activities, customer lending activity of Maritime Bank during this period had stable growth. Since 2014, Maritime Bank has taken strong steps to restructure its loan portfolio under a new business strategy with positive adjustments in the credit portfolio, towards efficiency and prudence. Therefore, outstanding loans at the end of 2015 were kept at 28.091 billion Dong, increasing 19.61 percent compared to 2014. That in 2016 increased 25.02 percent compared to 2015.

### Table 2.2: Some Criteria for Credit Activity in the Period of 2014 – 2016 of Maritime Bank

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unified Minimum Capital Requirement (CAR%)</td>
<td>15.70%</td>
<td>24.53%</td>
<td>23.6%</td>
</tr>
<tr>
<td>The ratio of outstanding credit balance to total deposits (%)</td>
<td>61.00%</td>
<td>39.00%</td>
<td>53.20%</td>
</tr>
<tr>
<td>Total mobilized capital for market 1 and valuable papers (VND billion)</td>
<td>66 874</td>
<td>65 913</td>
<td>61 805</td>
</tr>
<tr>
<td>Credit outstanding balance (including outstanding balance for business and individuals, commitments to guarantee and investment in enterprise bonds) (billion Dong)</td>
<td>39 352</td>
<td>50 126</td>
<td>54 223</td>
</tr>
<tr>
<td>Loans to customers</td>
<td>23 485</td>
<td>28 091</td>
<td>35 119</td>
</tr>
<tr>
<td>Individual</td>
<td>2 896</td>
<td>7 577</td>
<td>10 874</td>
</tr>
</tbody>
</table>
Some product segments such as small business loans, personal loans were secured assets with good growth and high profitability, however, the proportion of total outstanding loans was still low. Credit quality control has always been first priority. Bad debt ratio was kept at a stable level and complied with the debt classification requirements. Provisions were made under the regulations of the State Bank. Capital adequacy ratio remained stable at more than 15% during the State Bank of Vietnam's 9% requirement period and has been markedly improved over the years. By 2015, the capital adequacy ratio had increased by 8.83% compared to 2014 and almost the same in 2016.

2.2 OVERVIEW OF THE ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

Maritime Bank - Thai Nguyen Branch was opened and put into operation on November 16, 2010 at Newday Building, 182-184 Luong Ngoc Quyen Street, Thai Nguyen City. Its task is to serve individual customers and enterprise customers within the City in particular and Thai Nguyen Province in general. Convenience banking products are being deployed at Maritime Bank.

2.2.1 Enterprise Credit Activities at the Bank During the Innovation Period

2015 is considered an important milestone marking the renewal period not only of Maritime Bank but of all the member units. It was in 2015 that the Bank officially merged into Mekong Development Bank (MDB) and completed the acquisition of Vietnam Textile Finance Corporation (TFC). This event helped Maritime Bank increase its charter capital from 8 000 billion VND up to 11 750 billion VND. Its operating network increased from 221 up to 270 transaction offices all over Vietnam. It has the largest charter capital and largest network of non-state-owned commercial joint stock banks in Vietnam.

Also in 2015, Maritime Bank was one of the banks selected by the State Bank of Vietnam to implement risk management model based on the Basel II standard. Maritime Bank formally established the Basel II Center to manage and monitor the overall implementation of the program across the Bank to ensure the success of implementing the Basel II Baseline Safety Standard in accordance with the set timetable. This was one of the important activities to increase the risk management capacity of the Bank, to maximally ensure the benefits of its customers and shareholders.

With the change of the whole system, credit activities in the period of 2015 - 2016 of Maritime Bank Thai Nguyen also had noticeable changes. Total mobilized
capital in 2016 decreased by 4,670 million Dong, equivalent to 1.37%. In 2016, capital mobilization of the whole banking system was considered to have good growth, but that of Maritime Bank Thai Nguyen declined partly due to the effect of TFC acquisition, MDB merger, and restructuring of 49 branches and transaction offices of the whole system in 2015. Despite the reduction in capital mobilization, the outstanding loans to total deposits in 2016 increased by 1.38%. Outstanding loans increased by 2,893 Million VND (equivalent to 2.27%), showing that financial package with outstanding benefits for each customer segment that Maritime Bank deployed since 2015 was working effectively. However, the growth of outstanding loans was often accompanied by the risk of bad debt, so Maritime Bank Thai Nguyen and the whole system had better pay great attention to control this risk.

Table 2.3: Enterprise Credit Activities at the Maritime Bank Thai Nguyen

<table>
<thead>
<tr>
<th>During the Innovation Period</th>
<th>2015</th>
<th>2016</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ratio of outstanding credit balance to total deposits (%)</td>
<td>37.41%</td>
<td>38.79%</td>
<td>1.38%</td>
</tr>
<tr>
<td>Total mobilized capital (VND billion)</td>
<td>340.631</td>
<td>335.961</td>
<td>-1.37%</td>
</tr>
<tr>
<td>Outstanding credit balance (including outstanding credit balance for enterprises and individuals, guarantee commitment and investment in enterprise bonds) (million Dong)</td>
<td>127,425</td>
<td>130,318</td>
<td>2.27%</td>
</tr>
</tbody>
</table>


With the total mobilized capital in 2015, Maritime Bank Thai Nguyen contributed 0.51% to the total mobilized capital of the whole system. This number increased to 0.54% by 2016, which showed efforts of the staff of Thai Nguyen Branch.

Chart 2.3: Mobilized Capital Contribution of Maritime Bank
Thai Nguyen to total Mobilized Capital of the Whole System in the Innovation Period

Credit loan balance in 2015 contributed 0.25% to the credit loan balance of the whole system. Though in 2016 credit loan balance increased compared to that in 2015, the speed was not able to follow that of the whole system, making the credit loan balance contribution of Maritime Bank Thai Nguyen to the whole system slightly decrease comparing to that in 2015.

![Chart 2.4: Credit Loan Balance Contribution of Maritime Bank Thai Nguyen to the Whole System In the Innovation Period](image)

2.2.2 Latent Risks and Formation of the Enterprise Credit System

At Maritime Bank, credit activity, including enterprise credit, is one of the main contributory factors to its revenue and profits. Therefore, in order to operate effectively and minimize the potential risks, Maritime Bank's member units are quite interested in information that supports credit granting decision. Latent risks are often in the Bank's credit procedure and even in credit loan balance growth.

To identify latent risks, the Bank needs to be able to analyze, evaluate and manage risks effectively. In order to carry out risk analysis, assessment and management, ever since its establishment, Maritime Bank has built specialized risk management components. Since 2013, it has completed its organizational structure of credit risk management, established credit risk management units for each segment of specialized customers: enterprises, large enterprises and financial institutions, individuals, and public banks. At the same time, the Bank also completed and continued to implement the framework for credit risk management, the set of credit risk management criteria, applied different credit policies to each client, and aimed to balance profit and risk.

In addition, to improve the quality of measurement, warn and manage credit
risks, since 2013, the credit risk models at Maritime Bank have been reviewed, upgraded, reconstructed, and used for all of its customers. Its success was that the Bank successfully established the small enterprise customer rating tool, the enterprise customer sorting and rating tool (CSC) and the tool for early warning risk debt for enterprise customers (EW). Maritime Bank has been reviewing its internal credit rating models, preparing a database that complies with the Circular 02 of the State Bank of Vietnam and aims to comply the Basel II international risk management. In addition, Maritime Bank conducts credit risk monitoring according to best practices. Monitoring results are regularly reported to the State Bank of Vietnam and within Maritime Bank, creating a channel of information and credit information management, which is the basis for bad debt treatment, debt classification and risk provision.

Being a branch of Maritime Bank, Maritime Bank Thai Nguyen not only have risk management and enterprise credit system with the characteristics of Maritime Bank but they also fully comply with its regulations.

In order to limit credit risk, the Bank and its branches strictly follow the law, as well as internal regulations related to credit, lending and operations of credit institutions. At the same time, to control the latent risks from credit activities, Maritime Bank and Thai Nguyen Branch classify debts by quantitative method (classified according to Article 6, Decision 493/2005 / QD). - NHNN dated on April 22, 2005 on "Debt classification, provision and use of provisions to deal with credit risks in banking activities of credit institutions." Outstanding loans are divided into 5 groups as following:

- Group 1 (standard debt);
- Group 2 (Debt that needs attention);
- Group 3 (substandard debt);
- Group 4 (doubtful debt);
- Group 5 (potentially bad debt).

Credit risk is latent in problematic loans and manifests itself in a variety of forms, and the above debt classification helps credit officers identify and anticipate in advance, and prevent risk from occurring.

The latent risk exists in Maritime Bank's enterprise credit activity, which has a direct impact on the enterprise credit decision-making of the bank and its branches, including Thai Nguyen branch. Therefore, the Bank and its affiliates are interested in organizing enterprise credit system at banks so that they can minimize the latent risk of losing bank's profit. The enterprise credit systems of Maritime Bank and its branches assigned to the enterprise banks include: internal documents system related to enterprise credit, credit programs for different enterprise types, enterprise credit
approval procedures, enterprise asset valuation procedures, enterprise credit information systems, enterprise sorting and rating tools.

1) Internal Documentation System Related to Enterprise Credit: the internal documents system related to enterprise credit of Maritime Bank is built on the characteristics of enterprise banking operations. It complies with the laws and regulations of the State Bank of Vietnam.

(2) Credit Programs for Different Enterprise Types: Up to now, Thai Nguyen has about 2000 enterprises operating mostly as small, medium, and micro enterprises. Obviously, it is a potential area to exploit on credit services for various types of enterprises. Accordingly, Maritime Bank Thai Nguyen has been developing credit programs for small enterprise customers, micro enterprises and enterprises joining the supply chain.

(3) Enterprise Credit Approval Procedure: it is developed in a scientifically rigorous manner by the Bank for each entity and type of enterprise credit, saving time on processing documents. The Enterprise Credit Approval Procedure is divided into: new / reassignment approval procedure; credit adjustment procedure; approval process with secured credit granting; adjustment process with assurance; and flow chart of professional segment system.

(4) Enterprise Asset Valuation Procedure: enterprise asset valuation is applied to medium and long term loans.

(5) Enterprise Credit Information System: Based on the profile of the credit applicants, combining with interviews, surveys and information collection by professional operation, the information related to enterprises will be processed by specialized software system and stored in accordance with the bank's regulations.

(6) Tool for Sorting and Rating Enterprise Credit: it is specified through the set of criteria for sorting and rating enterprise credit in combination with tool manual. Currently, the entire Maritime Bank system is using the Pre-Sorting Criteria, the Customer Rating Criteria (CSC) and the sorting tool - rating customer segmentation of enterprise customer transaction (CSC-TB).

2.2.3 Enterprise Credit Activity Over Different Periods and History of Credit System

Thai Nguyen is considered to be one of the potential markets with more than 2000 enterprises in operation. Hence, the capital needs of enterprises are relatively high. The period of 2010 - 2012 was a difficult time of Maritime Bank Thai Nguyen, because it was penetrating Thai Nguyen market, building facilities, and training personnel. Products for enterprise customers deployed by Maritime Bank Thai Nguyen were the same as those of Maritime Bank in this period.
In the period of 2013 - 2014, the Branch initially obtained first results. In 2013, the total mobilized capital of the branch was 280,377 million VND, contributing 0.41% to its total mobilized capital. In 2014, this figure increased by VND 33,952 million VND (equivalent to 12.1%), which was 314,329 million VND, contributing 0.47% of total mobilized capital.

**Chart 2.5: Total Mobilized Capital Contribution of Maritime Bank Thai Nguyen into the Total Mobilized Capital of the Whole System in the Period of 2013 - 2014**

Credit outstanding balance in 2013 reached 57,339 million VND, contributing 0.21% to the total outstanding balance of the whole system. However, in 2014, it dropped sharply to 9,698 million VND, contributing only 0.02% to total outstanding balance. One of the main reasons for this was that, from 2013 to 2014, other than existing branches in Thai Nguyen, Vietcombank (SHB) and SHB (2014) were established.

**Chart 2.6: Credit Outstanding Balance Contribution of Maritime Bank Thai Nguyen into the Credit Outstanding Balance of the Whole System in the Period of 2013 – 2014**

After this period, Maritime Bank Thai Nguyen went into the innovation period, with considerable changes, gradually penetrated into Thai Nguyen Market and gained
some market share here.

2.3 ACTUAL STATE OF THE ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

2.3.1 Legal Framework and Organization of Enterprise Credit System

2.3.1.1 System of Legal Documents on Current Enterprise Credit

Enterprise credit activities at Maritime Bank Thai Nguyen comply with the law and internal banking regulations. At present, this activity is affected by the legal document system of enterprise credit including:

- Law on Credit Institutions No. 47/2010 / QH12;
- Circular No. 39/2014 / TT-NHNN dated on December 30, 2016 by the Governor of the State Bank of Vietnam on lending activities of credit institutions and foreign bank branches to customers.
- Circular No. 07/2015 / TT-NHNN dated on June 25, 2015 by the Governor of the State Bank of Vietnam on bank guarantees;
- Circular No. 02/2013 / TT-NHNN dated on January 21, 2013 by the Governor of the State Bank of Vietnam on the classification of assets with deduction levels, methods of risk provision and the use of provisions to deal with risks in the activities of credit institutions, foreign bank branches, amendments and supplements;
- Decision No. 1627/2001 / QD-NHNN dated on December 31, 2001 by the Governor of the SBV on the issuance of the regulations on loans by credit institutions to customers;
- Consolidated Letter No. 33 / VBHN-NHNN dated on June 08, 2016 of the State Bank of Vietnam, consolidated Circular No. 04/2013 / TT-NHNN dated January 01, 2013 by the Governor of the State Bank of Vietnam on extraction activities. Transfer negotiable instruments, other credit institutions, State Bank of Vietnam branches to customers; Circular No. 21/2016 / TT-NHNN dated on June 30, 2016 by the Governor of the State Bank of Vietnam amending and supplementing some Articles of Circular No. 04/2013 / TT-NHNN;

2.3.1.2 Organization of Credit Enterprise System

Based on the system of legal documents related to credit institutions, and credit activities of banks, Maritime Bank Thai Nguyen has concretized into internal institutions and documents for its enterprise credit system includes:

- Regulation No. QC.BM.001 dated on November 06, 2013 by the Board of Directors on the organizational structure of Martime Bank;
- Regulation No. QC.BM.012 dated on March 30, 2012 by the Board of Directors on Organization and Operation of the Risk Management Committee;
- Regulation No. QC.RR.012 dated December 08, 2016 by the Board of Directors
on Credit Risk Management;

- Regulation No. QC.BM.012 dated on March 30, 2012 by the Board of Directors on Organization and Operation of the Risk Management Committee;

- Regulation No. QC.BM.004 dated on August 01, 2013 by the Board of Directors on the organization and operation of the Credit and Investment Council;

- Regulation No. QC.TD.006 dated on August 29, 2016 by the Board of Directors on the Regulation on competence to approve credit granting;

- Regulation No. GDD.TD.064 dated on November 01, 2016 by the Director General on the policy of credit at Enterprise Bank.

- Regulation No. TD.023 dated on June 23, 2016 by the Director General on Asset Policy to secure credit granting;

2.3.2 Actual State of the Credit Enterprise System

Since its foundation, Maritime Bank Thai Nguyen has gradually affirmed its presence in this area. However, Maritime Bank Thai Nguyen only deployed and developed four packages out of 12 packages of enterprise credit services, namely short-term and medium-term loans; guarantee; loan financing by trust investment and L/C deposit, of which short and medium term loans account for the highest proportion. It can be generally appreciated that the current enterprise credit system is at an early stage of development, and that it has not yet brought into play the efficiency of the system of equipment, technology, people, and potential of the credit services that banks are deploying.

Chart 2.7: Credit Service Ration at Maritime Bank Thai Nguyen in the Period of 2011 – 2016
2.3.2.1 Actual Stat of Organization of The Information System and Enterprise Credit Rating

To make a credit decision for the enterprise who is really in need and minimize credit risk, Maritime Bank, particularly Maritime Bank Thai Nguyen, directly the credit officers will collect information of the enterprise applying for credit. Collecting and exploiting information is carefully and carefully conducted by the Bank, as well as by credit officers, through a variety of sources, including business records, from the mass media, statistical database, regulatory documents system, direct interview information (managers, sales executives, transaction officers, sales staff, business partners). Information is stored in the shared data warehouse of banks. For instance:

* **Preliminary record**: CIC (CIC enterprise outstanding credit, owner / supervisor decision, CIC asset assurance); Business Registration license (or equivalent document) / Establishment and Operation License or Investment License / Investment Certificate / Establishment License / Establishment Decision or equivalent valid document; Financial report of the last two years; Details of the enclosed items of the latest fiscal year; Monthly consolidated tax returns of the most recent year and up to the last month of the current year; Request tax declarations submitted to the tax office with electronic signatures downloaded from the tax office's website; Economic contracts / orders of suppliers, output customers as prescribed; Statement of bank account in the latest 12 months, the time of submission of credit to ensure verification of at least 50% of revenue of the same period; Offer valuation and Asset Documentation; Reporting customer information, etc.

* **Legal documents of enterprises**: Documents proving legal character; Organizational and operational charter; ID card / citizen identification card / passport of the representative at law; Decision on the appointment of the representative at law, etc.

* **Project legal documents**: Approval documents / investment decisions of the General Committee of Shareholders / Board of Directors / Member Council, Management Board or other levels stated in the charter or other internal documents of the debtor; Investment License; Mining permit; Project Progress Report, etc.

* **Business profile of the customer**: income statement; Economic contracts and bank statements.

* **Credit application**: Credit proposal and Credit granting plan; Investment plan / Investment report / Economic-technical report; Credit contract or credit approval at other credit institutions; Agreements and other documents proving the feasibility of the project / repayment plan / Principle contracts / Output contracts, etc.
* **Security Asset Documentation:** Comply with the relevant regulations on security asset records at the Bank of Vietnam in each period.

* **Enterprise rating:** Maritime Bank develops credit programs for enterprise customers based on the principle of synchronized coordination between departments and divisions at enterprise banks. The Market and Potential Customer segment performs pre-sorting by sector, time, scale, CIC history, and other criteria from time to time to identify potential customer in the target banking segment of the enterprise bank. Sorting questions based on the Enterprise Finance Report are the first sorting questionnaire to remove potential customers who do not meet the basic requirements of the Credit Program at the Maritime Bank. The Presorting questionnaire will only be applied after full financial details are collected, after the first meeting with the customer. All rows must be graded and rated according to the CSC questionnaire with a set of thresholds that are secure and integrated in the customer rating system. Based on the CSC rated customer, depending on the customer's credit needs and the determinants, the customer will be granted credit under the Credit Criteria Set.

**2.3.2.2 Actual State of Personnel System**

In order to maintain the operation of the branch and the enterprise credit system in the right direction, according to the general objective of the entire bank, the personnel system at Maritime Bank Thai Nguyen is organized as the Figure 2.2.

![Figure 2.2: Organization Diagram of Personnel System of Maritime Bank Thai Nguyen](image-url)

After almost seven years of existence, Maritime Bank Thai Nguyen's staffs have grown steadily in terms of quantity and quality, with 33 people, most of whom graduated from university. From the foundation of this team, Maritime Bank in general, Thai Nguyen Branch in particular, always attaches great importance to investing strongly in training and development of resources and activities that play a
key role in improving the quality of human resources, creating a foundation of a high-performing culture. Every year, Maritime Bank Thai Nguyen has sent its officers and employees to on courses organized by Maritime Bank, including: Chain of sales training program "Retailer" of Retail Banking, Awareness on "Money Laundering Prevention," a series of training programs on management planning.

2.3.2.3 Evaluating the Satisfaction of Enterprise Customers with Enterprise credit services of Maritime Bank Thai Nguyen

To evaluate the satisfaction of enterprise customers with enterprise credit services of Maritime Bank Thai Nguyen, the author used a questionnaire to sample 120 small and medium enterprises in Thai Nguyen Province, 69 of whom are now customers of Maritime Bank in Thai Nguyen. The result is:

Regarding the enterprise structure surveyed by equity: Of the 120 surveyed enterprises, 6.7% have less than 500 million VND; 8.3% have business capital from VND 500 million to VND 1 billion; 58.3% have business capital of over 1 billion VND to 10 billion VND; and the remaining 26.7% have business capital of more than 10 billion VND to 50 billion VND.

![Chart 2.8: Structure of Enterprise Surveyed by Equity](image)

(Chart 2.8: Structure of Enterprise Surveyed by Equity)

(Source: Survey outcome of the author)

Regarding Main Business Sectors of the Surveyed Enterprises:

About 25.83% of surveyed enterprises operate in the production sector, 12.5% in the agricultural sector, 45% in the commercial and service sectors, and 16.67% in the field of construction.
Table 2.4: Main Business Sectors of the Surveyed Enterprises

<table>
<thead>
<tr>
<th>Sector</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>31</td>
<td>25.83</td>
</tr>
<tr>
<td>Agriculture</td>
<td>15</td>
<td>12.50</td>
</tr>
<tr>
<td>Service and Commerce</td>
<td>54</td>
<td>45.00</td>
</tr>
<tr>
<td>Construction</td>
<td>20</td>
<td>16.67</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(Source: Survey outcome of the author)

Regarding the ratio of borrowing money from banks:

Table 2.5: the Ratio of Borrowing Money from Banks of the Surveyed Enterprises

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 10%</td>
<td>28</td>
<td>23.14</td>
</tr>
<tr>
<td>From 10% to 20%</td>
<td>50</td>
<td>42.00</td>
</tr>
<tr>
<td>From 20% to 40%</td>
<td>34</td>
<td>28.29</td>
</tr>
<tr>
<td>From 40% to 60%</td>
<td>8</td>
<td>6.57</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(Source: Survey outcome of the author)

Most of the enterprises in the survey are small and medium, even micro, so accessing to medium and long-term loans that require collateral is relatively difficult. Therefore, in the surveyed 120 samples, only 6.57% have a loan ratio of 40% - 60%; 28.29% have a loan ratio of 20% - 40%; the majority (up to 42%) have a loan ratio of 10% - 20%; and the remaining 23.14% has a loan ratio of less than 10%.

Regarding the total amount of transactions through the bank:

Table 2.6: Total Amount of Transactions through the Bank

<table>
<thead>
<tr>
<th>Amount</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 500 million VND</td>
<td>5</td>
<td>4.17</td>
</tr>
<tr>
<td>From 500 million to 1 billion VND</td>
<td>25</td>
<td>20.83</td>
</tr>
<tr>
<td>From 1 to 10 billion VND</td>
<td>69</td>
<td>57.50</td>
</tr>
<tr>
<td>From 10 to 100 billion VND</td>
<td>16</td>
<td>13.33</td>
</tr>
<tr>
<td>From 100 to 500 billion VND</td>
<td>5</td>
<td>4.17</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(Source: Survey outcome of the author)

Due to the small size of enterprises, plus the habit of using cash of Vietnamese people, the volume of transactions through banks of the surveyed enterprises is mainly from 1 billion to 10 billion VND (accounting for 57.5%). The rest are at other levels.

Regarding the credit services that invested enterprises are using:

Among surveyed enterprises, up to 100% of enterprises are using concurrent
credit services at 2 or more banks. Credit services provided by banks are typically short-term, medium-term, long-term loans, project loans and valuable papers. Among these services, 43% are short-term loans; 21% are medium-term loans; and 13% are long-term loans; and the rest are on other credit services.

**Table 2.7: Used Enterprise Credit Services**

<table>
<thead>
<tr>
<th>Service</th>
<th>Maritime Bank</th>
<th>Viettinbank</th>
<th>Vietcombank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short term lending</td>
<td>32</td>
<td>89</td>
<td>10</td>
</tr>
<tr>
<td>Medium term lending</td>
<td>12</td>
<td>47</td>
<td>4</td>
</tr>
<tr>
<td>Long term lending</td>
<td>9</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Project financing</td>
<td>2</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Financing package in special sector</td>
<td>6</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Exporting Financing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Importing Financing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Business overdraft</td>
<td>0</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Factoring</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Loan on discounted valuable papers</td>
<td>8</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Foreign currency denominated loans</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Leasing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(Source: Survey outcome of the author)

Although banks provide quite a number of credit services to enterprises, it is often difficult for small and medium enterprises to access long-term loans because of the constraints associated with collateral to access these loans.

For Maritime Bank in general, the strong enterprise credit services lending and financing enterprises in the field of construction, investment, import and export. However, Thai Nguyen Branch has exploited some of this strength.

*Regarding the satisfaction of the surveyed enterprises for enterprise credit services provided by the bank:*

As mentioned in the previous section, 69 out of 120 surveyed enterprises are using enterprise credit services of Maritime Bank Thai Nguyen. Most of the enterprises rate their satisfactions with the enterprise credit provided by the Branch 2 to 5 points (2: Not satisfied, 3: Normal, 4: Satisfied, 5: Very satisfied). Average score was 3.95 points (meaning that new enterprises are quite satisfied with enterprise credit services at the Branch).

The satisfactions with special services are:
Table 2.8: Satisfaction of Enterprises with the Enterprise Credit Services of Maritime Bank Thai Nguyen

<table>
<thead>
<tr>
<th>Service</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short term lending</td>
<td>3.90</td>
</tr>
<tr>
<td>Medium term lending</td>
<td>3.95</td>
</tr>
<tr>
<td>Long term lending</td>
<td>3.75</td>
</tr>
<tr>
<td>Project financing</td>
<td>3.85</td>
</tr>
<tr>
<td>Financing package in special sector</td>
<td>4.25</td>
</tr>
<tr>
<td>Loan on discounted valuable papers</td>
<td>4.00</td>
</tr>
</tbody>
</table>

(Source: Survey outcome of the author)

Traditional credit services including short-term, medium-term, long-term loans and project investment loans have lower levels of satisfaction than the rest of the services, meaning traditional credit services need to innovate its service quality.

2.3.3 Achievements of the Enterprise Credit System

Granting credit to customers helps enterprises meet their capital needs, creates more jobs and increase incomes for workers, and contributes to the overall development of the national economy as well as local economy. Enterprise credit quality is under control. Overdue debt ratios and loans are lower than expected. The credit structure is adjusted at a reasonable level, not concentrating in one or more sectors of the business.

In 2010, Maritime Bank officially put Thai Nguyen Branch into operation with the goal of exploiting the potential of a province with over 2,000 enterprises. After 7 years of construction and development, Maritime Bank has 3 branches in Thai Nguyen, also during this period, the Branch in Gang Thep did not work effectively so it had to officially suspended operation. The Office at Bao Viet Building, 51 Hoang Van Thu Street, Phan Dinh Phung Ward, Thai Nguyen City, focuses on providing enterprise customers in the city in particular and Thai Nguyen Province in general with utilities deployed at Maritime Bank such as: short, medium and long-term loans, payment services between customers, trading foreign currencies, gold and silver pursuant to international standards in the domestic market. And foreign; Perform international payment operations. In particular, the Branch focuses on deploying lending products to small and medium enterprises; small business loans; loans for production, business and services.

The outstanding achievements of Maritime Bank Thai Nguyen in the past years:

In 2010, it officially entered the Thai Nguyen market, focusing on developing the core value of credit products for small and medium enterprises (SMEs). With the
development of the core value of credit products, the processing time of credit applications for enterprise customers is shortened down to 3-4 days. The assets are priced quickly, accurately, professionally, close to market price. When penetrating this market, Maritime Bank Thai Nguyen paid special attention to the development of a professional team, taking care of each and every customer. Also in this period, it implemented new banking products to serve enterprise clients, including:

+ M - Business products with outstanding features such as: tariff incentive services; highest interest rate of payment account on the market; Top and free Internet Banking and sms Banking;

+ Online banking services;
+ Guarantee package;
+ Overdraft on payment deposit account

In 2011, after one year in operation, the Branch had granted credit to 21 enterprises in the city with the total amount of nearly 69 484 million Dong. It carried out 01 guarantee contract worth 70 billion VND and provided loans by investment capital of over 7 665 million VND.

In 2012, along with the whole bank, Maritime Bank Thai Nguyen continued to perfect the modern payment features to provide the most efficient and convenient financial solutions for enterprise customers. In addition, with the goal of diversifying the product portfolio, serving the increasing demands of customers, the Bank launched a series of new products with many advanced financial services suitable for each and every customer. The Platinum VIP package is a specialized product that best meets the cash flow needs of corporations and groups with subsidiaries, independent units and affiliates. With outstanding features such as completely free service, attractive deposit rates, cash flow stream of affiliates and making transactions on Internet Banking convenient, VIP Platinum is one of the most important products of Maritime Bank.

Also in 2012, Maritime Bank Thai Nguyen continued to maintain credit activities for 13 enterprises from 2011, granting credit to 4 new enterprises, making it more than VND 229983 million VND in total. It made 01 L/C deposit contract equivalent to 61 665 million Dong and provided loans with investment capital and trust equivalent to over 6 570 million Dong.

In 2013, Maritime Bank Thai Nguyen only maintained a credit contract with six traditional customers, with total outstanding loans of VND 37 588 million VND. It performed 02 guarantee contracts equivalent to 30 047 million Dong and 01 deposit contract equivalent to 90 275 million Dong.
In 2014, due to the potential growth of the SME segment, the Bank spent a lot of effort to restructure its SME business model, ready for economic growth. Significant changes in the model include:

- Transforming business development from product-oriented into customer-oriented. The implementation of this model helped SMEs focus on the all resources for customer development and care, creating many different and systematic values. At the same time, it strengthened the connection of products together with the aim of serving the demand of customers as much as possible. With every customer who passed carefully selected criteria, SME always approached on the basis of the desire to become the main partner, supplier as well as business plan of the customer.

- On the basis of customer-oriented, SME divided customers into three segments: comprehensive credit customers, credit transactional customers and non-credit customers. Segmentation assist business administration and promotes specialized operation from the headquarter down to each enterprise customer center.

- The entire SME business network was transformed into a retail SME business model.

In 2014, Maritime Bank Thai Nguyen faced the worst credit growth in its entire development period. Former credit contracts were disbursed; branches opened two new credit contracts with two new enterprises; outstanding credit balance was only 908 million. It maintained a margin contract equivalent over 55 770 million VND.

In 2015, the Bank consolidated its sales approach, built a financial solution package with superior benefits for each customer segment, and increased the confidence of the enterprise community.

- Develop a closed approach and management model by identifying potential customers to access appropriate product packages to meet the needs of not only financial services of both leaders and officers in that enterprise. By this way, Martime Bank Thai Nguyen has step by step increased credit relations and transactions with customers, ensuring effective exploitation of the existing customer list, expanding new customers in the province.

- Improving products and services such as receivables financing, import financing, chain financing, etc., to provide enterprise customers with a variety of options suitable with comprehensive financial solutions. Especially, major improvements of Internet Banking, including the Mobile App with many deployed applications, have contributed significantly to increase user autonomy, interactivity and user convenience, reducing procedures when needed transaction. This is one of the typical activities to enhance service experience of enterprise customers. These efforts have helped Maritime Bank Thai Nguyen gain more and more trust from the business
community in 2015. Compared to the bleak of 2014, in 2015, Maritime Bank Thai Nguyen signed credit granting agreements with 12 enterprises, with total outstanding credit balance of nearly 31 692 million VND. It made 08 guarantee contracts with the total value of 5 199 million VND.

In 2016, following the development of 2015, Maritime Bank Thai Nguyen continued to expand its market share, signed credit contracts with 19 enterprises with total outstanding credit balance of 88 660 million Dong, and guaranteed for 6 enterprises with total contract value of 24 285 million VND.

![Graph showing the number of enterprises and outstanding credit balance over years]

**a. The Number of Enterprises**

**b. Outstanding Credit Balance**

**Chart 2.9: Some Achievements of the Enterprise Credit System at Maritime Bank Thai Nguyen**

### 2.3.4 Drawbacks and Difficulties of Current Enterprise Credit System

During nearly 7 years of operation, Maritime Bank Thai Nguyen has gradually exploited the market and achieved certain achievements, but compared to competitors with more years of experience in the area, Martime Thai Nguyen Bank encountered countless difficulties like:

- Difficulties in approaching enterprises in the area, especially those with high loyalty to perennial banks and are afraid to change. According to a survey by the author Ngo Thuy Ha (PhD thesis at the Central Philippine University), she conducted an evaluation of the factors affecting the loyalty of institutional clients to the banks that set up branches in Thai Nguyen before 2010 (so-called the old bank group) and banks that set up branches in Thai Nguyen after 2010 (so-called new bank group), including BIDV (1996) Agribank (2003), VIB (2007), VPBank (2008), Vietinbank (2009), Techcombank (2008); ABBank, ACB, Maritime Bank, MB Bank, NCB Bank (2010), East Asia, Sacombank, Seabank (2011), Vietcombank (2013), SHB (2014), Lienvietpostbank and Shinhan Bank (2015). The results showed that among the 350 surveyed enterprises, 312 enterprises used credit services of the old bank group and the
overall satisfaction was 3.41. Only 38 enterprises used credit services of the new bank group and the average satisfaction is 3.18. This result showed that, for banks that set up branches in Thai Nguyen after 2010, particularly for Maritime Bank Thai Nguyen, it was very difficult to attract enterprises to use their credit services if there is no difference in quality and service in each product offered to this customer group.

- The network has not been expanded in the areas or districts far from the city center. By the end of 2016, Maritime Bank Thai Nguyen had only three branches, mainly in Thai Nguyen, while BIDV had 10 branches, Vietinbank had 34 branches and transaction offices, and Agribank had 30 branches and transaction offices throughout the province.

- The competition between commercial banks was increasingly fierce while the branch still did not create any advantage of enterprise credit services so the ability to attract customers was not high.

- Enterprise customer information storage system at Maritime Bank Thai Nguyen is still handy and has not exploited the efficiency of information technology and specialized software, making it difficult to search customer information of disbursement at the branch in the previous 5 years. This also greatly affects the operation of enterprise credit system.

- The staffs of Maritime Bank Thai Nguyen are quite young, 1/3 of whom are under 27 years old. Their actual work experience is not really much. Their ability and experience to attract customers in comparison with competitors are very limited, which also significantly affects the efficiency of the Branch's credit system.

### 2.3.5 Evaluation of Development of the Enterprise Credit System

Since it has been established for less than 10 years, in general, enterprise credit system in Maritime Bank Thai Nguyen, compared with other competitors, has certain limitations, but we can see that Maritime Bank Thai Nguyen has made certain efforts in developing its enterprise credit system.

As mentioned in Chapter 1, the evaluation of development of the enterprise credit system should be based on qualitative and quantitative criteria. Accordingly, it is possible to evaluate the level of development of the enterprise credit system at Maritime Bank Thai Nguyen as follows:

**Firstly, the satisfaction of enterprise customers for credit services provided by Maritime Bank Thai Nguyen**

If the given scores are from 1 to 5, where 1: Very dissatisfied, 2: Not satisfied, 3: Normal, 4: Satisfied, 5: Very satisfied, survey results as mentioned in the section 2.3.2.3, the average score of the 120 surveyed enterprises (69 of whom have been granted credit by Maritime Bank Thai Nguyen) is 3.95. While the results of a survey of
350 enterprises by Ngo Thuy Ha (PhD thesis at the Center Philippine University), the average score for banks including Maritime Bank Thai Nguyen Province is only 3.18. This shows that the enterprise credit service of Maritime Bank Thai Nguyen has not really attracted enterprises.

Secondly, the growth speed of enterprise credit at Maritime Bank Thai Nguyen

![Chart 2.10: Credit Development Speed in 2012 – 2016](chart)

Chart 2.10 shows that the credit growth rate of Maritime Bank Thai Nguyen during 2012 - 2016 was extremely unstable, with negative growth periods, which had a considerable impact on the results of the evaluation of the level development of the branch

Thirdly, the satisfaction of enterprise customers for separate services of Maritime Bank Thai Nguyen

In the result given in Section 2.3.2.3, although the branch provides a lot of specialized credit services to enterprise customers, for these credit services, the highest score obtained from the investigation 120 enterprises only reached 4.25, the lowest is 3.75 (See Table 2.7 for details). This shows that the new credit system only partly satisfies customers in the market that Thai Nguyen Maritime penetrating.

Fourthly, the growth rate of the number of enterprise customers

![Chart 2.11: Customer Growth Rate in 2012 – 2016](chart)

Chart 2.11: Customer Growth Rate in 2012 – 2016

Like credit growth, Maritime Bank's customer growth in Thai Nguyen was not
stable. It was negative in the early years of operation and sharply increased in the early innovation period.

Fifth, expansion of credit forms

Like Maritime Bank, Thai Nguyen Branch focuses on strengths related to import, export, construction and investment. Accordingly, during the past seven years, the Branch has focused on developing and exploiting its strengths, maintained traditional forms of credit granting but concentrated on reforming credit procedures. As a result, along with the whole system, the processing time and credit of enterprises of Maritime Bank Thai Nguyen is considered the fastest compared to other banks operating in the area.

2.4 COMPARISON OF ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN TO SOME BIG COMMERCIAL BANKS IN VIETNAM

In general, the credit procedure of Maritime Bank, Vietcombank, Vietinbank or any other commercial banks in Vietnam has gone through the following steps: Credit analysis; Credit Decision and Disbursement. Structure of enterprise credit system in the bank usually includes 3 parts: Analysing System of Enterprise Credit; Rating System of Enterprise Credit and Enterprise Credit Levels. Comparison of enterprise credit system between banks. In this study, Comparison of enterprise credit system between Maritime Bank Thai Nguyen to some big commercial banks in Vietnam just focus on analyzing, comparing the corporate credit rating system, because this part in each bank has certain differences that make its characteristics.

2.4.1 Joint Stock Commercial Bank for Foreign Trade of Vietnam (Vietcombank)

The former Bank for Foreign Trade of Vietnam (BIDV), now known as Vietcombank, was established on April 1, 1963. Its predecessor is the Foreign Exchange Department (belonging to the State Bank of Vietnam). Being the first state-owned commercial bank selected by the Government to pilot equitization, Vietcombank officially operated as a joint stock commercial bank on June 2, 2008 after completing equitization plan through the initial public offering of shares. On June 30, 2009, Vietcombank shares (VCB shares) were officially listed on the Ho Chi Minh City Stock Exchange.

After more than half a century of operations in the market, Vietcombank is now one of the largest commercial banks in Vietnam with over 14 000 employees, over 460 branches / transaction offices / representative offices / units in Vietnam and foreign countries. Its has headquarter in Hanoi, 96 branches and 368 transaction offices in Vietnam, 2 subsidiaries in Vietnam, 1 representative office and 2 overseas subsidiaries, 5 public Joint Venture Companies. In addition, Vietcombank has
developed an Autobank system with more than 2,300 ATMs and over 69,000 POS points in Vietnam. Banking operations are also supported by a network of more than 1,856 correspondent banks in 176 countries and territories around the world.

On November 12, 2013, at Thai Nguyen City, Thai Nguyen Province, Vietcombank solemnly held the Opening Ceremony of Vietcombank Thai Nguyen Branch. Opening of a branch in Thai Nguyen makes it the 81st branch of Vietcombank in Vietnam. Vietcombank has extended its network to the Northeast of the country, wishing to make Vietcombank an active bank. Under the motto of constantly innovating and developing in the direction of modernity, prestige and efficiency; Worthy of being "Leading Bank for Vietnam's Prosperity".

**Regarding Enterprise Credit Rating**

Vietcombank has been developing the enterprise customer rating system since 2003. The scoring principle of the model applied by Vietcombank is the initial score of each rating according to the most recent criterion that customer achieved. The point used to compile the credit rating is the product of the score between the initial score and the weight of each criterion and set of criteria.

The grading model consists of two scoring parts: quantitative one, which is calculated directly from the company's income statements and qualitative part rating on the basis of the bank's valuation of the enterprise on all aspects. The information used to mark the enterprise is the income statement of the nearest year and nonfinancial information updated at the time of scoring. Criteria are weighted differently according to the importance of each.

The financial criteria are evaluated based on the guideline of the State Bank of Vietnam and sector statistics are adjusted to match the credit information of Vietcombank, each of which has five standard ranges: 20, 40, 60, 80, 100 (initial score). The weighted score is the difference between the initial score and the corresponding weight. The scoring guidelines are the actual indexes of non-financial criteria, including five groups with 25 criteria. Each criterion has five standard deviations of 5, 8, 12, 16, 20 points (starting point).

The non-financial criteria used by Vietcombank Thai Nguyen to score are cash flow, management level, credit relations, external factors, etc.

An aggregate score of financial and non-financial criteria along with bonus for audited income statements after multiplying by weight, will be rated by 10 categories corresponding to the increased risk level. Gradually from AAA (lowest risk) to D (highest risk).

**2.4.2 Vietnam Joint Stock Commercial Bank for Industry and Trade (Vietinbank)**
Vietinbank has built a credit rating system for individual customers and enterprise customers. The Bank used a combination of qualitative criteria to supplement the quantitative criteria with detailed guidelines for scoring and credit rating to limit the subjective evaluation of criteria. Vietinbank's credit rating model is based on the guidance of the State Bank of Vietnam and is changed and corrected some statistical coefficients based on research from customer database.

Like Vietcombank, Vietinbank also has a system of financial criteria evaluated by the rating model based on the guiding framework of the State Bank of Vietnam and adjusted some statistical coefficients according to calculations from the credit information of Vietinbank. The financial and non-financial criteria are divided into five grades of 20, 40, 60, 80, 100. Particularly, the total number of non-financial criteria is divided by 4, 8, 12, 16, 20. The total scores after getting the initial score and weight will be used to rate after seeking expert consultation.

- Vietinbank's enterprise rating model consists of 19 financial criteria as guided by the State Bank of Vietnam, divided into 4 groups and 3 levels of enterprises. Rather than non-financial criteria in the valuation model similar to those of Vietcombank like cash flow and management experience, Vietinbank also uses such criteria as prestige in banking transactions and other operating characteristics.

The credit rating system of Viettinbank Thai Nguyen and Vietcombank classify enterprises into three groups: state owned enterprises, foreign invested enterprises and other enterprises. In addition, Vietinbank's system also classifies enterprises as audited and non-audited enterprises. Rating results are categorized into ten levels by the decreasing sign system from AA + to C.

**Table 2.9: Comparison of the Enterprise Credit Systems of Maritime Bank, Vietcombank, and Vietinbank – Thai Nguyen Branches**

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Vietcom bank</th>
<th>Vietin bank</th>
<th>Martime bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Term</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rating signs</td>
<td>AAA, AA, A,</td>
<td>AA+, AA, AA-</td>
<td>A đến E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BBB, BB, B..</td>
<td>, BB+, BB,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BB-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Evaluation criteria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td><strong>Scale of enterprises</strong></td>
<td>1. Equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Labor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Net revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Liabilities to The State’s Budget</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(There should be a scorecard with specify details to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td><strong>Industries</strong></td>
<td>Focusing on four main industries: agriculture, forestry and fishery; trade and services; construction and industry</td>
<td>Focusing on many industries but the strengths are construction; import-export; and investment.</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>-----------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Financial criteria</td>
<td>Financial criteria (16 criteria)</td>
<td>Financial criteria (19 criteria)</td>
<td>Financial criteria (23 criteria)</td>
</tr>
<tr>
<td>4.1</td>
<td>Solvency</td>
<td>Including 2 detailed criteria</td>
<td>Including 2 detailed criteria</td>
<td>Including 3 detailed criteria</td>
</tr>
<tr>
<td>4.2</td>
<td>Operation criteria</td>
<td>Including 3 detailed criteria</td>
<td>Including 4 detailed criteria</td>
<td>Including 4 detailed criteria</td>
</tr>
<tr>
<td>4.3</td>
<td>Self-financing capacity</td>
<td>Including 3 detailed criteria</td>
<td>Including 3 detailed criteria</td>
<td>Including 2 detailed criteria</td>
</tr>
<tr>
<td>4.4</td>
<td>Profitability</td>
<td>Including 3 detailed criteria</td>
<td>Including 5 detailed criteria</td>
<td>Including 10 detailed criteria</td>
</tr>
<tr>
<td>4.5</td>
<td>Cash flow criteria</td>
<td>Including 5 detailed criteria</td>
<td>Including 5 detailed criteria</td>
<td>Including 4 detailed criteria</td>
</tr>
<tr>
<td>5</td>
<td>Non-financial criteria</td>
<td>Non-financial criteria (25 criteria)</td>
<td>Non-financial criteria (16 criteria)</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Score of management quality</td>
<td>Including 5 detailed criteria</td>
<td>Including 5 detailed criteria</td>
<td>Including 4 detailed criteria</td>
</tr>
<tr>
<td>5.2</td>
<td>Score of prestige in transactions</td>
<td>Including 10 detailed criteria</td>
<td>Including 10 detailed criteria</td>
<td>Including 2 detailed criteria</td>
</tr>
<tr>
<td>6</td>
<td>External factors</td>
<td>Including 5 detailed criteria</td>
<td>Including 5 detailed criteria</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Other factors</td>
<td>Including 5 detailed criteria</td>
<td>Including 5 detailed criteria</td>
<td></td>
</tr>
</tbody>
</table>

In general, the enterprise credit rating system at Maritime Bank, Vietinbank or Vietcombank complies with the guidelines and regulations of the State Bank, and the system also brings the banks some determined benefits, such as:

Firstly, quantification of the criteria for considering, building a Standard framework for the evaluation of enterprise customers, creating a clear base for credit...
officers to check and evaluate accurately enterprises applying for credit and then enhancing the accuracy of credit decisions.

Secondly, it helps to minimize the risk of giving credit due to subjective reasons from credit officers. According to the credit rating system, credit officers will objectively assess businesses and give accurate result to help businesses access the necessary capital.

Thirdly, thanks to the application of the enterprise credit rating system, the banks can assess the risks of lending to enterprises, and then decide whether or not to lend. This can be regarded as a method is not only helps the bank assess credit risks and but also is an effective risk management tool in giving credit, reducing the risks involved in the loan appraisal process.

However, in the implementation, the enterprise credit rating systems of Maritime Bank or Vietinbank and Vietcombank have some limitations need to overcome:

Information provided by the businesses almost have been edited, so the accuracy is not high. The financial statements that businesses provided have not been audited in time is also one of the restrictions for credit officers. The competition in market share between commercial banks in the national banking system makes the sharing of customer information is rather difficult, which is also one of the problems for banks, as well as credit officers to collect information with high accuracy, and especially difficult to verify information provided by business customers.

Difficulties in evaluating financial and non-financial indicators, the financial indicators of Vietcombank are only 16, while Vietinbank is 19 and Maritime Bank is 23. The number of indicators helps evaluate carefully, increase the reliability, but extremely hard in creating the accuracy of the figures because in fact, businesses are often unable to provide full financial statements based on real data, not to mention the audited financial statements. The non-financial indicators of Vietcombank and Vietinbank are 25, while Maritime Bank is 16, but in general to evaluate, marking these indicators still depends on credit officers.

CHAPTER 3: SOME SOLUTIONS TO UPGRADE THE ENTERPRISE CREDIT SYSTEM OF MARITIME BANK THAI NGUYEN

3.1 SOLUTIONS TO THE INFORMATION SYSTEM AND ENTERPRISE CREDIT RATING

As mentioned in chapter 2, Maritime Bank Thai Nguyen has been collecting, storing information and rating enterprises according to the procedures developed and issued by Maritime Bank based on the criteria suitable with the characteristics of the
enterprises. Although Maritime Bank's credit approval processing time is considered to be the fastest among Vietnamese commercial banks, the operational efficiency of the customer information system remains to be an issue. In addition, the customer information system that Maritime Bank Thai Nguyen exploit is not good enough to ensure that the decision to grant credit is optimal, so the author would like to propose to Maritime Bank in general, Thai Nguyen branch in particular, some solutions as follows:

Firstly, upgrading the information technology system: It is necessary to build integrated software to manage credit information of enterprise customers with enterprise credit rating on an internal network between the Bank, its branches, and transaction offices. Integrated software development should be divided into four phases in order to make the most of the current machinery and technology, and to prepare for the cost of construction and deployment without causing a mass in the whole system. The four stages are divided as follows:

Table 3.1: Plan for Upgrading Information Technology System

<table>
<thead>
<tr>
<th>No.</th>
<th>Work</th>
<th>Execution time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Phase 1</td>
</tr>
<tr>
<td>1</td>
<td>Preparation of database systems related to businesses in each area</td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>- Enterprises used to be the Bank’s customers</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>- Enterprises who now are the Bank’s customers</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>- Potential enterprises</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Having a integrated software written based on the existing software</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Updating information of the collected database</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Deploying and test running at the Headquarter</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Training the whole system staff</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Implementing in the whole system</td>
<td></td>
</tr>
</tbody>
</table>

The preparation of enterprise customer database system in each area should be assigned to the branches and transaction offices in that area. They will insert the data in Excel and send it to the headquarter. The sample table needs to be consistent so that after built and upgraded, the software can import data from this table without manually entering of the data. The table should consist of some basic information:

Table 3.2: Enterprise Database Sample Table

ENTERPRISE CUSTOMER INFORMATION IN … (PROVINCE)
* It should be specified that whether they are potential customers, customers who are using the services of the bank, or customers used the services of the bank before.

It is necessary to set up a table of information on each customer group on separate file or sheet, consistent in font and font size to facilitate the import of data into the software.

For the hiring of an integrated software developer, software should be developed based on the existing software platform, which will help to save costs and reconnect the current software of the system without causing any disturbing during deployment. At the same time, existing data on the current software can be kept combining with up-the database that has been prepared in Phase 1. In this process, a Software Management and Development Division should be established within the Credit and Investment Board. This Division, together with the design unit, is responsible for receiving and delivering the software.

After the software is completed, it should be tested at the headquarter first because the information system is not only diverse but also connected with branches and transaction offices all over Vietnam. In this process, there should be a database and some backup servers to avoid unintended risks.

Once the software is successful tested and if the Bank wants to deploy it on a large scale, it must train the staff across the country first. However, training should not be over-crowded, affecting daily work. The Bank should ask each branch to send only 10% to 20% of its credit staff to train, then these staffs will re-train people in their branch or transaction office.

When first applying the software in the entire system, branches should make daily report on the operation of software and submit it to the Software Implementation and Maintenance Division (Software Management Division) in time to fix the shortcomings. The Software Management Division is responsible for receiving all software-related technology transfer to ensure activeness during operation. For branches, it is necessary to appoint a software manager to implement at the branch. It should be the head of Credit Division of the branch ensure activeness in handling and exploiting data.
After the first month of implementation, the entire system should hold a meeting to summarize and draw experience (avoid doing for form’s shake). The meeting content should be planned in advance and sent to the branch to study in advance for positive feedbacks.

At the same time, banks, as well as affiliates, need to build positive relations with relevant enterprises’ officers, divisions and departments to regularly update information related to enterprises during operation.

In addition, it should be clear that only available information collected by the Bank and its affiliates is not enough and cannot ensure the diversity of information. Therefore, the Bank needs to work closely with professional associations and government agencies so that credit officers can get more information related to enterprise customers, thus reducing processing time yet still ensuring optimum loan decision. This partnership also helps Maritime Bank develop non-collateralized lending, instead of relying on enterprise sponsorships for enterprise debtors.

Along with the development of integrated software, Maritime Bank also needs to continue to build information technology platform to improve efficiency of information storage and information sharing with customers in the credit system all over the country. Maritime Bank should also regularly connect, share and provide information about its enterprise customers to Vietnam Credit Information Center. This connection not only helps Maritime Bank to store customer information safely, but also exploits information from other sources.

Secondly, perfecting the enterprise credit rating system. The current credit rating system technically has characteristics of Maritime Bank. However, with the continuous change of the market economy, of the banking system of Vietnam, and of the trend of world credit development, Maritime Bank needs to regularly upgrade and add criteria to the set of customer sorting criteria. The obsolete, inappropriate criteria should be eliminated. For the easy-to-confuse criteria, there should be careful notes for credit officers. In addition, the criteria for rating customers and sorting tools should also be regularly updated to promote the highest efficiency of the enterprise credit rating system. Standards and frameworks should be used to evaluate and guide non-financial criteria clearer and more precisely. Non-financial criteria are heavily dependent on subjective opinions of the credit officers. This is to reduce risks and ensure that scoring results are the most reliable.

For the criteria related to external factors, the bank should be concerned, pay attention to frequent change in the ratios of the sector prospects, because the sector prospects are one of the issues not only the nation, the society, and the economy interests but also businesses themselves are also concerned, this can be considered as
one of the driving force to help businesses within the industry develop in a sustainable and stable way. For businesses in the prospective group which the nation facilitates in all aspects, the bank should also focus on this indicator to increase access to capital.

In addition, the bank should consider changing basic earnings per share (EPS), Price-to-Book Ratio (for enterprises of joint stock company), the criteria on technological level, qualities of receivable and inventory.

For qualitative indicators, it can be easily calculated, which does not make much sense in enterprise credit ratings such as inventory turnover, capital, assets, days of sales outstanding. Banks can consider giving a suitable score, should not give too high score.

For guaranteed asset indicators, it is necessary to consider increasing the score because this is one of the indicators directly affecting ability to pay for bank loans of enterprises. On the bank side, this is a major impact on the decision to give the credit limit to borrowers.

The processed and rated enterprise information should be stored on the integrated software system for later use and prevent risks during operation. The built data process can still be restored.

At the same time of carrying these tasks, the Bank also needs to consider maintaining and developing a credit risk management information system. It should link information between enterprise credit and risk management information to limit risks caused by credit defaults.

3.2 SOLUTIONS TO THE ENTERPRISE CREDIT SYSTEM

With a vision of becoming the best commercial joint stock bank in Vietnam, Maritime Bank has determined its important mission of building a bank "so good that everybody wants to join and nobody wants to leave". With a clearly defined vision and strategy, each branch and transaction office has been focusing on implementing the Core Values in each activity. This is considered an important action on the way to build organizational culture which is professional, friendly, transparent, highly effective at Maritime Bank in general, Maritime Bank Thai Nguyen in particular, providing a solid foundation for a fast and sustainable development in the coming years.

3.2.1 Solutions to Upgrading the Enterprise Credit System

The enterprise credit system is made up of three components: the enterprise credit analysis system; Enterprise credit rating system and enterprise credit granting. To upgrade the enterprise credit system, banks and branches should focus on upgrading all three systems. The core solution to upgrading the enterprise credit system at the branch is still the capacity and level of employees involved in the
The solution to the credit rating system is presented in Section 3.1, which focuses on credit and enterprise credit systems.

3.2.1.1 Solutions to Upgrading the Enterprise Credit Analysis System

At the Maritime Bank Thai Nguyen, credit officers both play the role of a customer relation officer and do credit analysis, so they will certainly face difficulties in the process of analysis which affects the quality of information analysis and credit granting decision. In order to improve the quality of credit analysis, the Branch should have a plan to change the organization of the personnel of the credit analysis department and the customer relation department. This separation will create objectivity in the credit analysis process, while limiting the risk in the process.

This separation allows our customer relation staff to focus on finding and developing markets and taking care of customers throughout the process until the enterprise is granted and disbursement is made. Customer information provided by the customer relation officer will be forwarded to the credit analysis department for reviewing, finding additional information, and evaluating the enterprise objectively. In the analysis process, a confidential evaluation should be conducted, meaning that the record, business information, after being transferred to the credit analysis department, will be forwarded to a secret analyst whom only the manager knows. Two or three credit analysts should done cross evaluation on a profile.

At the same time, branches and the Bank should actively build the credit analysis process to ensure that the information provided by the customer relation department is processed as quickly as possible. Processing results also need to be integrated into the integrated software system to serve the next steps of the credit rating and enterprise credit process. Here, the author also suggests a preliminary analysis of credit for branches and the Bank as follows:

**Step 1: Receiving credit applications and information provided by the customer relation department**

**Step 2: Analysis department manager assigns tasks to analysts (do not disclose information of analysts)**

**Step 3: Analysts do their job within the specified time and then return the results to the department manager**

**Step 4: Department manager conduct cross check**
Credit analysis time should be from 2 to 3 days depending on the scale of the enterprise and loan requirements.

3.2.1.2 Solutions to Upgrading Efficiency of Credit Granting

In addition to credit analysis and dealing with customer information, banks and branches need to have a good source of mobilized capital. To do that branches and the Bank had better to implement methods to promote the mobilization of capital as a basis for balancing capital structure. They also need to diversify deposit products, focus on developing new products and services, improve the quality of payment services, adjust interest rates to be appropriate and competitive with other banks, combine with services caring, and consult clients professionally and dedicatedly.

At the same time, attention should be paid on improving the quality of appraisal and evaluation of investment projects, appraisal of secured assets. Appraisal of investment projects is an important step, a base for deciding whether to grant credit to enterprises or not. Appraisal focuses on the following issues: full evaluation of the content to ensure a comprehensive project evaluation; development of modern software to directly serve the appraisal to improve efficiency and shorten appraisal time; training staff with high expertise in project appraisal.

3.2.2 Solution on Upgrading Service Quality and Enterprise Credit Products

As mentioned in Chapter 1, the current trend of credit service development that banks are interested in is the development of enterprise credit services in the stock market; Developing banking services for enterprises in depth; And expanding enterprise credit services internationally.

In addition, in fact, Maritime Bank Thai Nguyen has been deploying only four of the more than 10 enterprise credit services. In 2016, only 2 enterprise credit services were maintained: short-term, medium-term loans and guarantees (Chart 3.1). Short-term and medium-term loans amounted to 88 660 million VND, accounting for 78% of enterprise credit income, while guarantees amounted to only 22%, equivalent to 24 285 million VND. Thus, in order to develop enterprise credit services at Maritime
Bank Thai Nguyen following the current trend of the banking industry, exploit and promote existing advantages, the Branch should first focus on maintaining the two ongoing services, plan to regain the position of two services that existed before 2015: L/C collateral and loan financing. It should focus on customers who used its service before, find out why customers did not use it anymore, and combine with penetrating into the market of potential customers.

![Chart 3.1: Results of Sales of Enterprise Credit Products Deployed in 2016 at Maritime Bank Thai Nguyen](image)

Besides, the quality of service and credit products need to be upgraded based on customer satisfaction. In order to improve the score of customer satisfaction on enterprise credit services of Maritime Bank Thai Nguyen, besides the solutions for upgrading the enterprise credit system, attention should be paid on upgrading the quality of service. In order to do this, the Branch should regularly perform customer satisfaction evaluation on the branch's credit service against its competitors. Based on the scores that customers evaluate, the Branch should identify its weaknesses compared to its competitors, and develop strengths and reduce weaknesses. The customer satisfaction evaluation process can follow the proposed model by Paul Hague and Nick Hague, consisting of the following five steps:

**Step 1: Spot the gap.** This is a step that helps the Bank identify the credit services that have lower score than those of the competitor based on the investigated customer satisfaction data.

**Step 2: Challenge and redefine the segmentation.** Also based on the score of different customer groups to identify good and bad segment to have solutions to upgrading or changing in time.
Step 3: Challenge and redefine customer value propositions. At this stage, the Bank needs to find out why the customer's proposals are not being communicated, or performing effectively.

Step 4: Create an action plan. When developing the action plan, the Bank should make sure to describe the most complete issues; It should identify problems that need to be addressed and their causes; It also should identify barriers that are restricting the enhancement of customer satisfaction; It should set measurable goals, resource allocation of resources, divide labor and time limits for each task, measure and evaluate progress.

Step 5: Measurement and improvement. The post-construction action plan should be monitored for the measurement and evaluation of results.

Figure 3.2: 5 step process to make longer – term improvements customer satisfaction


In addition, it should be made clear that banks and their affiliates, are competing not only for the diversity of their credit products, but also for the quality of their services. The traditional enterprise credit products and services provided by the bank can only be competitive through quality. Accordingly, Maritime Bank Thai Nguyen in particular should focus on improving service quality via a number of measures such as:

Firstly, continue to solve the problem of applying information technology to support the provision of enterprise credit services. Modern technology not only contributes to quick resolution of the work, records, customer information accurately and permanently, but also assesses the potential capital and assets of the bank itself.
Nowadays, the faster the information is processed, the less time-consuming it is, the more customers will be attracted.

Secondly, maintain the selection policy, reward talent, ensure the best working conditions, but promote the creativity, capacity, trust and dedication of employees in the entire system in general, enterprise credit staff in particular.

Thirdly, improve the level of management staff. Besides experience and capacity, age is also an important factor for banks to pay attention to when recruiting, training and fostering of managers.

Fourthly, do not stop researching the market for the best development of credit service. Each region and each sector has its own characteristics, so it is impossible to develop the same products and services for all regions. Market research helps Maritime Bank Thai Nguyen conduct market segment and customers to provide the most suitable credit service.

Fifthly, based on identified market segments, branches should conduct direct access to businesses to market their products and services. To access effectively, based on business questionnaires to assess customer satisfaction with credit services as outlined at the outset, the branch may list and delineate firms that have potential then carry out proper marketing activities.

Sixthly, study the process of dealing with enterprise customers in a scientific way, optimize, and limit too much travel for customers and the cumbersome administrative procedures. Credit officers should actively phone and email customers to assist them in the best way.

Improving the quality of enterprise credit products should go with the inherent risk control that exists in this system. Accordingly, branches and the Bank should implement solutions such as:

- Maintaining investment and development of credit services in many economic sectors, including focusing on strengths to make a difference (This is what the Bank has been doing, but the branches have not yet succeeded on investing in specific industries that banks are pursuing.) This helps branches to avoid risks due to the socio-economic development policy of the State in limiting the activities of certain trades in the plan of restructuring some economic industries.

- Avoiding lending a customer too much and always maintain a certain percentage of his total operating capital to avoid unexpected risks and bad debts from the customer.

- Developing credit services with different loan terms, but still ensuring the balance between short, medium and long-term loans, ensuring stable development and avoiding credit risks by changes in interest rates.
Combining the development of enterprise credit services with credit insurance. This combination brings confidence to customers when borrowing from banks and helps banks to control the risks that may occur.

In addition, to be able to meet the needs of customers by providing the products and services they like and to attract their attention on the banking services, Thai Nguyen Branch should maintain customer relations, carry out useful data mining in all stages of the customer relation cycle from customer search, increase customer value to customer retention, apply techniques to exploit customer information that helps banks and branches to analyze and identify where loyal customers and customers who tend to move to other banks with the desire of a better service, which helps branches and banks retain their customers.

3.3 SOLUTIONS TO ORGANIZING STAFF TO OPERATE ENTERPRISE CREDIT SYSTEM

The effectiveness of the enterprise credit system is highly dependent on the level and organization of the personnel of Maritime Bank Thai Nguyen. In practice, the bank has developed procedures and issued regulations related to the operation of the credit system applied to each type of enterprise. The quality of the credit staff and capacity and organization of the system operator plays a decisive role in the success or failure of the system.

2015 is a very difficult year of Maritime Bank Thai Nguyen. The Gang branch was suspended. Most of the staff in the customer relation department transferred work to other banks. A newly recruited branch manager took over. There were too many difficulties but in 2016 Maritime Bank Thai Nguyen gradually regained balance and the number of customers and outstanding credit balance increased sharply. In order to maintain this result, besides the Bank's policy of attracting talents, credit officers themselves had to take utmost care in the process of exploiting and using the found enterprise information. (verifying the source, noting the source for each information in a personal notebook). It implemented the storage on the bank's software. When transferring work between new and old staff, there should be a detailed handover, supervised by the management. It regularly checked the expertise and skills of the department staff, continually improved communication skills as well as customer care. Besides opening short-term training courses on this skill, the branch should develop emulation policies among individuals in order to create motivation for the department.

In addition, it regularly trains staff to operate the system to ensure that transactions are handled correctly from the beginning. The training plan should be combined with the regular inspection and supervision regime. For instance:
<table>
<thead>
<tr>
<th>No</th>
<th>Work</th>
<th>Form</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Training and input processing</td>
<td>In-office training and online materials</td>
<td>At the beginning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Centralized training at the center or branch for employees who do not attend training at the center.</td>
<td>When deploying new software</td>
</tr>
<tr>
<td>1b</td>
<td>Checking and evaluating</td>
<td>Direct manipulation at the work unit</td>
<td>After training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online through reports</td>
<td>Daily, for 1 month for new employees or new software; Then periodically by month</td>
</tr>
<tr>
<td>2a</td>
<td>Intensive training on analysis, rating or processing of credit records</td>
<td>Online training</td>
<td>For new employees, or when updating software, change evaluation criteria</td>
</tr>
<tr>
<td>2b</td>
<td>Checking and evaluating</td>
<td>Report via email with attachment data</td>
<td>After each data analysis</td>
</tr>
<tr>
<td>3a</td>
<td>Practical training on sorting, using the sorting toolkit</td>
<td>Training materials</td>
<td>For new employees, or when updating software, or changing evaluation criteria</td>
</tr>
<tr>
<td>3b</td>
<td>Checking and evaluating</td>
<td>Directly by supervisor</td>
<td>Once a month or suddenly</td>
</tr>
<tr>
<td>4a</td>
<td>Training on using software</td>
<td>Online or directly at the headquarter, branch or training materials</td>
<td>When deploying new software, or when updating information</td>
</tr>
<tr>
<td>4b</td>
<td>Checking and evaluating</td>
<td>Directly by supervisor</td>
<td>At the end of the training or period or periodically</td>
</tr>
</tbody>
</table>

In addition, Maritime Bank should continue to maintain the human resource policies: the policy to attract talented people; policy to reward, arrange and employ staff with good work experience, creating conditions and promoting a safe working atmosphere; and combining the application of models of using foreign specialists in the field of enterprise credit services.

And, above all, because credit officers are directly involved in assessing enterprises that need enterprise loans, the ethics of creditors is one of the issues that branch and the Bank need to pay attention on. It is necessary to plan a review and sorting of credit officers that do not meet the ethical requirements; having a plan to
train and develop credit officers to ensure the highest standards of integrity, integrity in work.

3.4 SOME RECOMMENDATIONS FOR THE STATE BANK OF VIETNAM

Firstly, it is necessary to continue to perfect the document system; regulations relating to credit activities; loan regulations; assurance of loans on the basis of ensuring safety for credit activities and create conditions for banks to expand lending to enterprise customers in an effective and safe way. It should have stricter regulations on commercial banks' liability on compliance with loan regulations and loan guarantees, limiting complex legal procedures which cause difficulties for commercial banks.

Secondly, it should develop a set of criteria to evaluate the competitiveness of commercial banks and help banks understand the realities of the banking sector in general. This not only helps commercial banks evaluate themselves against the banking system or against other competitors, but also helps the state bank control overall operations. The bank credit activities aim at well serving the development trend of commercial banks, timely adjusting regulations and monitoring measures, especially strategic planning, developing the industry in the context of international integration and competition.

Thirdly, it should inspect and control more. The State Bank of Vietnam should regularly carry out inspections and controls in various forms in order to promptly detect and prevent negative violations in credit activities in order to properly apply the bank's credit activities. Currently, SBV's banking inspection activities are mainly to check the lawfulness of commercial banks. Regarding the evaluation of the risk control system of commercial banks, the State Bank Inspector has not done this systematically. There is no system of criteria for comprehensive evaluation to make recommendations to commercial banks. In addition, the State Bank should improve the organizational model of the banking inspection apparatus from the center down to the grassroots level and have the relative independence in operating and operating in the banking organization.

Fourthly, it should improve the quality of Credit Information Center (CIC). The Credit Information Center is the focal point for providing important credit information to commercial banks in assessing customer risk. However, the reality shows that the information provided by CICs is only statistically and completely unresponsive to the need for updated information and warning information. Therefore, in the coming years, the State Bank should coordinate more with the functional agencies to provide commercial banks with the latest information on the development of the sector as well
as the situation of enterprises' operations. The State Bank of Vietnam has taken a number of measures to encourage and need to gradually come to the regulations that oblige commercial banks to provide sufficient and timely information and data of borrowers at their banks. The center provides timely warning information for commercial banks. In addition, the State Bank should have a policy of recruiting and training CIC staff not only knowledgeable about information technology such as online information and other supporting tools, but also able to gather information, analyze, synthesize and make appropriate judgments, warnings instead of just statistics for reference.
REFERENCES

2. An explanatory note on the Basel II IRB risk weight functions, Basel Committee on Banking Supervision;
7. Ngo Thuy Ha, 2017, *Factors affecting Enterprise customers’ satisfaction of credit services provided by commercial Banks in Thai Nguyen province*, Dr thesis;
8. PTS. Nguyen Ngoc Hung, 1998, Financial Theory - Monetary, Statistics Publisher;
10. Associate Professor and Ph.D Vu Van Hoa, 1998, Monetary theory, Hanoi Finance Publisher;
12. Faculty of Banking - Hanoi National Economics University, 1993, Financial Theory of Money (Volume II)
15. Credit scoring guide of internal credit rating system Enterprise customers of Maritime Bank;
16. The scoring guide of the internal credit rating system Enterprise customers of Vietinbank;
17. Enterprise Law No. 68/2014 / QH13 dated on November 26, 2014 by the National Assembly of the Socialist Republic of Vietnam
18. Law on Credit Institutions No. 47/2010 / QH12 dated on June 16, 2010 by the National Assembly of the Socialist Republic of Vietnam
19. Circular No. 39/2016 / TT-NHNN dated December 30, 2016 by the State Bank of
Vietnam, regulations on lending activities of credit institutions and foreign bank branches to customers.

20. Maritime Bank Lending Regulation;
21. Vietinbank's Lending Regulations;
22. Vietcombank's lending regulations;
23. BIDV's Lending Regulations;
24. Law on Credit Institutions No. 47/2010 / QH12;
25. Circular No. 39/2014 / TT-NHNN dated December 30, 2016 by the Governor of the SBV regulating lending activities of credit institutions and foreign bank branches to customers.
26. Circular No. 07/2015 / TT-NHNN dated 25 June, 2015 by the Governor of the State Bank providing for bank guarantee;
27. Circular No. 02/2013 / TT-NHNN dated on January 21, 2013 by the Governor of the State Bank on classification of assets with deduction level, method of deduction for risk provisions and use of provisions for risk treatment in activities of credit institutions, foreign bank branches and amendments and supplements;
28. Decision No. 1627/2001 / QD-NHNN dated on December 31, 2001 by the Governor of the SBV regulating the promulgation of the Regulation on lending by credit institutions to customers;
29. Consolidated Letter No. 33 / VBHN-NHNN dated on June 08, 2012 by the State Bank of Vietnam to consolidate Circular No. 04/2013 / TT-NHNN dated January 01, 2013 by the Governor of the State Bank on discounting activities Negotiable instruments, other CIs of CIs, SBV branches with clients; Circular No. 21/2016 / TT-NHNN dated on June 30, 2016 by the Governor of the State Bank of Vietnam amending and supplementing some articles of Circular No. 04/2013 / TT-NHNN;
30. Regulation No. QC.BM.001 dated on November 06, 2013 by the Board of Directors on the Organization of the Maritime Bank;
31. Regulation No. QC.BM.012 dated on March 30, 2012 by the Board of Directors on Organization and Operation of Risk Management Committee;
32. Regulation No. QC.RR.012 dated on December 08, 2016 by the Board of Directors on Credit Risk Management;
33. Regulation No. QC.BM.012 dated on March 30, 2012 by the Board of Directors on Organization and Operation of Risk Management Committee;
34. Regulation No. QC.BM.004 dated on August 1, 2013 by the Board of Directors on
35. Regulation No. QC.TD.006 dated on August 29, 2016 by the Board of Directors on the Regulation on competence to approve credit granting;

36. Regulation on Decision No. QD.TD.064 dated November 01, 2016 by the Director General on Credit Policies in the Enterprise Bank;

37. Code of Director QD.TD.023 dated on June 23, 2016 by the Director General on Asset Policy to secure credit granting;

38. Internal documents on audit activities of E & Y credit institutions;


44. http://encyclopedia2.thefreedictionary.com/Credit+Systems
