



**DETERMINANTS OF INTERNATIONAL PAYMENT  
SERVICE QUALITY IN BANKING SECTOR:  
A COMPARISON STUDY BETWEEN STATE-OWNED  
JOINT-STOCK COMMERCIAL BANKS AND PRIVATE  
JOINT-STOCK COMMERCIAL BANKS IN VIETNAM**

---

*Bachelor of Business Administration Thesis*

**Group members:**

<b>Ta Bich Loan</b>	HS140051
<b>Pham Thi Thu Phuong</b>	HS140536
<b>Vu Ngoc Quynh Chi</b>	HS140600
<b>Pham Viet Tam</b>	HS130315
<b>Bien Mai Linh</b>	HS130246

**Supervisor:**

**Dr. Nguyen Hoang Phuong Linh**

*\_\_ December 2021 \_\_*

## ACKNOWLEDGEMENT

A completed research would not be possible without assistance. Therefore, the authors gratefully acknowledge their assistance and encouragement over the period of conducting this research as a requirement of obtaining our Bachelor of Business Administration degree.

First and foremost, we would want to express my sincere appreciation and gratefulness to our supervisor, *Dr. Nguyen Hoang Phuong Linh*. Her kind assistance and consistent recommendations were invaluable during the preparation of our thesis. Her remarks and encouragement have indeed enhanced and developed our work. The thesis would have been difficult to accomplish adequately without her motivation and directions.

In order to serve the qualitative research, it is impossible not to mention the enthusiastic help from the employees of the two groups of banks. We are very grateful to you for taking your valuable time to review and answer the qualitative interview questions of the research team. The results obtained have really aided us in the process of data collecting and analyzing.

My special thanks approve to employees from businesses that are making international payments, also known as the customers of the banks. You also took your time to give some evaluations of the service quality of banks from the two groups which are researched. Your contribution is an integral part of our quantitative and comparative research.

Lastly, we would like to express gratitude to our parents, partners, and friends for their unconditional support during this challenging time and for assisting us in completing this research.

## **EXECUTIVE SUMMARY**

Import and export activities between countries are increasing rapidly in the context of an interconnected global economy, leading to an increase in demand for international payment services at financial institutions, especially commercial banks. Due to the fierce competition, in fact, all banks use many different techniques to improve service quality in order to meet the needs of customers, increase the conversion rate from returning customers, and maintain long-term revenue. The quality of international payment services among banking groups is a topic of interest to users. Many researchers from all over the world have also discussed this topic for many years. However, no research has been conducted comparing the factors' impact on service quality of international payment of two groups of banks in Vietnam.

This study seeks to investigate the effect of factors influencing foreign payment service quality in the case of two groups of banks: state-owned joint-stock commercial banks and private joint-stock commercial banks. This study employs both the quantitative and qualitative methods to obtain both objective and subjective viewpoints. In addition, the authors solicit user feedback through a survey. Based on the result of findings, this topic contrasts the quality of service provided by two groups of banks to support and options for businesses when it comes to selecting banks for international payment transactions.

Following 182 valid replies from customers, the study reveals five primary components: RELIABILITY, TANGIBLES, ASSURANCE, EMPATHY, and RESPONSIVENESS, which explain customer perceptions of foreign payment service quality in two groups. It has been discovered that these five components have a positive link with service quality, with RELIABILITY having the most significant impact on service quality.

# TABLE OF CONTENT

<b>ACKNOWLEDGEMENT</b> .....	2
<b>EXECUTIVE SUMMARY</b> .....	3
<b>LIST OF FIGURES</b> .....	7
<b>LIST OF TABLES</b> .....	8
<b>LIST OF CHARTS</b> .....	9
<b>ABBREVIATION AND ACRONYMS LIST</b> .....	10
<b>CHAPTER 1: INTRODUCTION</b> .....	11
1.1 Topic background.....	11
1.1.1 Overview .....	11
1.1.2 Banking system .....	11
1.1.3 Topic background.....	12
1.1.4 Practical problem.....	12
<b>1.2 Research objectives</b> .....	13
<b>1.3 Research questions</b> .....	13
<b>1.4 Research scope</b> .....	14
<b>1.5 Methodology and data overview</b> .....	14
<b>1.6 Thesis outline</b> .....	14
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	16
<b>2.1 International payment service at commercial banks</b> .....	16
2.1.1 Definition of international payment .....	16
2.1.2 Characteristics of international payment.....	16
2.1.3 Roles of international payment .....	17
2.1.4 Main common international payment methods.....	18
<b>2.2 Service quality</b> .....	23
2.2.1 Service .....	23
2.2.2 Quality .....	24
2.2.3 Service quality .....	24
2.2.4 Bank's service quality .....	25
2.2.5 International payment: Micro and macro aspects .....	25
<b>2.3 Related models</b> .....	30
2.3.1 SERVQUAL model - Jayaraman Munusamy et al. (2010) .....	30
2.3.2 SERVPERF model - Cronin Jr., JJ, & Taylor, S. (1992).....	32

2.3.3 SERVPERF & PSQM model - CUNG, N., et al. (2020) .....	33
2.3.4 SERVQUAL model - Han & Baek (2004) .....	33
2.3.5 SERVPERF model - Van Dinh & Lee Pickler (2013) .....	34
<b>2.4 Proposed conceptual model and the research gaps</b> .....	<b>34</b>
2.4.1 Proposed conceptual model.....	34
2.4.2 Proposed hypothesis .....	35
<b>CHAPTER 3: METHODOLOGY</b> .....	<b>39</b>
<b>3.1 Introduction</b> .....	<b>39</b>
3.1.1 Research philosophy .....	39
3.1.2 Research process .....	40
3.1.3 Research approaches .....	41
3.1.4 Research methods.....	42
<b>3.2 Data source</b> .....	<b>44</b>
3.2.1 Primary data .....	45
3.2.2 Secondary data .....	45
<b>3.3 Data collection</b> .....	<b>45</b>
3.3.1 Qualitative data collection.....	45
3.3.2 Quantitative data collection.....	47
<b>3.4 Measurement scale</b> .....	<b>49</b>
<b>3.5 Data analysis method</b> .....	<b>50</b>
3.5.1 Qualitative research method.....	50
3.5.2 Quantitative research method.....	50
3.5.3 Testing hypothesis.....	51
<b>3.6 Ethical considerations</b> .....	<b>52</b>
<b>3.7 Conclusion</b> .....	<b>53</b>
<b>CHAPTER 4: FINDINGS AND ANALYSIS</b> .....	<b>54</b>
<b>4.1 Result of qualitative study</b> .....	<b>54</b>
4.1.1 Overview .....	54
4.1.2 Descriptive statistics of sample .....	54
4.1.3 Result.....	55
<b>4.2 Result of quantitative study</b> .....	<b>62</b>
4.2.1 Overview .....	62
4.2.2 Descriptive analysis.....	63
4.2.3 Perception of importance of 5 factors .....	67
4.2.4 Measurement model analysis .....	69

4.2.5 Structural model analysis .....	72
4.2.6 Comparison between two groups of banks .....	74
<b>4.3 Discussion</b> .....	<b>75</b>
4.3.1 Tangibles .....	75
4.3.2 Assurance .....	76
4.3.3 Reliability .....	77
4.3.4 Empathy .....	78
4.3.5 Responsiveness.....	78
4.3.6 Discussion about the comparison between two groups of banks.....	78
<b>CHAPTER 5: RECOMMENDATIONS AND CONCLUSION</b> .....	<b>80</b>
<b>5.1 Summary of findings - Answer the research questions</b> .....	<b>80</b>
5.1.1 Question 1 .....	80
5.1.2 Question 2 .....	80
5.1.3 Question 3 .....	81
<b>5.2 Recommendations for each of 5 factors</b> .....	<b>82</b>
5.2.1 Recommendations for “RELIABILITY” factor.....	82
5.2.2 Recommendations for “EMPATHY” factor .....	83
5.2.3 Recommendations for “ASSURANCE” factor.....	84
5.2.4 Recommendations for “RESPONSIVENESS” factor .....	84
5.2.5 Recommendations for “TANGIBLES” factor .....	84
5.2.6 Recommendations about the comparison.....	84
<b>5.3 Limitations</b> .....	<b>85</b>
<b>5.4 Perspective for future research</b> .....	<b>86</b>
<b>REFERENCE</b> .....	<b>87</b>
<b>APPENDIX</b> .....	<b>93</b>
<b>APPENDIX 1: QUALITATIVE RESEARCH (IN-DEPTH INTERVIEW)</b> .....	<b>93</b>
<b>APPENDIX 2: QUANTITATIVE SURVEY</b> .....	<b>95</b>

## **LIST OF FIGURES**

Figure 2.1: SERVQUAL model by Parasuraman (1985)

Figure 2.2: Conceptual framework

Figure 3.1: Deductive strategy

Figure 3.2: Inductive strategy

Figure 4.1: Structural model results

## **LIST OF TABLES**

Table 3.1: Measurement scales

Table 3.2: Rule of thumb about Cronbach's alpha coefficient size (Cronbach, 1951)

Table 4.1: Demographics Characteristics of In-depth Interview (N=4)

Table 4.2: Participants' background

Table 4.3: Factor affecting international payment service quality

Table 4.4: Summary of qualitative results

Table 4.5: Descriptive analysis

Table 4.6: Measurement model: Outers loadings, CR and AVE

Table 4.7: Discriminant validity results – Fornell-Lacker criterion

Table 4.8: Discriminant validity results – HTMT

Table 4.9: Structural model analysis

Table 4.10: Testing hypothesis result

Table 4.11: PLS-MGA result (Source: SmartPLS analysis results)



## **LIST OF CHARTS**

Chart 4.1: Type of business

Chart 4.2: Scale of business

Chart 4.3: Business major

Chart 4.4: Number of banks

Chart 4.5: Priority bank

Chart 4.6: Frequency making international payment transactions

Chart 4.7: Most using International payment methods

Chart 4.8: Rate 5 factors at all points (Group 1: State-owned joint stock commercial bank)

Chart 4.9: Rate 5 factors at all points (Group 2: Private joint stock commercial bank)

## ABBREVIATION AND ACRONYMS LIST

<b>IP</b>	<i>International Payment</i>
<b>BIDV</b>	<i>Bank for Investment and Development of Vietnam</i>
<b>Vietcombank</b>	<i>Joint Stock Commercial Bank for Foreign Trade of Vietnam</i>
<b>Vietinbank</b>	<i>Vietnam Joint Stock Commercial Bank For Industry And Trade</i>
<b>SeABank</b>	<i>Southeast Asia Commercial Joint Stock Bank</i>
<b>Techcombank</b>	<i>Vietnam Technological and Commercial Joint Stock Bank</i>
<b>LienVietPostBank</b>	<i>Lien Viet Post Joint Stock Commercial Bank</i>
<b>URC</b>	<i>Uniform Rules for Collection</i>
<b>UCP</b>	<i>The Uniform Customs and Practice for Documentary Credits</i>
<b>JSC</b>	<i>Joint Stock Commercial</i>
<b>REL</b>	<i>Reliability</i>
<b>ASS</b>	<i>Assurance</i>
<b>RES</b>	<i>Responsiveness</i>
<b>EMP</b>	<i>Empathy</i>
<b>TAN</b>	<i>Tangibles</i>
<b>SQTOTAL</b>	<i>Service quality of International Payment</i>

# **CHAPTER 1: INTRODUCTION**

## **1.1 Topic background**

### **1.1.1 Overview**

It is undeniable that the period after becoming an official member of the World Trade Organization WTO was a remarkable turning point with Vietnam which made Vietnam's economy gradually integrated into the world economy. Every aspect of Vietnam's society and economy has changed as a result of this. When the majority of the world's economic hubs are experiencing negative growth, Vietnam's GDP growth in 2020 was among the highest in the world. In any case, the Vietnamese government has recognized constraints such as economic growth that come up short of potential and are not truly sustainable. Commercial banks in Vietnam have responded by boosting their competitive advantages in the midst of these obstacles and challenges which have shown in business expansion, management capacity enhancement, financial strength, business efficiency improvement, modernization, and technological innovation. Besides, International Payment is one of the most essential procedures for growing international trade and resolving a variety of connected issues among them.

International Payment services are also provided by several private joint-stock banks, foreign banks, and financial companies. Customers are considered as the banks' survival and growth in the face of such fierce competitive competition.

### **1.1.2 Banking system**

In Vietnam, the banking system is currently separated into two main types: State Bank and Commercial Bank, and each with its own set of features.

Basically, state-owned commercial banks, policy banks, and joint-stock commercial banks with more than 50% state capital are examples of state-owned banks. Commercial banks are divided into three types: joint-stock commercial banks, joint-venture banks, and commercial banks with 100% foreign capital.

To begin with, it is vital to understand the two categories of Vietnamese banks that will be mentioned in the topic. The first type of bank group is state-owned joint-stock commercial banks which are known as banks belonging to the State Bank of Vietnam. There are banks that have more than 50% of their shares held by the government. A few banks, for instance, are wholly controlled by the government and operate on a non-profit basis. This group of banks' representatives is Joint Stock Commercial Bank for Investment and Development of Vietnam (BIDV), Joint Stock Commercial Bank for Foreign Trade of Vietnam (Vietcombank), and Vietnam Joint Stock Commercial Bank For Industry And Trade (Vietinbank). Besides, it can be simply understood that the second group of banks

is a joint-stock commercial bank known as the bank formed by the capital contributions of two or more organizations or businesses. This group belongs to Commercial Banks. According to State Bank regulations, certain organizations and businesses are only permitted to own a limited number of shares. In this group, banks have less than 50% authorized capital of the state, typical are Vietnam Technological and Commercial Joint (Techcombank), Lien Viet Post Joint Stock Commercial Bank (LienVietPostBank), and Southeast Asia Commercial Joint Stock Bank (SeABank).

### **1.1.3 Topic background**

Customers are the most important aspect of the bank's survival and growth in today's competitive market. The bank that captures its clients' interest and loyalty will win and prosper. Today, the customer-centric strategy is gaining traction as the most effective business model. How to provide the highest level of client satisfaction is always an issue that banks try to solve to the best of their abilities.

When it comes to International payment, it is not only a profitable operation for commercial banks, but it is also a focal point for the bank's other trade activities. Export-import financing, international credit, and capital mobilization operations at commercial banks are therefore boosted as a result of clients' participation in international payment services. There are four common methods of international payment: open account, cash in advance, collection of payment, and documentary credit. Import and export businesses are the bank's primary customers for international payment services. Banks serve as payment intermediates, assisting firms in settling payments for international trade contracts and completing transactions. However, due to some banks' international payment service's poor quality, the client sometimes experiences delays while making international payments. Hence, the topic “Determinants of International Payment service quality in banking sector: A comparison study between state-owned joint stock commercial banks and private joint-stock commercial banks in Vietnam” is chosen as the research thesis to determine the components of international payment service quality. In addition, this topic contrasts the quality of service provided by two groups of banks to support and options for businesses when it comes to selecting banks for international payment transactions.

### **1.1.4 Practical problem**

To get around the impasse in the WTO, countries are increasingly signing Free Trade Agreements (FTAs) intending to encourage free trade and economic cooperation. About investing, the FTA appears to be more superior than the WTO because of the shorter negotiation period, the ease with which consensus can be reached due to the small number of participating countries, and the FTA's greater scope than the WTO. Up to May 2021, Vietnam has taken part in and is negotiating 17 free trade agreements (FTAs) which include 14 signed FTAs have taken effect, 1 signed FTAs have not

taken effect and 2 FTAs have been negotiated. Participation in so many FTAs has a substantial impact on the Vietnamese economy by diversifying import and export markets, resulting in a rise in export-import turnover to partner nations. While enterprises face stiff competition in the domestic market, their export results still have certain limitations. Besides, it is worth noting that the tariff reduction according to the schedule committed in the FTAs has strongly affected the state budget revenue from import-export activities.

In 2020, the total import and export value of Vietnam's goods reached US \$545.36, which raised 5.4% compared to the same period in 2019 (General Department of Vietnam Custom, 2020). Along with the phenomenal rise in the export-import arena, the international economic integration process has resulted in rivalry in the Vietnamese market between domestic and foreign commercial banks. As a result, to keep up with the competitive market, commercial banks must strengthen their international trade activity.

Furthermore, in the current world of technology, when the financial industry underwent a revolution and transitioned to the modern banking system, commercial banks must apply new technology to international payment services in order to address issues such as costs, exchange time, and so on.

## **1.2 Research objectives**

The primary objective of this graduation thesis is to compare the quality of International Payment activities between Vietnamese commercial banks in order to suggest the most suitable options to customers. The research conclusion is synthesized based on the analysis and evaluation of the following minor objectives:

**Objective 1:** To figure out the characteristics of International Payment and the reality of this segment in Vietnamese commercial banks.

**Objective 2:** To identify the factors having an effect on the quality of International Payment operations in Vietnamese commercial banks.

**Objective 3:** To be able to compare the elements influencing the quality of international payment services provided by the two groups of banks.

## **1.3 Research questions**

The research objective is achieved by answering these following research questions:

**Question 1:** How is the current reality of the international payment segment at commercial banks?

**Question 2:** What are the factors determining international payment's service quality at commercial bank?

***Question 3:*** Is there any difference in International payment service quality between the two types of commercial banks?

#### **1.4 Research scope**

The trade payment activities, which services export-import enterprises customers, will be the subject of this article (non-trade payment activities are not included). In-person interviews and surveys are the methods we employ to acquire data. Our study will focus on a group of customers who use 2 types of banks, which are state-owned joint stock commercial banks and private joint-stock commercial banks using international payment services.

- There are two types of surveys: online and offline.
- At least 90 units of responses.
- Customers of two types of the bank who use International Payment services are the respondents.

#### **1.5 Methodology and data overview**

Multiple approaches are used to gather and analyze data in this study. Quantitative data was obtained via email surveys and direct interviews for the primary research, which was then analyzed using the SPSS model, SmartPLS. The secondary investigation was performed using data from banks' internal databases, online publications, research publications, and official business websites.

#### **1.6 Thesis outline**

The thesis is constituted by five chapters (excluding the abstract, appendix, reference, list of tables and figure, abbreviations, and acronyms list):

##### ***Chapter 1:*** Introduction

Chapter 1 provides a summary of all the primary information about the background, objective, research scope, and research questions as well as the methodology.

##### ***Chapter 2:*** Literature review

Chap 2 discusses key ideas that serve as the foundation for developing research topics. Different methods of evaluating service quality are presented.

##### ***Chapter 3:*** Methodology

Chap 3 presents research methods such as qualitative, quantitative, and observational studies. Then it was explained why research had to do it. Data collection and analysis methods are clarified in this chapter as well.

##### ***Chapter 4:*** Findings and analysis

Chap 4 analyzes the data based on the methods proposed in Chapter 3. Through this, the factors that influence the level of quality of international payment activities, as well as the situation of those services at two groups of bank, are discovered.

**Chapter 5**: Recommendations and conclusion

The last chapter answers the research questions by summarizing the findings and suggests recommendations for improving the quality of international payment at 2 types of the bank given.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 International payment service at commercial banks**

#### **2.1.1 Definition of international payment**

Currently, nations cannot produce everything they require due to differences in geographical conditions, development levels, and natural conditions, all of which affect production capacity. As a consequence, nations will import products in which they do not have a competitive advantage and export those in which they do. This will allow them to capitalize on their competitive advantages. The process of commodities circulation generates a payment demand between entities from various nations. Buyers and sellers can select the payment method that will be used to make payments and collect funds. In general, governments do not settle directly with one another, but rather through the help of banks. Since then, an international payment service has been established.

Based on that basis, International payments consist of outgoing and incoming payments in that currency out of and into that country, as well as offshore payments in that currency, between two parties outside that country (B. Geva, 2013).

International payment involves two areas: trade payment and non-trade payment.

- Payment for export-import commodities or trade services that are applied for foreigners in the international market price is known as trade payment. An international trade contract serves as the foundation for parties to undertake a purchase and reach a settlement.
- Payment for non-commercial operations that are not related to export-import commodities, as well as trade service for foreigners, is referred to as non-trade payment.

#### **2.1.2 Characteristics of international payment**

Main characteristics of International Payment:

Firstly, IP activities are governed by international laws and practices: IP activities take place between parties from several nations, each with its own policies and laws. As a result, it is easy to misunderstand and difficult to resolve disputes unless there are common international practices. The International Chamber of Commerce (ICC) published UCP, URC, INCOTERMS in order to create a fair legal framework for entities engaged in international commerce and international payment operations, therefore preventing misunderstandings.

Secondly, IP activities are primarily carried out through banks: With the exception of a small portion of goods exchanged through border trade, the majority of a country's export-import turnover is reflected in the IP activities revenue of the country's commercial bank systems. The law stipulates that buyers and sellers can only pay via banks, not directly with each other. Importers and exporters



cannot always pay each other directly in international trade, they must go through a commercial bank with a global network of branches and correspondent banks. The bank acts as an intermediary between the two parties, performing foreign payment services on behalf of customers. All payments are made through the banks' NOSTRO and VOSTRO account payment systems.

Last but not least, in IP, at least one of the parties is linked to a foreign currency. IP, because of that, can be achieved quickly through the employment of changing prices and the control of the country's foreign exchange reserves.

### **2.1.3 Roles of international payment**

#### **2.1.3.1 In the national economy**

IP is considered as a bridge between the domestic and international economies in the context of an increasingly linked world economy. IP is extremely important in a wide range of economic operations, including export-import commodities and services, overseas investment, foreign exchange, and international finance. Furthermore, overseas economic activity is one of the main focuses in practically every country's economic development strategy. As a result, IP activities are becoming increasingly valued in both the domestic economy and international trade. Foreign business activities have a tough time existing and flourishing without intellectual property. In contrast, if IP activities are carried out in a timely, secure, and correct manner, it will aid in the smooth and efficient flow of goods and money between buyers and sellers.

#### **2.1.3.2 In import-export companies**

IP operations are mostly employed by import-export enterprises to meet their payment requirements for products and services. When a transaction occurs, the two parties (the buyer and the seller) sign a business contract, and the payment method is determined by how both parties respond to two questions:

- Firstly, how can exporters keep track of their goods till the buyer pays?
- Secondly, how can importers guarantee their funds until they receive the entire shipment of goods?

The exporters can handle it by controlling the products through the control of shipping papers using commercial banks' IP techniques. Importers, on the other hand, may ensure that their money is safe if they do not get the correct sort of products or the correct quantity of goods by inspecting and verifying shipping documents. As can be seen, exporters and importers have control over money and commodities via transit documentation provided by banking services. Depending on the payment method, the commercial bank will function as an insurance activity for the payment of the import-export contract, assuring more for both exporters and importers.

### **2.1.3.3 In commercial banks**

According to the legislation, parties in IP do not pay each other directly, but rather through banks. In a nutshell, commercial banks serve as a link between parties involved in IP transactions.

To begin with, international payment is not only a profitable operation for commercial banks, but it is also the focal point of the bank's other trade activities. As a result of customers' engagement in IP services, commercial banks' export-import financing, international credit, and capital mobilization operations are encouraged. As a result, improving IP activities will assist commercial banks in making profits from a variety of services, including trade finance, foreign currency trading, capital mobilization, particularly foreign currency capital...

IP activities also assist banks in expanding their operations. IP operations enable banks to collaborate with international commercial banks and financial institutions, as well as to integrate their activities with those of other banks throughout the world. Banks can develop their foreign affairs, obtain support from international banks, and expand their correspondent relationships on this basis.

### **2.1.4 Main common international payment methods**

Payment methods are critical components of trade contracts, not just for international commerce but also for domestic trade. Payment methods are the means through which the customer pays the vendor. In international trade, either the buyer or the seller might select appropriate payment methods based on their companies and relationships.

This section discusses four typical IP methods: cash in advance, open account, payment collection, and documentary credit.

#### **2.1.4.1 Cash in advance**

##### **Definition**

Cash in advance (CIA) is a payment technique in which the customer pays the vendor before the items are sent (Edward G. Hinkerlman, 2008, p. 12). The cash payment is received before and apart from the shipping of goods.

This form of payment is made by bank draft or check, or by wire transfer to the seller's/bank exporter's account.

##### **Process**

**Step 1:** By signing a sale contract that contains the CIA payment mechanism, the buyer and seller agree to conduct business.

**Step 2:** The purchaser sends a payment order to his bank via check, draft, or wire transfer.

**Step 3:** The importer's bank receives the request and approves it; money is transferred to the exporter's bank.

**Step 4:** Payment is made to the seller's account by the exporter's bank.

**Step 5:** The vendor sends items to the purchasers after receiving complete payment for the shipping.

### **Advantages and disadvantages**

There are no drawbacks for the seller (exporter) while utilizing this method of payment because he receives money prior to shipping. In other words, the seller may avoid credit risks associated with nonpayment, and the CIA is regarded as one of the safest payment methods in international commerce for exporters (Edward G. Hinkerlman, 2008).

CIA, on the other hand, gives the least assurance and poses the highest risk to the buyer (importer) that the exporter would not comply with all of the contract's requirements. As a result, according to Edward G. Hinkerlman (2008), the CIA is not often used by importers unless the supplier is lucky enough to have distinctive or in-demand items if the buyer is unknown from an unstable nation.

### **2.1.4.2 Open account**

#### **Definition**

An open account is a payment technique used in overseas sales in which things are sent and delivered before payment is due, which is usually 30, 60, or 90 days. The seller ships the products and sends the invoice together with the other papers to the buyer, who is requested to pay the agreed-upon sum on the specified date into the exporter's account (Dalhuisen, 2004, p.458). This form of payment is also made via bank draft or check, or by wire transfer to the seller's/bank exporter's account (as the same as CIA payment).

#### **Process**

**Step 1:** The buyer and seller sign a sale contract and agree to pay using an open account.

**Step 2:** The vendor delivers the customer the items and shipping documentation (documents and goods are sent separately to the buyer)

**Step 3:** After receiving the products, the buyer makes the payment to his bank on the due date (as specified in the contract).

**Step 4:** The importer wires the money to the exporter's bank.

**Step 5:** The seller's account is paid for by the exporter's bank.

### **Advantages and disadvantages**

#### Advantages

For the buyer, open account gives the most security and flexibility because he only needs to pay after receiving the products and ensuring that the exporter complies with all of the contract's requirements. Otherwise, this mode of payment allows the buyer to acquire products, advertise them on the domestic market, get payment, and make payment to the seller without having to direct his own cash. In other words, it lowers the credit risks for the buyer with a little amount of cash. This payment method, in general, does not rely on paperwork (as in documentary collections method or documentary credit). As a result, it is a relatively inexpensive means of transacting for both importers and exporters.

#### Disadvantages

Open account transactions, on the other hand, provide the highest risks to the seller since the buyer may fail to pay or postpone payment for the contract after receiving the products. As a result, in international trade, this payment method is not anticipated from the seller.

### **2.1.4.3 Collection of payment**

According to URC 522, "collection" refers to the processing of papers by banks in accordance with received instructions in order to acquire payment and/or acceptance; or deliver documents against payment and/or acceptance; or provide documents on other terms and conditions. In fact, two forms of collection exist: the clean collection and the documentary collection.

#### **a) Clean collection**

According to URC 522 (1995), the clean collection is the gathering of financial documents that are not accompanied by commercial papers. To be more exact, the clean collection is a process in which the seller entrusts the bank with collecting money from the buyer based on the draft produced by the seller, and the papers are given straight to the buyer without passing via the bank.

#### Advantages

With this payment method, when being in comparison to L/C, it requires lower cost and the bank provides assistance in locating and demanding payment

#### Disadvantages

In contrast, there are no guarantees of rewards for the seller. Moreover, the payment is entirely dependent on the customer, therefore some problems may occur, such as delayed payment or even no payment. In addition, the bank merely serves as a middleman and has no power to compel a buyer.

## **b) Documentary Collection**

According to URC 522 (1995), "documentary collection" involves the collecting of "financial documents accompanied by commercial papers or commercial documents not accompanied by financial documents." In more specific terms, this method of payment is one in which the seller entrusts the bank to collect money from the buyer not only based on the draft but also on the accompanying shipping documents, with the understanding that if the buyer pays or accepts the draft, the presenting bank will transfer the shipping documents to the buyer in order for the buyer to receive the goods (Edward G. Hinkerlman, 2008, p. 38).

Documentary collections are classified into two types:

- Document against payment (D/P): Before obtaining the papers, you must make a payment.
- Document against acceptance (D/A): This technique allows the buyer to sign the acceptance of payment on the demand draft produced by the seller/exporter rather than paying immediately. The signed draft is usually held in the collecting bank's (importer's bank) safe until the due date. To this day, the importer must make the approved payment.

### **Process**

**Step 1:** After sending the products and shipping them to the buyer, the seller prepares a draft for the buyer's money, together with a set of documents, and authorizes his bank to collect the money on his behalf via a collection instruction.

**Step 2:** The seller's bank, also known as the Presenting bank/Collection bank, delivers the collection instruction together with the draft to its correspondent bank in the buyer's country for collection.

**Step 3:** The buyer is required to pay the draft by the correspondent bank. The documents are only given to the buyer if he or she pays or agrees to pay the draft.

**Step 4:** The customer can pay right away (D/P) or sign to agree to pay the draft later (D/A).

**Step 5:** The proceeds will be transferred to the remitting bank by the correspondent bank.

**Step 6:** The money will be transferred to the seller by the remitting bank. If the document is a Document against Acceptance (D/A), the remitting bank will either keep it or send it to the seller.

Advantages: The seller's advantage is increased since the shipping paperwork may be managed through the bank. Other benefits of Documentary Collection are the same as those of Clean Collection.

Disadvantages: In addition to the increased certainty for exporters when requesting papers from banks, exporting businesses must pay a small fee to commercial banks. Other drawbacks of Documentary Collection are the same as those of Clean Collection.

#### **2.1.4.4 Documentary credit**

##### **Definition**

Documentary Credit is defined in Article 2 for UCP 600 (The Uniform Custom and Practice for Documentary Credits, ICC Publication No. 600, released in 2006) as follows: Credit is defined as any irreversible agreement, whether called or represented, that involves a clear promise of the issuing bank to honor a conforming presentation.

A letter of credit (L/C) is a vital element in the documentary credit payment method. L/C is classified into several kinds based on common features. Revocable L/C, Irrevocable L/C, and Confirmed Irrevocable L/C are three main forms. Furthermore, unique types include back-to-back L/C, revolving L/C, standby L/C, etc.

##### **Process**

**Step 1:** By executing a sale contract that includes an L/C payment method, the buyer and seller agree to conduct business.

**Step 2:** The buyer submits a request to the issuing bank in order to create a letter of credit.

**Step 3:** The Issuing bank approves the Buyer's credit risk, issues the credit, and delivers it to the Advising bank.

**Step 4:** The advising bank authenticates and advises the Beneficiary on the L/C.

**Step 5:** If the Buyer approves the contents of the L/C, the Seller provides items to him.

**Step 6:** After delivery, the Seller submits the relevant documentation to his bank (which may be the Advising bank) for payment processing.

**Step 7:** After reviewing the documents, the Advising bank sends them to the Issuing bank together with payment claims.

**Step 8:** The documents are checked by the issuing bank. The Issuing bank pays the Seller and seeks repayment from the Buyer if all of the documentation is complete.

## **Advantages and disadvantages**

### Advantages:

For the exporter, because the credit risk moves from the importer to the issuing bank, the seller has assured payment as long as he satisfies all terms and conditions specified in the L/C.

For the importer, the buyer is guaranteed that payment has been made to the seller until the seller satisfies all of the L/C conditions.

For the bank, banks receive fees for processing payments. Banks also provide additional functions such as foreign currency trading, export loans, guarantees, and so on. Furthermore, through the aforementioned actions, banks can enhance their reputation in international financial markets.

### Disadvantages:

When utilizing the L/C, both the exporter and the importer must do more difficult procedures than other methods and pay a larger fee to the bank.

For the exporter, documents are created in full accordance with all L/C standards. A minor inaccuracy in document preparation and examination will expose you to the danger of non-payment.

For the importer, L/C only ensures correct documentation but not necessarily correct products. Furthermore, in order to create an L/C, the importer must fulfill certain credit, mortgage, collateral, and credit limit criteria with the bank.

For the bank, any mistakes in the issuing bank's document inspection will be corrected.

## **2.2 Service quality**

### **2.2.1 Service**

According to the Cambridge Dictionary, "service" is defined as "a government system or private organization responsible for a specific type of activity or providing a specific thing that people demand." In research findings, service is defined as an action or task carried out by direct contact between a customer or guest and an agent or representatives of the service providing organization, which can be provided by a person either via technology (Ford et al., 2012). Depending on the frame of reference in which the term is applied and used, the term "service" can be defined in a variety of ways. Service, according to Kotler and Keller (2009), is "any intangible act or performance that one party provides to another." The term "Service" might well be defined in a variety of ways depending on the context in which it is used and utilized. According to Kotler and Keller (2009), service is "any intangible act or performance that one party offers to another that does not result in ownership of anything." Retailing, wholesaling, transportation, telecommunication, finance, education, tourism,

hospitality, and leisure are all service industries. As a result, service as a theoretical idea is difficult to describe since it is a synthesis of several aspects. As a result, service has been described as "any activity or benefit one party can offer to another that is essentially intangible and does not result in ownership of anything. Production may or may not be tied to a physical product" (Kotler et al., 1998).

### **2.2.2 Quality**

Quality, according to Parasuraman, Zeithaml, and Berry (1985), is defined as a comparison between expectations and performance. Quality is further defined as "the totality of qualities and characteristics of a product or service that have the capacity to meet the demands of the consumers" (Kotler et al., 1998). Obviously, quality is connected to the value of an offer or product, which may result in customer pleasure or discontent.

The gap between the quality that the guest expects and the quality that the guest receives is defined as the quality of the complete guest experience or any component of it. Any component of the service experience's quality may be defined in the same manner. Quality is unaffected by price or value. Quality can be high while also being expensive; the quality can be high while also being inexpensive, and so on. According to Ford, Sturman, and Heaton (2012), the term quality refers to the standard or specification that a service-producing organization guarantees. We can't have a hard and fast rule for quality. It is correct to state that service quality satisfaction is the result of resources and activities extended to provide service in accordance with user expectations.

### **2.2.3 Service quality**

Service quality is a mixture of two terms, Service and Quality, with the focus on the provision of high-quality services to authorized personnel. Service quality is commonly seen as the output of the service delivery system, particularly in pure service systems. Furthermore, service quality is related to customer satisfaction. According to Ford, Sturman, and Heaton (2012), service quality is the gap between what the customer anticipates and what the customer actually receives. The reason why the perceived quality of a product has become the most essential issue in commercial rivalry. While Edvardsson (1998) defines service quality as the ability to meet customers' expectations and determine their requirements and desires. Furthermore, Kotler et al. (2005) defined service quality as a service's capacity to accomplish its functions, including overall durability, reliability, precision, and other desired traits. It is clear from this that there are variances in the types of services and cultures in different countries and locations, as well as different periods. The writers of this thesis agree with Zeithaml and Bitner's (2003:85) definition of service quality: 'Service quality is a focused evaluation that reflects the customer's perception of specific dimensions of service-specific reliability, responsiveness, assurance, empathy, and tangibles.' Business operators can discover problems



promptly, improve their service, and better estimate client expectations based on the assessment of service quality supplied to clients.

#### **2.2.4 Bank's service quality**

Customer satisfaction and the quality of service are linked. Customer satisfaction rises in direct proportion to service excellence. Many believe that there are no acknowledged standard scales to evaluate the perceived quality of bank service in the banking industry. As a result, gaining a competitive edge through high-quality service is becoming an increasingly vital survival tool. Because of the specific qualities of services, measuring service quality appears to be a challenge for service providers.

As a result, banking service quality is defined by the customer's evaluation of the operational parts of the commerce that meet the customer's needs. Processes, employee attitude standards, price, security, customer insights, transaction processing, and credit speed, and so on are illustrations of these components. "International Payment activities quality of Commercial Banks is a collection of attributes related to IP activities at that bank, making them have the ability to satisfy requirements," the authors write, citing ISO 8002.

In general, once IP operations fulfill customers' expectations and want, they may help the bank become more competitive, attracting more customers and increasing revenue.

#### **2.2.5 International payment: Micro and macro aspects**

In general, all commercial bank activities, including international payment activities, are impacted by a variety of other elements. These influencing variables are classified as objective factors or subjective factors.

##### **2.2.5.1 Objective factors**

###### **National macroeconomic policies**

This is an essential element that not only has a direct impact on the production and business condition of companies but also on the operations of commercial banks. Each country's macroeconomic policies are designed to steer the course of economic growth. Some policies, in particular, have an immediate or indirect impact on commercial banks' international payment activity.

*Foreign economic policy:* Foreign economic policy is a broad field that includes commercial activities, financial investment, international services, technology transfer, and many other economic activities in which Foreign Trade is the central activity. Foreign economic policy can either promote or stifle the growth of foreign commercial operations. As a result, foreign policy is the foundation and framework that has a direct impact on international payment activities. The strategic orientation

of protectionism and trade liberalization influences corporate behavior, resulting in a silent worsening of international payment activities. The country's foreign policy: if it favors the trend of protectionism, it will create obstacles to trade operations; on the other hand, if it favors the trend of trade liberalization, it will create favorable conditions for foreign commerce to develop. As a consequence, the development of international payment activities and the development of international payment activities at commercial banks are encouraged.

Tax policy and import/export management: International payment is primarily a service offered by banks to meet monetary commitments originating between nations. It is a stage in the process that helps import and export activities go more smoothly. Tax laws and import-export management policies have a direct impact on the development and contraction of a country's export and import operations, and they are also a need for commercial banks to expand their international payment activities. The Government's tax policies have a significant impact on company business operations. Particularly important activities are import and export.

Foreign exchange management policy: The Government implements foreign exchange management by setting out policies to control the movement of foreign exchange in/out and regulations on foreign currency status of credit institutions. Based on the specific situation and fluctuations in the market, the State applies the knowledge of free or tight foreign exchange management to aim at the movement of foreign exchange activities to become stable in accordance with the policy of foreign exchange. Acting as a financial intermediary, when conducting international payment activities, commercial banks play the role of controlling the country's outgoing/incoming currency. Therefore, commercial banks that are allowed to conduct international payments must strictly comply with the regulations on foreign exchange management issued by the Government bank. The foreign exchange policy of the Government has an impact and affects the ability to balance foreign currencies for international payments. Thereby, commercial banks that are permitted to handle international transfers must closely adhere to the government bank's laws on foreign exchange management. The government's foreign exchange policy has an influence on the capacity to balance foreign currencies for international payments. Furthermore, economic and political developments in your country: the actions of nations' socio-economic environments have a significant impact on international payment operations. Each change in your country's macro environment will have an impact on your capacity and desire to meet the parties' agreed-upon commitments. The economic slump, along with political uncertainty, has a negative impact on enterprise freedom of trade, production, and commercial operations, hurting the payment process. Changes in a country's policy mechanism, such as foreign exchange reserve regulations, tax regulations, import and export fees, etc., or simply the legal

environment of a country's economy, which makes counterparties unable to predict the situation, affecting solvency, and thus causing damage to the commercial bank's party participating in it.

### **Customer factor**

Customers are a critical component in deciding the success or failure of banks in general, and foreign trade activities in particular, in a market economy. If the bank can attract a significant number of regular clients who do import and export business, it would provide ideal conditions for international payment activities to flourish.

Moreover, the production and company condition, financial capacity, foreign trade professional qualifications, import-export experience, and customer ethical conduct all play a part. The first step is to locate a partner and sign a contract.

Businesses may select a suitable partner to guarantee company operations are risk-free based on expertise, broad knowledge, and ability to grasp the commodity market. However, because enterprises in our nation are often inexperienced, lack knowledge of partners' information, and occasionally only interact and sign contracts via the internet, it is simple to risk delivery without payment.

Additionally, domestic businesses are frequently constrained in terms of document preparation qualifications, making payments simple to risk: documents not being presented on time, documents not complying with the presentation with the L/C, incorrect description of the items, etc the foreign bank refused to pay.

Consequently, companies must work with their banks to enhance their workers' credentials and international payment capability so that they can comprehend the terms of the L/C, create the necessary paperwork, and get payment swiftly.

### **2.2.5.2 Subjective factors**

Subjective factors, also known as internal factors, such as financial capacity, executive capacity, bank technology, staff qualifications, reputation, and agencies, and the support of marketing activities, all have an impact on IP activities in the detailed analysis below.

### **Executive capacity**

Commercial bank operational management model, a unified management system from the central to the branch according to a specified and compact procedure, with the branch taking the initiative, would save costs and time. Because their interests are assured, faster and safer payment times entice more customers to the bank. Commercial banks' executive capability is represented in business

decisions to reduce operational expenses and maximize the utilization of available resources to achieve optimal outcomes. It also manifests itself in the establishment of management regulations and operational procedures that are closely aligned with worldwide standards at each level of growth.

### **Financial capacity**

Capital, which includes legal capital and reserve funds, is the most essential financial component for a commercial bank. When a firm faces a risk (such as bad debt in the securities sector), bank capital serves as compensation for that risk and generates the ability to pay customer activities and obligations. Aside from capital, we must consider a number of other variables, including the bank's liquidity, asset risk structure, nature of the bank, changes in deposit kinds, and the quality of bank management. When banks have a significant financial capacity, they can operate in a stable manner, allowing the economy to expand gradually as well. Financial capacity is a critical component that is represented in the bank's capital potential.

Also, one of the primary activities involved in Trade Finance is intellectual property, and the two have a strong link. If a bank has sufficient financial resources, it will be able to grow its operations, supply the most up-to-date payment processing equipment, attract more high-quality human resources, and fulfill customer demand for transaction sponsorship. As a result, it contributes to the growth of IP-related activities.

### **Banks' technical level**

In the face of rapid advances in science and technology, as well as strong rivalry among banks, one of the most important elements in determining success is the implementation of scientific and public achievements. Technology has been included in the Bank's business processes. The more advanced banking technology is, the more data the bank can collect quickly and precisely, allowing it to make more fast and accurate choices. The enhancement of the import-export payment program software, as well as Vietnamese commercial banks' involvement in the SWIFT network, has made it easier to open L/Cs and make payments more rapidly and correctly. Banking technology boosts a bank's competitiveness in a variety of ways, including cost savings for both customers and the bank, faster payment and cash flow, centralized management, and quick, convenient, and secure connections with other banks and foreign partners for conducting IP activities effectively. Banks in every country are now heavily investing in information technology, telecommunications, and data processing.

### **Human resources qualifications**

Professional qualifications, competency, and quality of personnel are important elements in the number, quality, and success of the bank's goods and services. Because bank staff is the person who

directly executes the bank's business plans, if the bank's staff has high professional qualifications, risks in foreign payment operations will be reduced, and customer support consulting will be performed successfully. One of the success criteria in the field of technical progress and strong rivalry among banks is the implementation of new scientific and technological accomplishments in banking. Banks can collect information more quickly and precisely with the aid of contemporary banking technology, resulting in more timely and accurate choices. Besides that, banking technology boosts bank competitiveness in a variety of ways, including cost savings for both customers and the bank; faster payment and cash flow; centralized management; and quick, easy, and secure connections with other banks and foreign partners for conducting IP activities effectively...The connection mentioned by banking employees is used to transmit information from the market, customers, and rivals to banking policymakers. Banking employees with extensive knowledge and expertise in IP sectors such as export-import, customs, transportation, insurance, and international customs, as well as strong foreign language skills, can successfully manage transactions with partners all over the globe. Likewise, having well-qualified people to manage and execute operations is absolutely important in order to develop and expand operations. Moreover, if banks do not have sufficient quality employees to manage and utilize new advanced technology, their investment in new technologies would be wasteful and inefficient.

### **Credibility**

A large reputable bank is one that has a diverse range of operations, is vast in scale and quality, and attracts a large number of clients. A respectable bank will also have little trouble expanding both domestic and foreign markets. A renowned international bank, in particular, will facilitate international payment activities and execute payment guarantee responsibilities for both local and foreign customers.

### **Agency network**

The extensive network of correspondent banks enables me to perform international transactions and payments rapidly and accurately, lowering costs and decreasing risks. Banks, on the other hand, have the ability to use correspondent banks to carry out bank entrustment services in order to increase international payment activity.

### **Bank marketing**

Banks cannot afford to overlook the importance of marketing in their operations. Banking marketing activities are a set of market research and product development operations aimed at bettering customer demands.

The primary goal of marketing operations is to attract more customers and encourage them to pick the products and services offered by banks.

## **2.3 Related models**

### **2.3.1 SERVQUAL model - Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia - Jayaraman Munusamy et al. (2010)**

In this study, Malaysian researchers believed that customer satisfaction and service quality were interrelated. It means that the higher the service quality, the higher is the customer satisfaction and vice versa. According to Parasuraman in his article published in 1985, service quality was defined as the gap between customer expectation and the perceptions of the service received. If a business does not meet the expectation of customers, the quality of service is considered "low". On the other hand, if the performance exceeds expectations, customers will appreciate the quality of service that the business provides.

To measure service quality of retail banks in Malaysia, Jayaraman Munusamy's group had used SERVQUAL - a well-known quantitative model developed by Parasuraman et al. The SERVQUAL important benefit is its ability to apply to examine numerous services industries such as education, health care, banking or financial service. In the beginning, the SERVQUAL model showcased 10 components to determine customers' expectation and actual perception when using services (Parasuraman et al,1985). Although the scale of the model covers almost all aspects of service, it still remains the complex measuring, which has not got the discriminating value in some cases yet. In 1988, these ten components were corrected and collapsed into five different dimensions: Assurance, Reliability, Tangibles, Empathy, Responsiveness (Parasuraman et al, 1988). The author Jayaraman Munusamy also chose these five dimensions to mark the customer expectation and perception. They are described as follow:

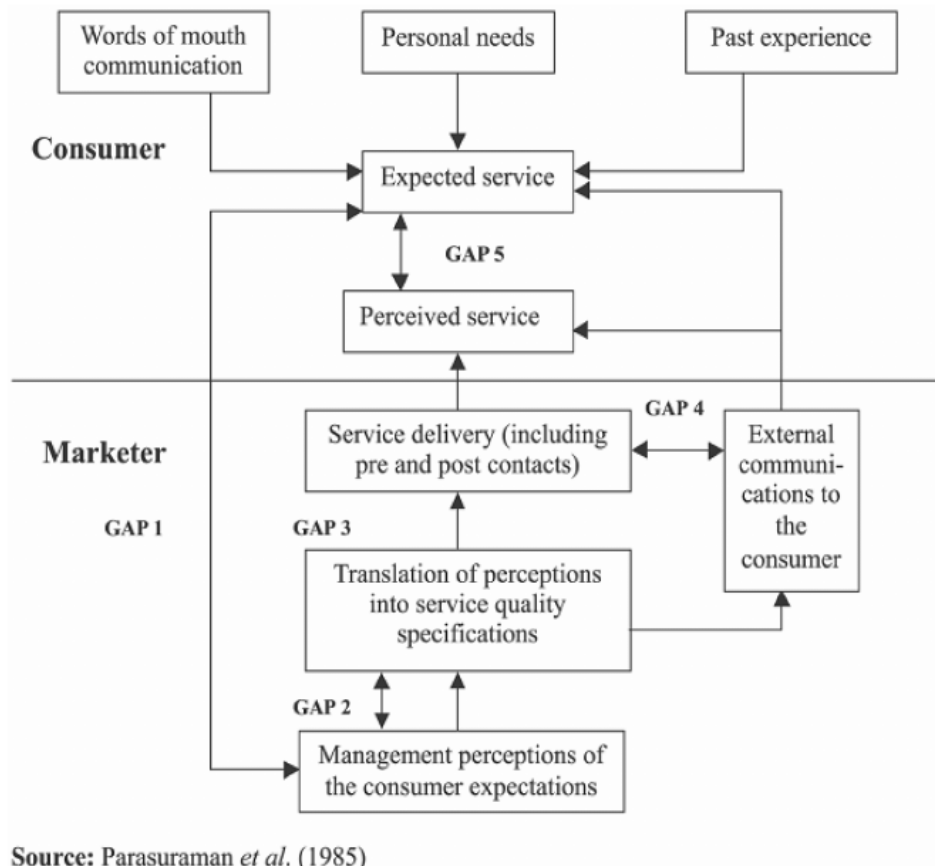
**Assurance** is an element that banks demonstrate their competence to their customer by providing safe transaction methods, having a high security system or carefully controlling risk for customer funds.

**Reliability** is about ability to provide service accurately and timeliness, respect commitments as well as keep promises with customers.

**Tangibles** comprise the appearance of a bank: facilities, modern equipment, communication system and so on. They are about what customers see, touch and feel when using services.

**Empathy** is directly caring for customers whenever they need support. Although the mechanical system has been developed, humans still assume a critical part in the interface and help clients.

**Responsiveness** is the timely response of a bank to customers' expectations.



Source: Parasuraman et al. (1985)

**Figure 2.1: SERVQUAL model by Parasuraman (1985)**

It can be seen that customers' expectation derives from four factors including: word of mouth, personal needs, past experience and external communication.

**Expectation (E)** is what customers expect when they use services.

**Perception (P)** is what customers perceive from banks' services.

**Service quality (S)** - the gap between Expectation and Perception.

$$S = E - P$$

In order to get the realistic outcome, data must be collected over a large population with numerous variables: genders, races, age groups, marital status, education backgrounds, designations and professionalisms. Jayaraman Munusamy supposed that different backgrounds have different expectations and needs so the respondent will absolutely generate a more reliable result towards Service Quality by retail banks. The surveys were conducted in two ways: face-to-face interview and

emails. After that, researchers ran two programs: Statistical Package for the Social Sciences (SPSS) and Microsoft Excel for analysis. Based on the outcome, the author had shown conclusions about the relationship between five dimensions and customer satisfaction:

**Assurance** has a positive relationship with Customer Satisfaction, but without significant effect. There were two potential reasons: firstly, the clients feel that the retail banks have given sufficient security and trust in their administration. Secondly, the clients have surrendered since all the retail banks are not capable of giving the degree of security anticipated.

**Reliability** has no noticeable effect on customer satisfaction. Machines have been utilized to supplant banks staffs to help clients in real money pull out, cash credit, check, Mastercards, bank book update, credit move and numerous different administrations. Customers believe that the machine has unwavering quality as opposed to human dependability when managing banks.

**Tangibles** has positive correlation and is highly significant with customer service. The load of changes in further developing office and gear are made to satisfy customer loyalty, catch and hold their clients.

There is no significant positive relationship between empathy and customer satisfaction. Although the vast majority of the clients would like to utilize the new facilities in the bank, there are still groups of people who prefer face-to-face communication by the banks. Because of that, the banks should pay attention to individual customers' needs and improve their empathy skill.

**Responsiveness** has a relationship but no significant effect on customer satisfaction. Customers can get that at some point machines can break down, but they cannot accept if bank' staffs do not respond to their requirements on time. These are the distinction discernment from clients between dealing with machines and humans.

### **2.3.2 SERVPERF model - Measuring service quality - a reexamination and extension - Cronin Jr., JJ, & Taylor, S. (1992)**

The SERVQUAL model has proved its effectiveness in assessing service quality. Many researchers had applied this model in their studies that were highly regarded by scholars. However, some people think the SERVQUAL model needs to be corrected at some point.

According to Parasuraman et al (1985), the definition of service quality in SERVQUAL was the gap between “expectation” (E) and “perception” (P). But in 1992, Cronin and Taylor had presented the SERVPERF model, a new performance-based measure of service quality, which defined service quality as a form of customer attitude. Basically, the scale of this model had the same five dimensions in evaluating service quality including: Tangibles, Reliability, Assurance, Empathy, and



Responsiveness. The difference is these factors are assessed based on the perceptions of service, not customer's expectations. Furthermore, when measuring service quality, there are various advantages to utilizing the SERVPERF scale rather than the SERVQUAL scale. First, some previous studies had proved that the SERVPERF model is one of first-rate measurements of service quality (Brown, Churchill Jr, & Peter, 1993; Jain & Gupta, 2004). Next, the number of questionnaires in SERVPERF is 22 items, which is half as many as SERVQUAL. Because of that, it is easier to understand and save more time for respondents in the survey process. In addition, using SERVQUAL scale may affect the quality of collected data, leading to reduced reliability and instability of observed variables.

### **2.3.3 SERVPERF & PSQM model - Influencing Factors of the International Payment Service Quality at Joint Stock Commercial Bank for Investment and Development of Vietnam - CUNG, N., et al. (2020)**

In this study, the authors applied an integration of SERVPERF and PSQM to measure international payment service quality at BIDV. They chose four factors (Tangibles, Responsiveness, Reliability, Assurance) from the SERVPERF model and Convenience factor from the PSQM model.

In order to get realistic results, researchers had collected data by sending surveys to customers who have used BIDV international payment service via email and face-to-face interview. After three months, The total number of survey samples obtained is 189, which comprises 75 online survey samples and 114 offline survey samples. The collected data were analyzed by running through the SPSS program gave the following results:

Reliability has the largest influence, followed by Responsiveness, Assurance, Tangibles, and Convenience. In international payment transactions, the accuracy and security issue is always strongly focused since it directly affects their customers' business activities. In fact, BIDV had received many awards including: “The best local trade finance house 2012” from Euromoney magazine and others from reputable banks in the world such as JP Morgan Chase, Bank of New York Mellon, Citibank, and Wells Fargo for Straight Through Processing (STP). These accomplishments have cemented BIDV's reputation as one of Vietnam's most prestigious commercial banks, consistently providing high-quality trade finance products and services to customers.

### **2.3.4 Antecedents and Consequences of Service Quality in Online Banking: An application of the Servqual Instrument - Han & Baek (2004)**

The focus of the study is to show the impact, influence and outcome of service quality in online banking. In the past decade or so, online banking has gradually replaced traditional banking services. Customer satisfaction now depends a lot on the improvement of technological factors. To clarify this issue, the authors conducted and analyzed data obtained from 740 responses.

Based on the study of Kettinger and Lee (1994), the most suitable model to evaluate IS (Information System) was the SERVQUAL model proposed by Parasuraman (1982). Han and Baek had applied this model then validated the measurement model and structural equation model. Besides, EFA is used to screen data and check dimensionality. Results showed that nine items were discarded after the EFA process because they are cross-loaded on more than one item. The four dimensions retained from Parasuraman's research include: Tangibles, Reliability, Responsiveness, and Empathy. The assurance dimension has a low influence on the quality of banking services. It is explained that in online banking transactions, customers will work directly on applications and websites, instead of interacting with bank staff. Therefore, they are more interested in the security of financial transactions. That is the reason why reliability would be the most representative dimension of service quality in online banking.

### **2.3.5 Examining Service Quality and Customer Satisfaction in the Retail Banking Sector in Vietnam - Van Dinh & Lee Pickler (2013)**

The purpose of this study was to fill two main knowledge gaps. First, the results obtained are considered as supporting evidence for previous literature, in particular the findings from Hanzae and Salehi (2011), Munusamy, Chelliah and Mun (2010), Ozdemir and Hewett (2010), and Ravichandran et al. (2010). Secondly, leaders of banks in Vietnam can rely on the analyzed results to come up with options to improve their service quality.

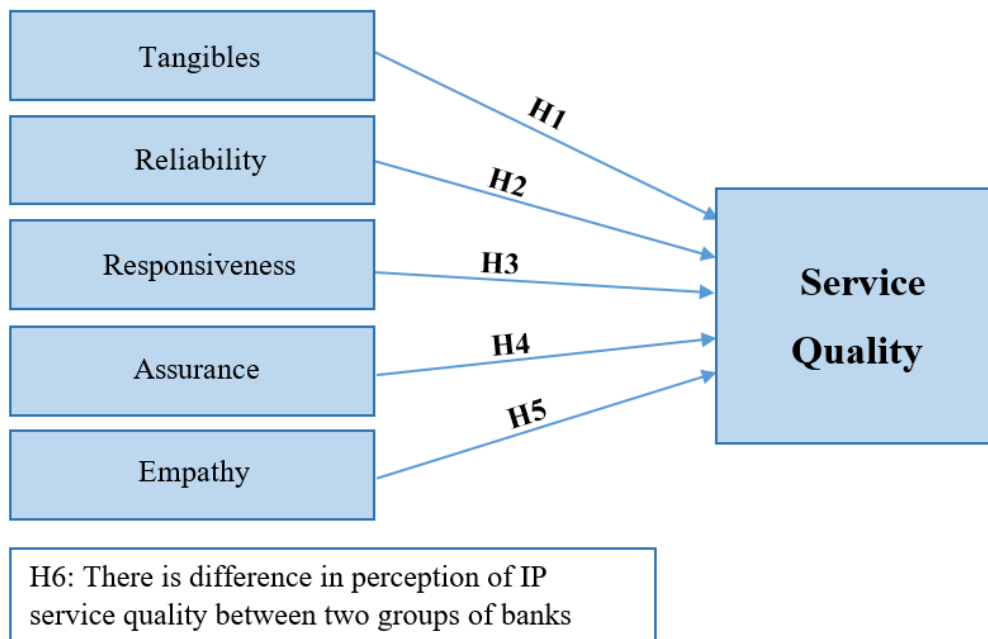
The authors had used the SERVPERF model of Cronin (1992) to examine the relationship between service quality and customer satisfaction. The five dimensions used for the analysis include: tangibles, reliability, responsiveness, assurance, and empathy. Besides, to improve the accuracy of the results, the researchers also applied some other methods: reliability and validity analysis, descriptive analysis, factor analysis, correlation analysis, and multiple regression analysis.

In conclusion, the two most influential factors on customer satisfaction in the banking industry were reliability and empathy. These results suggest that bank leaders need to focus on improving the reliability of the services that they plan to provide. In addition, the results also show that 61.4% of customer satisfaction does not come from the five listed factors but from other aspects. The authors suggest that customer loyalty to a bank may come from other factors such as pricing policies, culture, and levels of market standardization.

## **2.4 Proposed conceptual model and the research gaps**

### **2.4.1 Proposed conceptual model**

After analyzing and comparing the models in the previous section, we decided to choose the SERVPERF model with 5 factors: Tangibles, Reliability, Responsiveness, Empathy, Assurance based on the research by V. Dinh and L. Pickler.



***Figure 2.2: Conceptual framework***

There are several study publications on service quality in general, and banking service quality in particular, available at the moment. However, measuring the quality of two sets of banks' national payment services for businesses is a relatively new issue that has received little attention. Therefore, the information in the article will be quite new and difficult to find. But we will limit errors as much as possible and bring the most objective conclusions.

This study will analyze the quality of international payment services at two types of banks in Vietnam (state-owned joint stock commercial banks and private joint-stock commercial banks) using both qualitative and quantitative methods, and will update more data to draw more general conclusions about the banks' operations in the context of the Vietnamese economy's future general development.

## **2.4.2 Proposed hypothesis**

### **2.4.2.1 Tangibles**

“Tangibles Online bank has up-to-date equipment. Easiness and availability of information on the bank web site.” – by Han and Beak (2004). Although nowadays people often use e-IP (IP online), there will also be cases of going to the bank to work directly, or to solve IP related problems. That is why the factor Tangibles should also be mentioned here. The tangible criteria for IP service quality are:

- *Appealing physical facilities*: I don't know what customer retention is yet, but I'm sure that facilities are the first thing that impresses customers and attracts customers to use our services. A bank using advanced, modern and continuously updated facilities will easily reach customers and easily attract customers' attention.
- *Convenient operating hours*: For a bank with convenient operating hours, it will be easier for customers to have more convenient time frames to use IP services.
- *Supporting facilities (flyers, site interface, ...)*: When supporting offices are different and reliable with the sort of benefit industry, clients will get data around items and administrations more effortlessly.

#### **2.4.2.2 Reliability**

“Reliability Involves the correct technical functioning of the site and the accuracy of service promises (delivering when promised) and product information” - by Han and Beak (2004). In other terms, reliability is a bank's ability to provide the promised service consistently and precisely.

- *Provide service at times and should do as promised*: Completing transactions accurately according to customers' requirements and on time is one of the top factors customers care about when using the bank's services, especially for customers using IP services. Doing it quickly and correctly will increase the trust of customers for the service, and at the same time increase the reputation of the bank. And in my opinion, this is a necessary element that every bank must have, perhaps without controversy.
- *Interest in solving customer problems*: In the process of performing the service, sometimes it is inevitable that mistakes will be made. Therefore, the agility and attentiveness of the customer service team when customers have problems is an indispensable factor to increase the trust for that service as well as the bank.
- *Security level of customer information*: And of course, not only banks, but all transactions also need security. No one wants to reveal their personal information, so the security of customer information must be a must-have factor to strengthen the trust of customers when using the bank's services.

Bank has many security technologies: Smart OTP, self-serve (e-zone), online activities, creative products (SWIFT GPI) to ensure the security of customers when making transactions. show transaction.

#### **2.4.2.3 Responsiveness**

According to Han and Beak (2004) “Responsiveness is quick response and the ability to get help if there is a problem or question.” Responding effectively and swiftly to client queries or concerns is what responsiveness entails.

- *Processing time:* We all know that making an international payment process takes a lot of time. Therefore, businesses often pay great attention to the time that banks manage transactions. Banks with quick and neat transaction processes will prevail in the customer's choice.
- *Should tell when services will be performed:* IP services often have to go through a lot of complicated steps. Banks should have a clear working schedule, and regularly notify customers of the results so that they feel more secure when using services at their banks.
- *Always willing to help customers:* As I said in the Reliability's part, the customer service staff should take care of customers more conscientiously and carefully. And one thing that's quite important is Never too busy to respond to requests.

#### **2.4.2.4 Assurance**

Assurance is defined as "knowledge and courtesy of employees and their ability to convey trust and confidence" (Pham, T. & Nguyen, H., 2012). Customers' evaluations of the following essential factors result in assurance:

- *Knowledgeable and trustworthy employees:* To ensure consulting and solving customer problems and questions, the staff must have strong communication skills and professional knowledge to handle all situations.
- *Staff service attitude:* This is a pretty important point here. Because I have mentioned this more than twice in the whole paragraph. Customers are satisfied when the staff is welcoming and friendly, quickly addressing their needs. Therefore, a positive and dynamic attitude is also an important factor.
- *Customers feel safe in transactions:* Finally, a point in this section related to Reliability a little bit is to ensure that customers will feel secure when using the bank's IP service. The more secure they are, the more satisfied they will be, the more transactions they will have.

#### **2.4.2.5 Empathy**

“Provision of caring and individualized attention to customers provided by call centers or web administrators.” – by Han and Beak (2004). This section is mainly about empathy between employees and customers. Employees must put themselves in the shoes of customers, understand them to see what they need and want, and what they are satisfied with.

- *Individual attention to customers*: Most customers will not fully understand the intricacies of IP services. So there will be times when they are confused and worried, leading to them asking a lot of questions about IP services. At such times, employees who directly work with customers need to have empathy and closely monitor the customer's problem and situation to give reasonable advice and guidance.
- *Understand customer's specific needs*: Beside the individual attention to customers, the employee should also give personal assistance for their customers. Understand what they want and focus on satisfying their needs in a scientific and reasonable way.
- *Have the customer's best interest at heart*: Just taking care of the customer is not enough. From my point of view, everything needs to come from both sides. Employees give customers good service, so they also need to make customers trust them and the bank's services completely. Empathize and make customers trust and prefer transactions at their bank.

H1: Tangibles has a positive relationship on IP service quality.

H2: Reliability has a positive relationship on IP service quality.

H3: Responsiveness has a positive relationship on IP service quality.

H4: Assurance has a positive relationship on IP service quality.

H5: Empathy has a positive relationship on IP service quality.

H6: There is difference in perception of IP service quality between two groups of banks.

## CHAPTER 3: METHODOLOGY

### 3.1 Introduction

#### 3.1.1 Research philosophy

Research philosophy covers all of the fundamentals of the source and growth of knowledge, and it is seen as a critical theory for selecting appropriate research methodologies. The next sections examine the four categories of realism, positivism, interpretivism, and pragmatism.

**Realism:** According to the realism research philosophy, the reality is different from the human mind. This philosophy is based on the premise that knowledge is developed in a scientific manner. Direct and critical realism are the two types of realism (John Doduvskiy, 2018). Direct realism, commonly referred to as naive realism, is defined as “what you see is what you get” (Saunders, M., Lewis, P. & Thornhill, A., 2012). In other words, direct realism depicts the world through the eyes of the individual. Humans, on the other hand, are said to perceive the sensations and images of the real world, according to critical realism (Novikov, A.M. & Novikov, D.A., 2013). Sensations and images of the real world, according to critical realism, can be deceiving and rarely depict the real reality.

**Interpretivism:** is a research theory that specifies one's level of interest in a certain study. Individual differences are recognized in this approach. Interpretivists believe that reality can only be fully understood by subjective interpretation and intervention in it. The interpretivist philosophy emphasizes the study of events in their natural setting, as well as the recognition that scientists cannot resist influencing the phenomena they research. They acknowledge that there may be multiple interpretations of reality, but they insist that these views are part of the scientific knowledge they seek. The history of interpretivism is no less illustrious than that of positivism, nor is it any shorter.

**Positivism:** Positivism is based on statistically evaluated quantifiable data. It should be emphasized that. Besides, according to Levin (1988), positivists believe that reality is stable and can be observed and described from an objective viewpoint that Positivism had a long and distinguished history, and it was so deeply embedded in our community that any learning not grounded in positivist philosophy was simply discarded as scientific and hence invalid (Hirschheim, 1985, p.33).

**Pragmatism:** According to John Dudovskiy, only notions that assist action are considered relevant by the pragmatist research philosophy. Pragmatics “recognize that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities”. The most essential factor of the research philosophy, according to pragmatic research philosophy, is the research question. According to the nature of the research subject, pragmatics might combine both positivist and interpretivist viewpoints within the framework of a single study.

Finally, in our case, positivism is the study philosophy for examining aspects affecting the quality of international payment activities between two distinct groups of banks. There are a variety of ways used to collect information and data to determine the aspects that most affect the quality of international payment service in the two groups of banks. The acquired data is measured through face-to-face interviews, questionnaires, and direct email surveys (with a range of templates). Using this method, the authors are able to obtain objective and dependable results from a variety of perspectives.

### **3.1.2 Research process**

The research process entails selecting, locating, evaluating, and analyzing the data required to answer research questions. According to Hair et al. (2012), there are four stages to the research process: Determine the research problem, choose the best research design, carry out the research design, and present the findings. To better visualize the research process, the following 11 steps are separated into phases:

#### **Phase I: Determine the Research Problem**

Step 1: Identify and clarify information needs

Step 2: Define the research problem and questions

Step 3: Specify the research objective and confirm the information value

#### **Phase II: Select the Research Design**

Step 4: Determine the research design and data sources

Step 5: Develop the sampling design and sample size

Step 6: Examine measurement issues and scales

Step 7: Design and pretest the questionnaire

#### **Phase III: Execute the Research Design**

Step 8: Collect the prepared data

Step 9: Analyze data

Step 10: Interpret data to create knowledge

#### **Phase IV: Communicate the Research Results**

Step 11: Prepare and present the final report

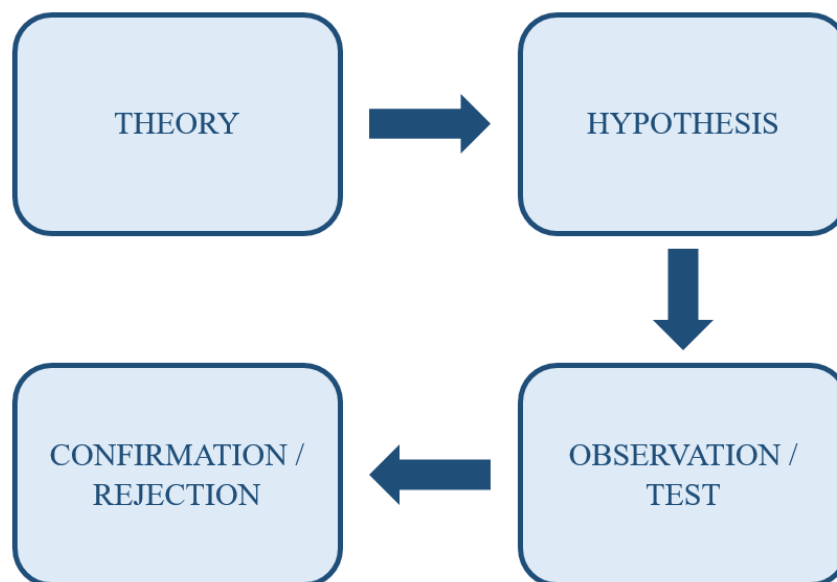


### 3.1.3 Research approaches

According to John Dudovskiy (2018), Regardless of the subject field, a discussion of the research strategy is an essential component of each scientific investigation. There are three sorts of research approaches: Deductive research approach, Inductive research approach, Abductive research approach.

#### Deductive research approach

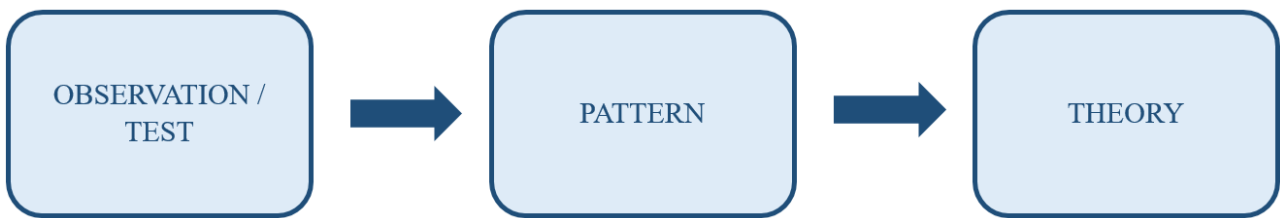
A deductive strategy might be used if you have developed a set of hypotheses for your dissertation that must be validated or rejected during the research process. When the premises are true, the conclusion must likewise be true in deductive inference. To generalize from the general to the specific, this logical technique is used. Data collecting is used to assess assertions or hypotheses that are connected to an existing theory. Finally, the theory is either falsification or verification.



***Figure 3.1: Deductive strategy***

#### Inductive research approach

The inductive technique, on the other hand, does not need the development of hypotheses. It begins with research questions and the goals and objectives that must be met during the research process. An inductive inference uses known premises to produce unproven conclusions. To generalize from the specific to the general, the inductive technique is used. The collecting of data is used to investigate phenomena, find themes and patterns, and develop a conceptual framework. The theory encompasses both generation and building.



***Figure 3.2: Inductive strategy***

### **Abductive research approach**

The research process in an abductive method is focused on the explanation of 'incomplete observations,' 'surprising facts,' or 'puzzles' indicated at the start of the inquiry. In an abductive technique, known premises are utilized to create tested conclusions, i.e. to generalize from interactions between the particular and the general. Data collecting is used to investigate phenomena, discover themes and patterns, place them in a conceptual framework, and test this with more data collection, and so on. Theory creation or modification; integrating current theory was suitable in building new theory or altering old theory.

**The deductive technique** assesses the validity of the assumptions (or theories/hypotheses) under consideration, whereas the inductive approach leads to the development of new ideas and generalizations. In contrast, abductive research begins with 'surprising facts' or 'puzzles,' and the research process is committed to explaining them. The deductive technique was chosen as the best methodology for this inquiry. This study used positivism in accordance with the previously established research philosophy; the strategy is totally warranted. The methodology of the study employs a logical approach to examine the effectiveness of services in the process of processing foreign payments.

### **3.1.4 Research methods**

In truth, scientists have developed and applied a variety of study approaches. However, in order to be appropriate for a student researcher, this study will concentrate on two key methods: qualitative research and quantitative research.

#### **3.1.4.1 Qualitative research**

Qualitative research is a sort of study that entails probing, gathering opinions, and viewpoints in order to get insight into a problem. This technique can also be used to predict future client trends. Qualitative research data gathering methods are highly diverse and can lack a precise structure, unlike quantitative research. Some of the techniques include focus groups, individual interviews, and observation. This method's sample is often smaller and more carefully selected. Qualitative research frequently approaches the research object in the most natural way possible in order to guarantee that

the behaviors, opinions, and perspectives expressed by the research subjects are as objective and accurate as possible.

**Objective:** Research group has collected qualitative interview answers of 4 employees from 4 different banks belonging to 2 groups of banks: state-owned joint stock commercial banks and private joint-stock commercial banks.

The collection of more qualitative survey results will add both objective and subjective parts to our research paper. Because bankers who work directly with the international payment system will have a better understanding and depth of the influencing factors than businesses - service users. If businesses give their opinion based on their experience using the service, then the bankers that we conduct qualitative surveys based on their personal knowledge and experience in working, will give the most professional opinions on the influence of factors on the quality of the bank's IP services. The collection of more qualitative results also helps us to learn more about some items of factors affecting the quality of international payment services. That contributes to making our research more complete and detailed.

**Advantages:** When qualitative research methods are applied, the problem is observed through the eyes of an insider. Having the researcher play a key role will help us better grasp the difficulties that quantitative research sometimes overlooks. Qualitative research aids in the clarification of study subjects' behavioral and attitudinal aspects. Furthermore, because qualitative research employs unstructured research methodologies, adaptability is quite great. Furthermore, this research strategy aids in the rapid discovery of relevant information. Finally, a qualitative research study is typically shorter and less expensive than a quantitative research endeavor.

**Disadvantages:** Besides the advantages, this research method also has several concerning drawbacks. First of all, this approach has limits in terms of the dependability of the study outcomes. A qualitative study, in particular, cannot have a large sample size due to cost and time constraints, and the outcomes of qualitative research are highly subjective. Furthermore, researchers must focus on the ability to interview people. Qualitative research takes a significant amount of time and effort to gather and evaluate data. A qualitative survey typically lasts around 30 minutes, which might make respondents feel uncomfortable and depressed. In order to gather the most precise and relevant information without making the survey participants feel uncomfortable, the researcher must be conversant with the study field as well as the procedures of analyzing. Another issue of qualitative research that researchers should consider is that because it is subjective, it is restricted in its ability to generalize study results to the whole.

### **3.1.4.2 Quantitative research**

The quantitative research approach is the gathering and analysis of information based on market data. The goal of quantitative research is to develop market findings by using statistical tools to analyze data and numbers. Quantitative research is suitable for research on attitudes, opinions, and behaviors of surveyed people. Quantitative data from small number of participants will be extended to a larger population. Methods for collecting quantitative data are often more structured than qualitative data collection, including various forms of surveys such as online surveys, paper surveys, mobile surveys, surveys by mail or email, etc. Quantitative research is frequently connected with depending on theories and conclusions to quantify, measure research elements, and investigate the relationship between variables in the form of measurements and statistics.

**Advantages:** Quantitative research methods are scientifically objective. Statistical analysis can analyze quantitative data, and because statistics are founded on mathematical principles, the quantitative technique is regarded as the scientific and reasonable way. As a result, quantitative research is ideal for testing the offered hypotheses. Most significantly, the survey results are quite reliable, and the representativeness is strong, thus the quantitative research findings may be generalized to the sample population. In addition, the examination of the acquired data will be completed more quickly while employing this research method. Analytical software aids in the processing of vast volumes of data in a timely and correct manner. Furthermore, it can reduce technical mistakes that may occur as a result of human variables in the data processing.

**Disadvantages:** The first is the subjective factor of the surveyor. In detail, if researchers are excessively focused on testing hypotheses, they may overlook some important survey facts. Furthermore, researchers must be on the watch for discrepancies in how issues are perceived. This can occur when the interviewee does not comprehend the question as intended by the researcher, but instead interprets it differently and reacts accordingly. Most types of surveys in quantitative research cannot intervene, explain, or clarify questions for respondents. In addition, researchers should keep in mind that quantitative research employs more sophisticated research methodologies than qualitative research, therefore designing research procedures will take more time.

Based on the characteristics, advantages and disadvantages of the two research methods above, in order to ensure the highest comprehensiveness and accuracy for this research, both methods will be applied to conduct the study. Specifically, the research group will conduct interviews with bank employees in the two groups of banks evaluated using qualitative methods. With the other method, which is the quantitative method, will be applied immediately to the questionnaire and survey through email.

### **3.2 Data source**

### **3.2.1 Primary data**

To begin with, primary data is information gathered directly by the researcher using the four most frequent methods: experiment, observation, interview, and survey. Furthermore, primary data has the following characteristics: it is the original source of information and data, hence it is more accurate and trustworthy (because the researcher can directly monitor and evaluate the process of research). This data is also often utilized primarily for research purposes, and its range is rather limited because it only comes from the study of one or a few scholars. Time-consuming as well as financial and information resources are frequently new and updated.

### **3.2.2 Secondary data**

Secondary data are data obtained by a person unrelated to the research project who collected these data for another reason and at a different period in the past. If the researcher makes use of these data, they become secondary data for existing users (Kotler & Kevin, 2012). Secondary data is categorized according to its source - internal or external. Internal data, also known as in-house data, is secondary information gathered within the corporation where research is being conducted. External secondary data is gathered from a variety of outside sources.

Primary and secondary data are chosen for the research of finding the determining factor of the quality of international payment activities at two kinds of bank in order to collect adequate data and information.

## **3.3 Data collection**

### **3.3.1 Qualitative data collection**

In qualitative research, non-probability methods, according to Cavana (2008, p. 137), have the distinct advantage of rapidly accessing participants who are most likely to provide rich information. As a result, the participants for the focus group interviews and in-depth interviews were to be chosen using a convenience sampling method. Furthermore, convenience sampling is most commonly used during the exploratory phase of a research project and is possibly the best way to gather basic information quickly and efficiently (Cavana et al., 2008, p. 263). As a result, the conventional approach is regarded as the best method, as the goal of the stage is to investigate more items relating to the progress of international payments in banks. The semi-structured interviews use some pre-formulated questions, but there is no strict adherence to them because new questions may arise during the conversation (Myers, 2009, p. 124). As a result, the interviewee has the opportunity to provide valuable insights.

An interview is a common type of qualitative approach that will be employed in this investigation. Before doing the in-depth interviews, we did a pretest with a banker. The result from the pretest is

that each employee will have to spend about 40 to 50 minutes to complete the qualitative interview of the research team. Interview design consists of nine phases, according to Creswell (2002):

1. Determine interviewees. Choose an acceptable intent sampling strategy.
2. Decide on the sort of interview you will do. Choose the one that best allows you to learn about the participants' perspectives and answer each research question.
3. Take notes on the questions and responses during the interview. This will provide you with a precise record of the chat.
4. During the interview, take brief notes. Despite the fact that it is normal to record the interview, take notes in case the recorder fails.
5. If feasible, conduct the interview in a distraction-free environment and select a realistic setting ideal for recording.
6. Obtain written informed consent from interviewees to participate in the research. Before beginning the interview, explain to the participants the aim of the study, when the interview will be completed, how the results of the interview will be used, and when the study summary will be available once the research is concluded.
7. Make a strategy, but be adaptable. Stick to the questions during the interview, but be flexible enough to follow the interviewee's discourse. Complete the questions within the time provided (if feasible) out of courtesy to the participants. Make an effort to be a good listener.
8. Use polls to get further information. Explorations are sub-questions that the researcher asks under each inquiry in order to acquire more information. Use them to clarify points or to allow the interviewee to elaborate on ideas.
9. At the end of the interview, be kind and professional. Finish the interview by thanking the participants, assuring them of the correctness of their replies, and asking if they want to summarize the study's findings.

Following those stages, and within the scope of this study, the interview questions were written in Vietnamese, with the intended audience being bank employees, and were separated into three sections:

Part 1: Describe the existing research group's content and aim. The study's overarching and ultimate goal is to assess the quality of variables influencing the quality of foreign payment services in two groups of joint-stock commercial banks. The qualitative method's information will serve as the foundation for the quantitative method's information and questionnaire procedures. The study's

qualitative interviews are aimed at bank personnel from two categories of joint-stock commercial banks.

Part 2: consists of 5 questions concerning general international payment services information. Question for bank employees regarding the common elements influencing service quality, including thoughts on which factor has the most effect on service quality.

Part 3: offers in-depth inquiries concerning the issues indicated above in the study in this thesis. In two groups of joint-stock commercial banks, the criteria that are directly applied to specific conditions at banks are described.

### **3.3.2 Quantitative data collection**

#### **3.3.2.1 Questionnaires design**

Questionnaire design consists of seven steps, according to Hair et al. (2012): Confirm research objectives; choose an appropriate data collection method; Develop a question and scale; Determine the layout and evaluate the questionnaire; Obtain initial client approval; Pretest, revise, and finalize the questionnaire; Implement the survey. The questionnaire in the quantitative method is prepared in Vietnamese based on the order and scope of the study, and the target audience is firms employing excellent international payment services at two groups of commercial banks.

A pretest is a preliminary test conducted after the research team has created the questionnaire. The pretest was completed in two days with five subjects: two Agribank employees and three retailers. The goal of the Pretest is to ensure that the questionnaire is of high quality in terms of meaning, specialized language, and survey response times. The authors created a comprehensive questionnaire after getting input on word usage and eliminating problematic and unclear phrases from the Pretest results.

This survey is separated into four sections:

Section 1: contains a question concerning firms' overall judgment of the quality of foreign payment services at the bank that enterprises use the most to evaluate the overall quality of JSC bank.

Section 2 consists of a question meant to gather firms' assessments of the quality of the bank's foreign payment services based on five independent characteristics based on the previously suggested research methodology.

Section 3: Enterprise ratings for five independent characteristics that are compatible with previously proposed service quality measures.

Section 4: Contains questions regarding fundamental firm information needed to categorize questionnaires, as well as questions about the most often utilized bank services by enterprises.

5-point rating scale: 1 = Strongly disagree, 2 = disagree, 3 = normal, 4 = agree, 5 = Strongly agree.

### **3.3.2.2 Sampling and collecting data**

#### **Sampling method**

In order to get the most exact result, sample selection is an extremely important step. Basically, there are two types of sampling methods:

- Probability sampling: All of the units in the study area have equal probability to be chosen. The randomization of the sample selection ensures the statistically-unbiased nature of the overall sample design.
- Non-probability sampling: The samples are chosen based on specific characteristics or personal information. Each unit in the study area has a different probability to be chosen.

In conclusion, the non-probability sampling method is chosen because it has more advantages than probability sampling. Firstly, it takes less time and resources to collect samples especially when data availability is rare and expensive. Secondly, selected samples are in accordance with the purpose of the study. In this study, all the respondents were companies that had used international payment services at least one time.

#### **Sample size**

Sample size is a term that is often used in statistics. It relates to the way research is conducted on large populations. In this study, there were 18 variables and each variable requires at least 5 responses (Hair et al, 2012). It means that the minimum sample size is 90 responses. There were 1500 questionnaires given to customers in order to get this sample size.

#### **Collecting data**

The data were collected by sending e-mail surveys to enterprises that had used international payment services at least one time. There are almost 1500 conducted surveys following the targeted sample below:

+ Type of survey: Online survey

+ Number of responses 182 units

+ Respondent: Customers who had used international payment services at least once time



The questionnaire included 25 questions, which related to five service quality dimensions. The method used to collect data was described as below:

- + Sent e-mail survey to export-import enterprises listed on trangvang.com.
- + Question format: Questionnaires were created by Google form.
- + Time: Surveys were sent in 1 month, from 21 October 2021 to 21 November 2021.

### 3.4 Measurement scale

In order to measure service quality, a 5-point Likert scale (Cronin Jr., JJ, & Taylor, S. (1992)) was applied. There are three 3 reasons to choose this measurement scale. First, the 5-point scale is quite simple so it is relatively easier to understand for respondents. Second, the 5-point scale is ideal for evaluating the results of a large sample of respondents. Finally, giving five different options to choose from increases response rates.

Variables	Item Code	Items	Item reference	5-point scale reference
<b>Reliability</b>	REL1	Provide service at times and should do as promised	V. Dinh and L. Pickler (2012)	Cronin and Taylor (1992)
	REL2	Interest in solving customer problems		
	REL3	Security level of customer information		
	REL4	Smart OTP	Qualitative results	
<b>Assurance</b>	ASS1	Knowledgeable and trustworthy employees	V. Dinh and L. Pickler (2012)	
	ASS2	Staff service attitude		
	ASS3	Customers feel safe in transactions		
<b>Responsive-ness</b>	RES1	Processing time		
	RES2	Should tell when services will be performed		
	RES3	Always willing to help customers		
<b>Empathy</b>	EMP1	Individual attention to customers		
	EMP2	Understand customer's specific needs		
	EMP3	Have customer's best interest at heart		

<b>Tangibles</b>	TAN1	Appealing physical facilities		
	TAN2	Convenient operating hours		
	TAN3	Supporting facilities (flyers, site interface, ...)	Parasuraman et al., 1985	

***Table 3.1: Measurement scales***

### **3.5 Data analysis method**

In order to analyze the collected data, Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied. Also, SPSS software and SmartLPS were used in this study.

#### **3.5.1 Qualitative research method**

The existence of certain words, subjects, or concepts in qualitative data is identified using *content analysis*, a research tool. Holsti (1968) defines inference as any approach for making inferences by systematically and objectively detecting specific qualities of communications. Ethnography, Observational Research, and Narrative Inquiry are all examples of research methods (1994 - 2012), A naturalistic and interpretative approach. It was observational and narrative in character, with less experimental aspects than is typical of scientific study (reliability, validity, and generalizability). Content analysis may be used by researchers to assess and analyze the existence, meanings, and relationships of certain words, themes, or concepts. Academics, for example, can evaluate the words of a news report to seek for bias or partiality. The subjects covered in the texts, the writer(s), the audience, and even the cultural and historical time in which the work was written may therefore be deduced by researchers.

#### **3.5.2 Quantitative research method**

##### **3.5.2.1 Descriptive statistical analysis**

One of the applications of the SPSS program is that it can be used to clean data and check for missing values by frequency analysis. Next, Descriptive Statistical Analysis in SPSS has the effect of briefly describing the characteristics of the collected data and evaluating the normality of the data based on the skewness and the kurtosis indexes (Pallant, 2005). The data are considered normal when they fall within the range of skewness from -2 to +2 and kurtosis from -7 to +7 (Byrne, 2010; Hair et al., 2010).

##### **3.5.2.2 Structural equation modeling**

Structural Equation Modeling (SEM) is a second-generation statistical analysis technique that is utilized to analyze multidimensional relationships between multiple variables in a model (Haenlein & Kaplan, 2004). Basically, there are two different types of SEM: covariance-based SEM (CB-SEM) and Partial Least Squares SEM (PLS-SEM). While CB-SEM is mainly used to confirm (or disprove)

hypotheses, PLS-SEM is mainly used to predict the effect of one variable on another (Hair et al, 2011). In addition, PLS-SEM is also more suitable for small sample sizes (Hair et al., 2017). In this study, there are 182 observations in total so PLS-SEM is recommended.

To evaluate the reliability of the scale, the research study used the composite reliability coefficient CR, the sum extracted variance AVE, single factor loading (outer loading), and Alpha Cronbach. According to Joe F. Hair Jr, composite reliability coefficient CR greater than 0.7 and the outer loading factor larger than 0.4 provide acceptable item reliability (Hair et al, 2014). For the standard of Alpha Cronbach, the higher the value of alpha ( $\alpha$ ), the higher the correlation between the items (Amit Choudhury, 2010). The reliability of Cronbach's alpha coefficient is expressed as follow:

<b>Cronbach's Alpha</b>	<b>Reliability value</b>
Less than 0.6	Poor
0.6 to less than 0.7	Questionable
0.7 to less than 0.8	Acceptable
0.8 to less than 0.9	Good
0.9 or more	Excellent

***Table 3.2: Rule of thumb about Cronbach's alpha coefficient size (Cronbach, 1951)***

Next, to examine the convergent validity, the study calculated the AVE (Average Variance Extracted) of each observer variable. According to Fornell & Larcker, the AVE of each observed variable is greater than 0.5 means the scale ensures convergence.

The last step was to test the discriminant validity. Discriminant validity is the degree to which a concept is actually distinguished from another concept by the following criteria experimental standards (Hair et al., 2010). In this study, this degree was measured by comparing the relationship between the factor with extracted variance AVE. According to Fornell and Larcker (1981), the Square root of AVE coefficient must be greater than the correlation coefficient between concepts (inter-construct correlations) to ensure discriminant validity. In addition, we also used HTMT (heterotrait - monotrait ratio) to increase the reliability in assessing discriminant validity. The HTMT coefficient is the ratio of the correlation coefficient between characteristics (between-trait correlations) with within trait correlations. When the HTMT index is less than 0.9, the scale achieves the discriminant value (Henseler et al., 2015).

### **3.5.3 Testing hypothesis**

In order to test the study's hypothesis, we used the following coefficients: path coefficient, p-value,  $R^2$  (coefficient of determination),  $f^2$  (effect size), and VIF (Collinearity Statistics). All of these coefficients must meet the following criteria:

- p-value less than 0.05: more inclined to support the hypothesis (McLeod, S. A., 2019)
- $R^2$  (R-square) higher than 0.5: If  $R^2$  gets closer to 1, the model has more significant (Hair et al, 2010)
- VIF less than 5: There is a moderate correlation between an independent variable and other independent variables in the model -> Multicollinearity may occur (Cock, 2015)
- According to Pearson (Karl Pearson, 1880s), the correlation is known as an effect size measurement. In his research, Pearson denoted the "effect size" as "r". His basic rules are as follow:
  - +  $r > 0.10$  indicates a small effect;
  - +  $r > 0.30$  indicates a medium effect;
  - +  $r > 0.50$  indicates a large effect.

### **3.6 Ethical considerations**

According to Weber, researchers should take the ethical issue seriously.

From the very first, it is that all study respondents should have the right to know what they are responding to. More specifically, they need to know information, at least basic information to understand what survey research they are serving.

Secondly, researchers need to protect the identity and information that survey participants provide. And at the same time the researcher must not deceive while doing the research in some way such as: cheating the survey, intentionally correcting information that is misleading compared to what the survey participants provided, and so on. In other words, the accuracy of the research must always be guaranteed.

To summarize, all of the aforesaid ethical factors were taken into account during the current study procedure. All participants were able to connect with the study's authors at any time (contact us through the information we have provided) to ask questions, express objections, or express other opinions. Furthermore, it was explicitly stated at the beginning of the questionnaire that all responses would be utilized exclusively for the current study aims and would be kept anonymous.

Besides, in order to ensure impartial findings and honest replies to the questionnaire, the survey was carefully organized so that respondents were well aware of the processes used.

### **3.7 Conclusion**

In summary, this chapter explains in detail the methodologies and models employed in this study. Data gathering and analysis will be critical in future study.

In addition, to generate these final conclusions, this study employed analytical approaches such as correlation analysis, descriptive analysis, regression analysis, and reliability analysis. The data analysis is described in depth in the next chapter.

## **CHAPTER 4: FINDINGS AND ANALYSIS**

This chapter focuses on analyzing the result of this research, which are qualitative research and quantitative research results. Therefore, the authors will evaluate the difference among the dimensions of two types of banks.

### **4.1 Result of qualitative study**

#### **4.1.1 Overview**

Most of the studies on the factors affecting the quality of international payment services of banks are quantitative. Therefore, for this study, we decided to add a qualitative method which is face-to-face interview. The objective of this approach is to identify the main factors affecting the quality of international payment services in two groups of joint-stock commercial banks in Vietnam, namely the state-owned joint stock commercial banks and corporate equity trading, thereby extracting the most important factor affecting the quality of international payments at banks. First, we will look at the method of conducting in-depth interviews. Next, a description of the sample data is provided. Then the results will be presented. Finally, the conclusions and factors affecting service quality and the importance of each factor are given.

The basic data for this study were obtained from in-depth interviews with 4 bankers at banks belonging to 2 groups of state-owned joint stock commercial banks and private joint-stock commercial banks. 4 bankers working at banks respectively: BIDV, Vietcombank, SeAbank and LienVietPostBank. The authors conducted the interviews themselves. Due to the impact of the Covid-19 epidemic, 2 out of 4 interviews were conducted online via Google Meet, the remaining 2 interviews were conducted in person at the bank's office and recorded with consent. of the participants.

These participants were interviewed for a period of 20 to 30 minutes in October 2021. The questionnaire in the interview guide was adopted and adjusted based on the questionnaire developed by V. Dinh and L. Pickler (2012), Parasuraman et al., (1985). Then, one participant was interviewed to revise and test the interview questionnaire. Thereafter, 4 more interviewed participants were interviewed. According to "Saturation in qualitative research: exploring its conceptualization and operationalization" (Saunders et al. 2018). When data saturation is reached, we decide to close the interview and move on to the data analysis process. Data analysis and classification was performed according to V. Dinh and L. Pickler (2012). Guided questions for in-depth interviews are presented in Appendix 1. Finally, an interaction model (recommended model) was built after analyzing data from in-depth interviews.

#### **4.1.2 Descriptive statistic of sample**

We collected demographic data of 4 people after conducting interviews. The data is presented in Table 4.1.

According to the data in the table, we can see that there are 4 qualitative interviewees (N=4), including 2 men and 2 women of different ages. All interviewees are employees of international payment transactions. In which, each person comes from different banks, namely BIDV, Vietcombank (belonging to the group of state-owned joint stock commercial banks) and SeAbank, LienVietPostbank (belonging to the group of private joint-stock commercial banks).

	Quantity	Percentage (%)
<b>Gender</b>		
<b>Male</b>	2	50
<b>Female</b>	2	50
<b>Total</b>	4	100
<b>Bank's type</b>		
<b>State-owned joint stock commercial banks</b>	2	50
<b>Private joint-stock commercial banks</b>	2	50
<b>Total</b>	4	100

***Table 4.1: Demographics Characteristics of In-depth Interview (N=4)***

Respondents	Gender	Age	Role in the bank
<b>Respondent 1 (R1)</b>	Male	30	International payment transaction officer
<b>Respondent 2 (R2)</b>	Female	29	International payment transaction officer
<b>Respondent 3 (R3)</b>	Male	33	International payment transaction officer
<b>Respondent 4 (R4)</b>	Female	27	International payment transaction officer

***Table 4.2: Participants' background***

#### 4.1.3 Result

#### 4.1.3.1 The 1<sup>st</sup> result: Factors affecting the quality of banking services international payment

When they were asked about the factors influencing the decision to use international payment services at a joint-stock commercial bank, 100 percent of respondents said that one of the decisive factors is "people" international payment procedures. The factor "technology" accounts for 75 percent of the updated comments on the influencing factors. According to the qualitative data, 50 percent of individuals believe that among the aspects that must be highlighted in the quality of foreign payments, empathy is a significant feature. The "exact" and "tangibles" factors, which also have 50 percent of the authorized replies, are essential variables in the quality of foreign payment services at the bank. Only 25% of the answers appear to contain criteria such as speed, pricing from the bank for clients. The components "people" or bank workers are graded and coincide with the definition of the assurance factor, according to the research stated in the literature review as well as definitions from experts. The technology aspect is an essential component in tangibles. The responsiveness factor includes both the speed and the pricing. The qualitative method's findings correspond with those indicated in the SERVPERF model, which includes five factors: reliability, assurance, tangibles, responsiveness, and empathy.

Guiding question	Responses	Percentage
List the factors that you believe have an effect on the quality of international payment in 2 groups of banks.	Assurance	100%
	Tangibles	75%
	Reliability	75%
	Responsiveness	50%
	Empathy	50%

***Table 4.3: Factor affecting international payment service quality***

#### 4.1.3.2 The 2<sup>nd</sup> result: The most important factor in international payment

When asked what the most essential and decisive element determining service quality was, 75% of bank employees said "people" - 1 item in the Assurance factor. The remaining 25% of respondents cite facilities as the most crucial component in providing excellent service to customers. According to the statistics shown above, persons or variables relating to the quality of workers at banks have the biggest effect on customer choice and trust in the bank. At a time when bank prices and fundamental processes are nearly identical, the quality of human resources is the brightest point. Employees serve as a bridge to provide ideas and advice to customers for them to select the most reasonable service



package and payment method, as well as a pioneering condition for the bank-customer relationship. When asked what needs to be addressed in banks, it was once again verified that the most essential and conspicuous aspect in the bank. 75 percent of prior respondents who chose the human aspect agreed in general on boosting employee quality, qualifications, routinely and thoroughly updating international practices for employees, and further improving employee quality. All local and international guests should be able to communicate in a foreign language. The remaining 25% is for facility improvements, so focus on growing the brand, enhancing quality, and improving infrastructure to attract customers with trust and optimism.

Following their responses, the respondents provided items related to the previously listed factors based on the study model. According to the writers of this project group's summary, the assurance element has the largest effect on the quality of international payment services. 75 percent of opinions belong to tangibles, which are the second most significant component out of the five discovered variables, which include technology and financial facilities. Reliability is also the second most essential element, accounting for 75% of all foreign payment transactions at banks, including accuracy and reputation. The responsiveness and empathy categories account for 50 percent of the total four replies. Each aspect has a unique function in influencing the quality of international payment services.

#### **4.1.3.3 The 3<sup>rd</sup> result: Details on the influence of 5 factors on the quality of international payment services of two groups of banks**

##### **Tangibles**

This question required respondents to give their assessment of the impact of tangible factors on the international payment services quality at the bank they were working for. All interviewees responded that their banks regularly conduct internal surveys to get employees' opinions about uniforms, facilities, remuneration policy... The senior personnel may consider improving banking tangible factors based on their employees' feedback.

*"Vietcombank frequently get employee's evaluation about uniforms, facilities, remuneration policy every year." – R2, State-owned JSC Bank*

*"LienVietPostBank attaches great importance to the opinions of bank employees, so my bank often organizes annual overview surveys." – R4, Private JSC Bank*

*"SeABank often organizes internal surveys to ask for opinions, suggestions, and overall assessment of the bank." – R3, Private JSC Bank*

##### **Reliability**

The respondents had to answer 4 questions related to 4 factors of this dimension including banking security, banking risks, solutions of banks, and technology background. In terms of banking security, 50% of the interviewees said that their banks are applying smart OTP while the rest are using SMS OTP. It can be concluded that Vietnamese banks are trying to protect their customers by improving more new security methods.

Next, 75% of bankers said that banking risks often occur when customers are scammed to transfer money or have OTP codes stolen. Fraudsters often take advantage of customers' trust and the lack of knowledge to carry out acts of appropriation of property. In addition, risks can also occur due to some subjective reasons of customers such as incorrect account number, beneficiary bank, etc. In order to minimize banking risks, all banks regularly send messages, emails and publish information about frauds to customers, so that customers can protect themselves from scammers. For problems such as transferring money to the wrong beneficiary or beneficiary bank, the bank staff will make a trace and assist the customer to get the money back.

Finally, in terms of technology platforms, all respondents said that their banks always try to apply high technology in their operations to improve the quality of banking services. According to 100%, banks now have mobile banking applications, along with many features such as bill payment, phone card purchase, or online savings.

In particular, Vietcombank has implemented a self-service channel (e-zone) at the transaction office, converting the manual procedure at the counter to an automatic operation on digital banking channels.

*"Vietcombank has modern distribution channels such as mobile banking, SMS banking, etc. At the same time, this bank has built self-service channels (e-zone) at transaction offices, converting manual procedures at counters to automatic operation on digital banking channels for transfer, loan repayment, online deposit, credit card debt management, and repayment. In addition, the bank also coordinated to deploy a number of innovative products such as QR pay, Swift GPI and built models for mining big data, unstructured data...." – R2, State-owned JSC Bank*

*"Currently, SeABank has applications to serve customers such as App SeAMobile, SeANet page. In addition, the bank also deploys many other products such as QR pay, online bill payment, top-up, phone cards, online savings, online loans." – R3, Private JSC Bank*

## **Responsiveness**

Responsiveness is assessed by 100% of interviewees as the most important dimension of banks. First, international payment transaction fees are an indispensable factor for every bank. Banks often compete by offering the cheapest and most economical fees to customers. Second, all respondents

agree that the collection and letter of credit are the two most chosen methods by customers. These 2 international payment methods have low risk and ensure safety for both buyer and seller. Next, an important factor affecting customers' evaluation of the quality of international payment services is transaction processing time. Normally, it takes banks from 2 days to 1 week to process 1 international payment transaction, but Vietcombank only takes about 20 minutes to do it. Vietcombank links with many other banks in the world, which makes it easier for this bank to access and exchange information faster. Finally, banks also sometimes have trouble processing international payment transactions. All four interviewees said that the main reason often comes from customers: not providing enough information or providing wrong information. Normally, it will take 2-3 days for customers to add documents and the bank to re-check.

### **Assurance**

When being asked what professional exams that employees had to take at their banks, 75% of the interviewees answered that employees need to take the annual professional exam. Moreover, 75% of the answers mentioned professional training courses on soft skills, communication skills, dealing with customers, learning more about products and services provided by the bank, etc. In addition, 25% of the answers mentioned separate exams, namely the international money transfer exam every 6 months, exams for checking treasury operations once a year, and staff in customer relations positions will have to undergo a professional exam every 2 years. In conclusion, almost in the answers that the research team received, the interviewees said that the staff at the bank are always trained and have to pass professional exams to be able to improve their expertise, ultimately serving customers more attentively, accurately and efficiently.

Besides, when being asked about entry conditions to become an employee of the bank, 100% of the responses mentioned that, in order to be able to work at their bank, the most essential thing for a candidate is to graduate from a university with a relevant major. Specifically, here is the element of basic knowledge related to banking operations. This needs to be ensured first of all to be able to achieve high efficiency in the process of working at the bank. Most significantly, every employee has to be knowledgeable enough to pass frequent professional examinations. Additionally, 50% of the comments mentioned two important factors to become a bank employee, which are appearance and communication ability.

### **Empathy**

When being asked about the teller's duties during the working process, 100% of the answers from the interviewees mentioned that the main job is customer support, consulting transaction packages, checking records, etc.

When being asked about the number of branches and transaction offices of the bank across the country, 50% of the answers gave numbers from 500-600 workplaces, 25% of the answers gave numbers over 1000 and 25% gave the number less than 200 transaction offices and branches.

When being asked about the most important factor for a bank's transaction office, up to 75% of the interviewees answered that the location factor is the most important factor. The reason is that when choosing the correct and suitable location, the bank's working efficiency will be boosted. For example, placing a branch or transaction office in locations with a high concentration of people and pedestrians will be able to attract more customers than in remote locations with few people. Besides, 50% of the respondents agreed that humans are the most important factor due to the fact that they are the people who directly interact with the customers during the working process.

<b>Factors</b>	<b>Content</b>	<b>Opinions</b>	<b>Percentage</b>
<b>Tangibles</b>	Uniform	Get feedback from employees	100%
	Facilities	Get feedback from employees	100%
	Remuneration policy	Get feedback from employees	100%
<b>Reliability</b>	Banking security	Smart OTP	50%
		SMS OTP	50%
	Banking risks	Mistyped SWIFT code, beneficiary name, beneficiary unit, beneficiary bank	75%
		There is a possibility that customers are easily tricked into transferring OTP codes and being scammed.	100%
	Solutions	Warn customers about common scams today	100%
		Set up an investigation	50%
	Technology platforms	Banks now have mobile banking applications, along with many features	100%

		such as bill payment, phone card purchase, or online savings.	
		Implementing a self-service channel (e-zone) at the transaction office, converting the manual procedure at the counter to an automatic operation on digital banking channels	25%
<b>Responsiveness</b>	International payment fee	Depending on international payment methods and foreign currencies, banks have their own fees.	100%
	International payment methods	The collection and letter of credit are the two most chosen methods by customers.	100%
	Time to process international	The average processing time for international payment transactions is 3-5 days.	75%
		International payment transaction processing time from 15-20 minutes.	25%
	Reasons for the transaction to be delayed	Customers do not provide enough information or provide wrong information	100%
<b>Assurance</b>	Professional exams that employees had to take	For the position of teller: there is a professional qualification exam once a year, an exam to check the treasury operations once a year, international money transfers exams every 6 months	100%

		For the position of customer relations: Officers must pass a professional qualification exam every 2 years.	25%
	Entry condition	Knowledge	100%
		Appearance	50%
		Soft skill	50%
<b>Empathy</b>	Employees' responsibility	Bank staff need to assist customers before, during and after they agree to use the service	100%
	Number of branches	Under 200 branches	25%
		500-600 branches	50%
		More than 1000 branches	25%
	The most essential factor for a branch	Humans	50%
		Location	75%

***Table 4.4: Summary of qualitative results***

#### **4.1.3.4 The 4th result: Comparison of the two groups of bank**

According to the interview results, 50% picked the Empathy factor, with 25 % belonging to response group 1 (state-owned JSC banks) and 25% belonging to response group 2 (Private JSC banks). The Responsiveness component accounts for 50% of the replies, accounting for all two answers in Group 1, but not in Group 2. Tangibles account for 75% of the total: private JSC bank refers to two "tangible" dimensions, whereas group 1 has only one "tangible" dimension. The Reliability dimension has been picked by 75% of those polled, with 50% of group 1 and 25% of group 2 opting for it. Specifically, the assurance of two groups was elected 100 %. There may be a variation in the selection of factors determining the quality of international payment services between the two groups of banks.

## **4.2 Result of the quantitative study**

### **4.2.1 Overview**

This section will present the results of quantitative analysis with 5 factors: Reliability, Assurance, Responsiveness, Empathy and Tangibles.

This section consists of five main parts: descriptive analysis, the survey ranked the importance of 5 factors to the quality of the bank's international payment services, measurement model analysis, structural model analysis, comparison between two groups of bank.

#### 4.2.2 Descriptive analysis

##### 4.2.2.1 Preliminary analysis

###### Missing value

To collect quantitative data, an online survey (Google Forms) was employed. Before finishing the survey, we've made it a necessity to answer all of the questions. As a result, there were no missing values.

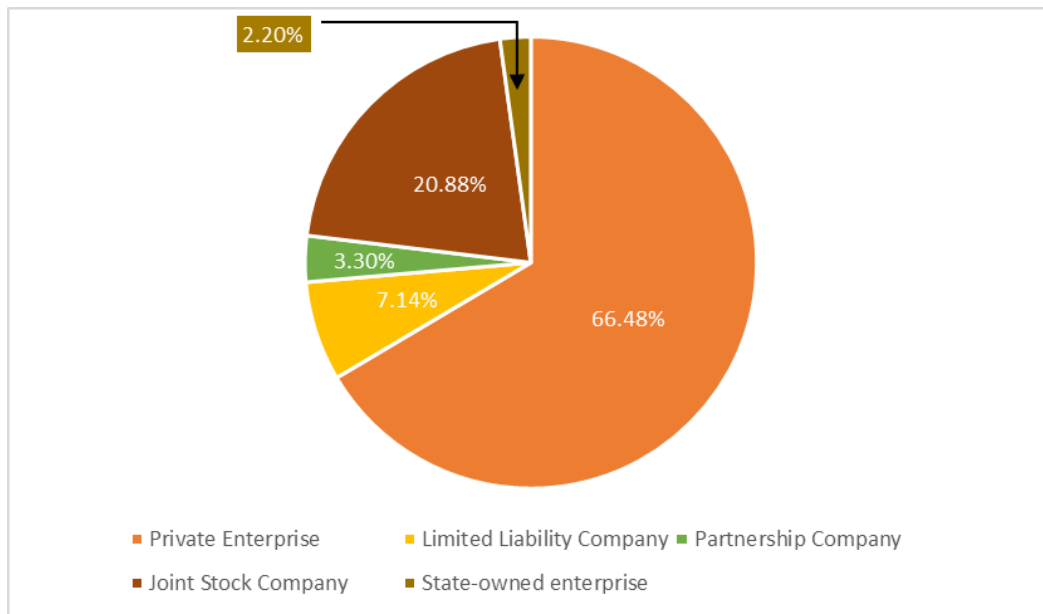
###### Normal distribution of observed variables

	N	Minimum	Maximum	Mean	Std. Deviation
<b>REL1</b>	182	1	5	4.45	0.709
<b>REL2</b>	182	1	5	4.31	0.755
<b>REL3</b>	182	2	5	4.56	0.599
<b>REL4</b>	182	3	5	4.45	0.635
<b>ASS1</b>	182	2	5	4.37	0.674
<b>ASS2</b>	182	1	5	4.37	0.774
<b>ASS3</b>	182	2	5	4.48	0.671
<b>RES1</b>	182	1	5	4.34	0.739
<b>RES2</b>	182	3	5	4.45	0.635
<b>RES3</b>	182	2	5	4.37	0.842
<b>EMP1</b>	182	2	5	4.31	0.761
<b>EMP2</b>	182	1	5	4.08	0.827
<b>EMP3</b>	182	1	5	4.24	0.828
<b>TAN1</b>	182	3	5	4.34	0.692
<b>TAN2</b>	182	1	5	4.10	0.883
<b>TAN3</b>	182	2	5	4.19	0.827
<b>Valid N (listwise)</b>	182				

***Table 4.5: Descriptive analysis***

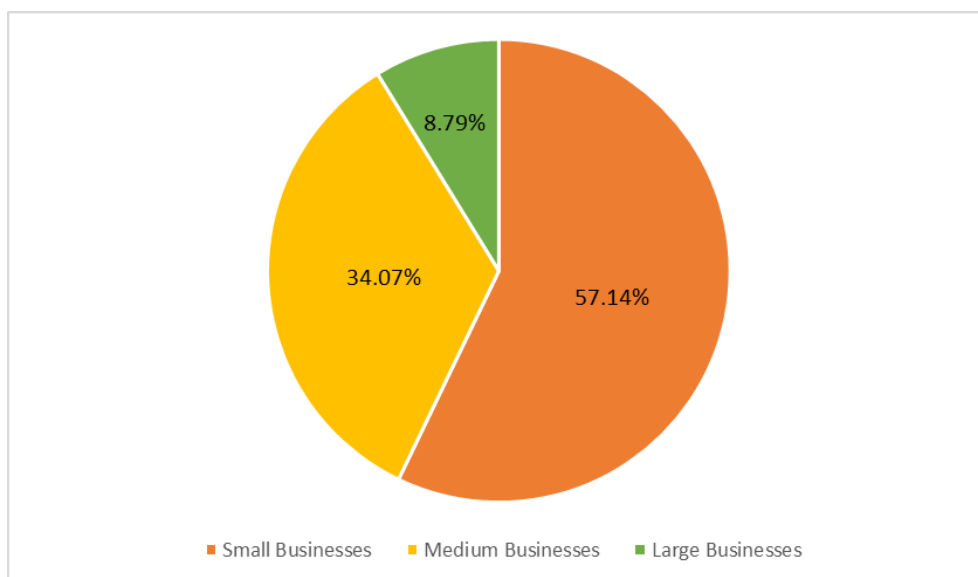
#### 4.2.2.2 Demographic analysis

The demographic data of 182 survey respondents from businesses from Vietnam are presented in Appendix 2. The data of type of enterprise showed that private enterprise was the main respondents, at roughly 66.48%, followed by joint-stock enterprise at 20.88%. Besides, partnership companies and state-owned enterprises account for only 3.30% and 2.20%, respectively, whereas limited liability companies account for 7.14% in the choice of the respondents.



***Chart 4.1: Type of business***

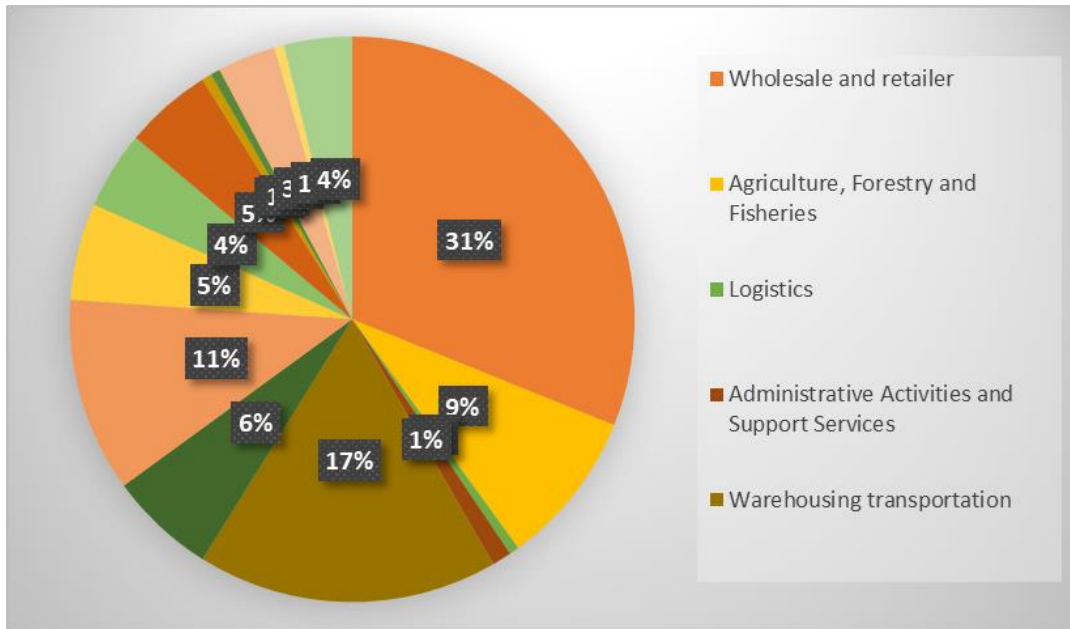
As for the size of the business, small businesses (57,14%) were the most respondents to the survey, followed by medium businesses (34,07%). There are only a small number of large businesses (8,79%).



***Chart 4.2: Scale of business***

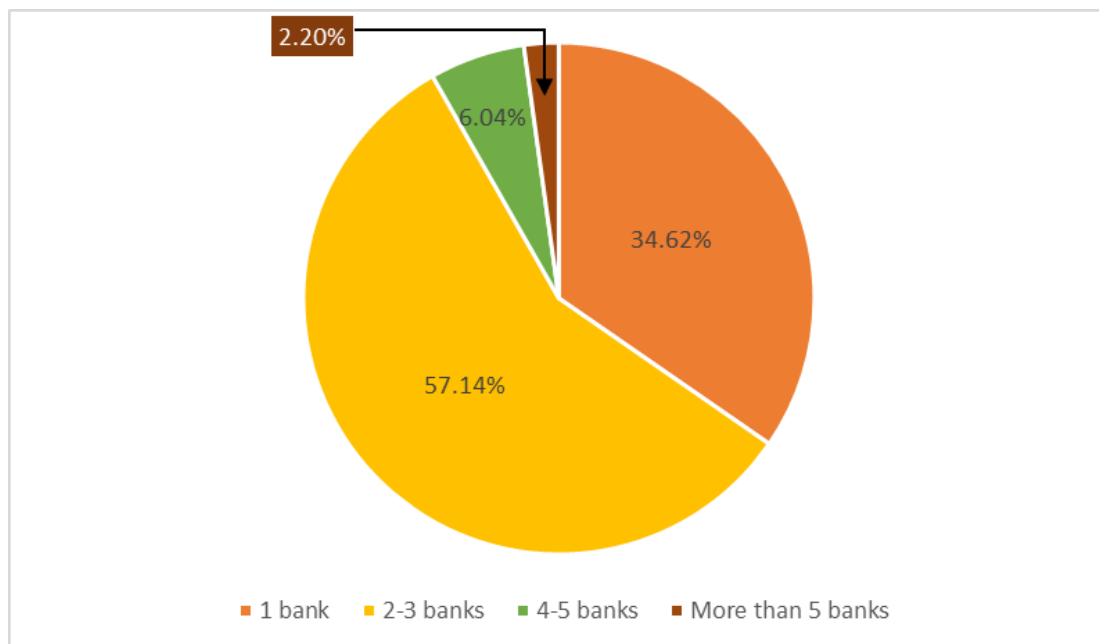


Most respondents about business lines were majoring in wholesale and retail (30,77%), followed by warehouse transportation at 17.03%, and construction industry (10.99%). In addition, some business lines only account for a small percentage such as logistics, education, health, and social assistance activities, etc.



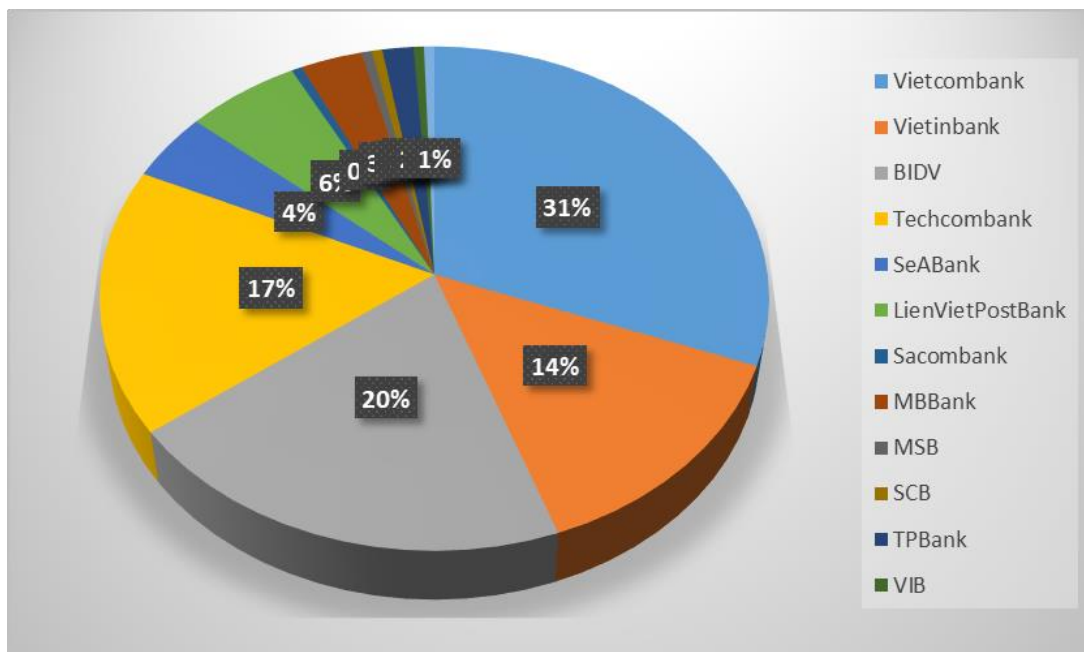
***Chart 4.3: Business major***

Most businesses utilize 2 to 3 banks in transactions (57.14%), followed by enterprises which are only loyal with 1 bank (34.62%). Besides, only a small percentage of businesses use 4 to 5 banks (6.04%) and more than 5 banks (2.20%) in their transactions.



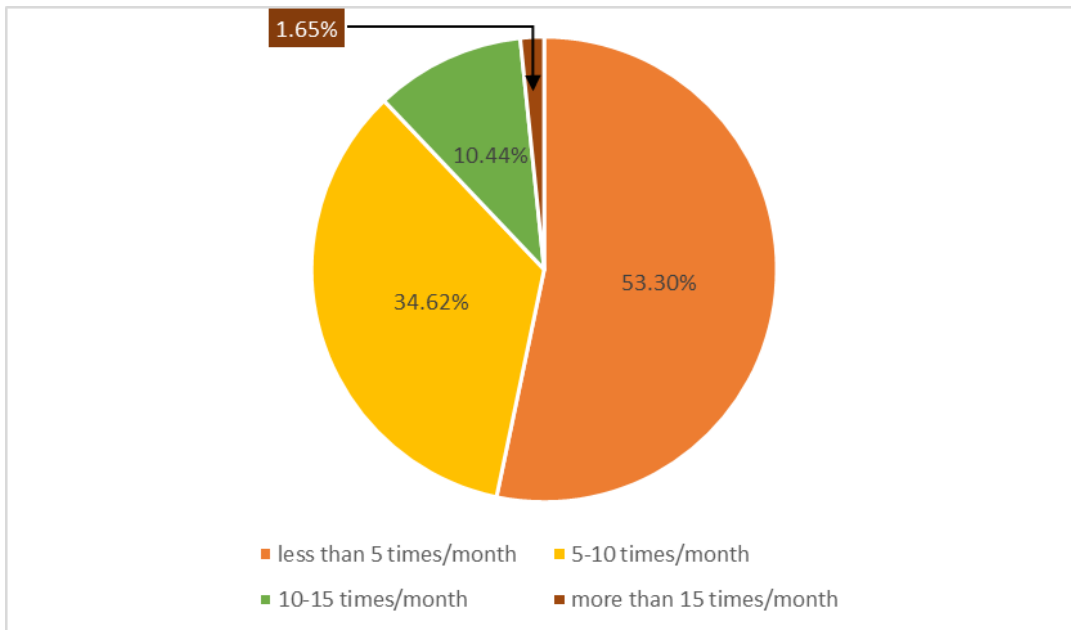
***Chart 4.4: Number of banks***

Many firms chose Vietcombank, which received 30.77% of the vote, while BIDV came in second place with 20.33%. Techcombank and Vietinbank, with 17.03% and 13.74%, respectively, are also accompanying numerous firms in the reaction.



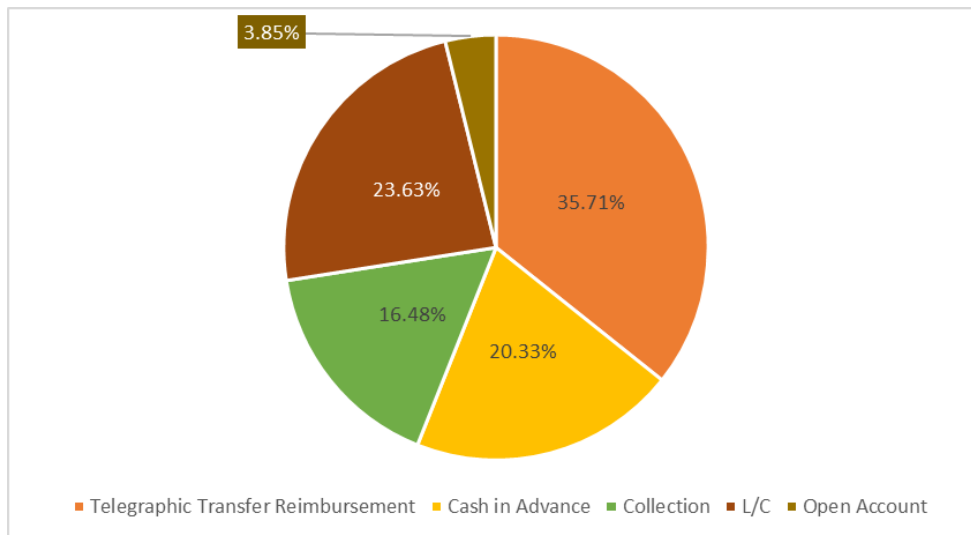
***Chart 4.5: Priority bank***

It's worth noting that there was a substantial variation in the regularity with which businesses used banking services. As can be seen from the chart, the majority of firms utilize banks less than 5 times per month (53.30%). In addition, banking services are used by businesses 5-10 times per month accounted for 34.62% of the total, which is quite high. However, the number of businesses using banking services 10 to 15 times a month is 10.44% which is only one third of the number of businesses transaction 5-10 times a month. Besides, it can be seen that businesses rarely utilize bank services more than 15 times each month.



***Chart 4.6: Frequency making international payment transactions***

A glance at the chart provided reveals that Telegraphic Transfer Reimbursement was most used by businesses in all types of transactions with 35.71%, while Letter of Credit was trusted by 23.63% respondents. The proportion of companies that use Cash in advance can be considered as a high number of the list which is 20.33%. Finally, Collection has been used by a not too large number of companies with 16.48% while Open account is not the choice of most companies with a percentage of only 3.85%.

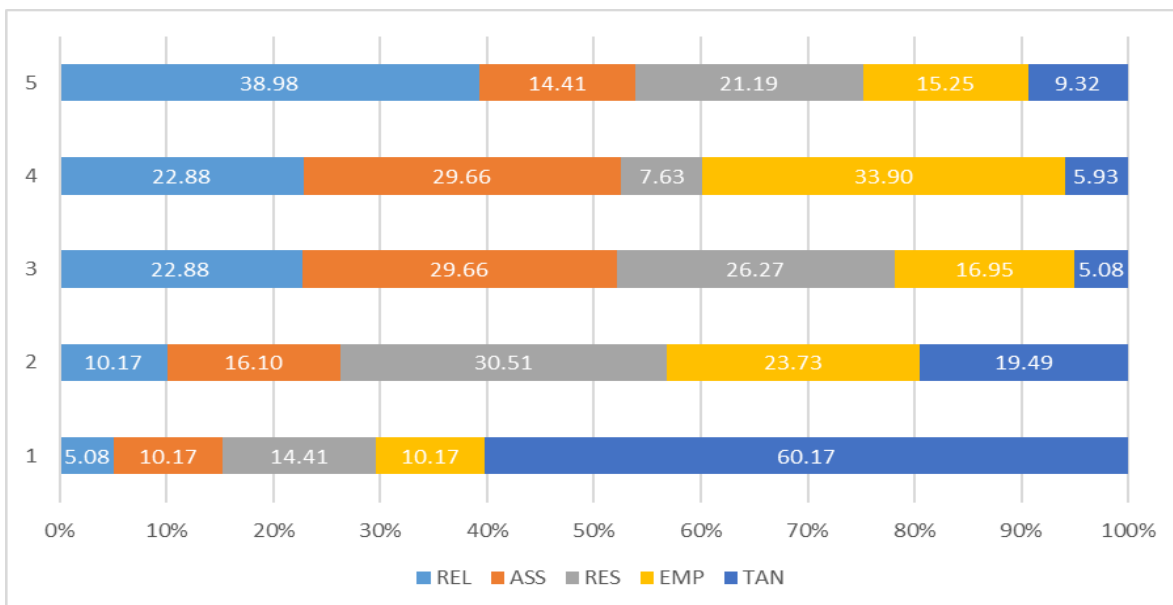


***Chart 4.7: Most using International payment methods***

#### **4.2.3 Perception of importance of 5 factors: a comparison between two groups of banks**

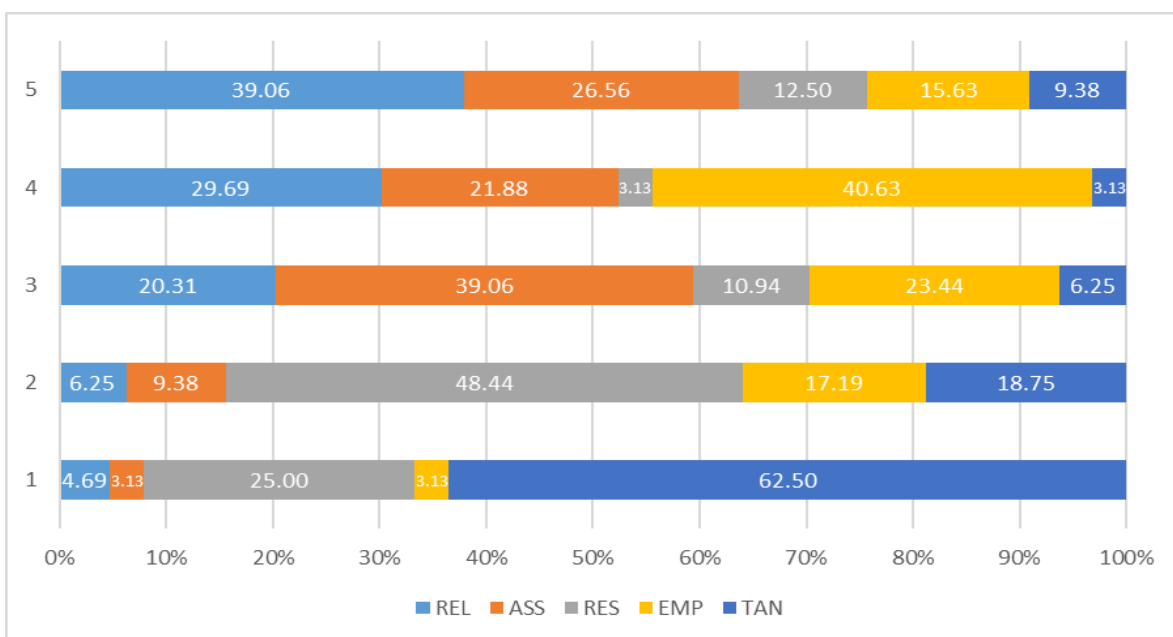
We have collected survey results of 182 businesses including 118 responses from the State-owned Joint-stock commercial bank and 64 responses from the Private Joint-stock commercial bank.

And based on the ranking of the importance of 5 factors to the quality of the bank's international payment services, we can draw the following results (we only collect validity answers, which only rate each factor 1 point from 1 to 5. We do not take duplicate evaluation results).



***Chart 4.8: Rate 5 factors at all point (Group 1: State-owned joint stock commercial bank)***

In 118 responses of State-owned Joint-stock commercial Bank: At point 5, the Reliability factor accounted for the largest number of responses of 46 responses, equivalent to 38.98%. At point 4, Empathy accounted for the most percentage at 33.90%. Assurance ranked first at point 3 with 29.66%. Responsiveness topped point 2 with 30.51% and Tangibles received the most replies at point 1 with 60.17%.



***Chart 4.9: Rate 5 factors at all point (Group 2: Private joint stock commercial bank)***

In 64 responses of the Private Joint-stock commercial bank group, the responses collected were quite similar to those of the State-owned Joint-stock commercial Bank group, specifically as follows: At point 5, the Reliability factor accounted for the most 25 responses, equivalent 39.06%. At point 4, Empathy accounted for the maximum percentage of 40.1%. Assurance ranked first at 3 with 39.9%. Responsiveness topped point 2 with 48.44% and Tangibles with overwhelming responses at point 1 with 62.50%.

In summary, in this section, we have compiled data on ranking the importance of 5 factors for the quality of international payments of 2 groups of banks at points from 1 to 5. The results are in both 2 groups of banks the factors are similar in ranking position. Of the 5 factors, each factor topped 1 point. Reliability, Empathy and Assurance ranked first at 5, 4 and 3 point respectively, showing that these are the factors used to attract and retain customers when doing business in banking, especially businesses. They seem to give priority to the bank's reliability, staff quality as well as customer service when choosing a bank for transactions. The two most chosen factors at points 1 and 2 are Tangibles and Responsiveness. From the business customers' perspective, these two factors are less important. We supposed that businesses often choose the other 3 factors because nowadays, in banks, Tangibles and Responsiveness are two factors that basically every bank has. These two factors may be essential for all banks, without these two determinants (Tangibles and Responsiveness), customers may feel unsatisfied about service quality, but when banks perform well in two aspects This does not guarantee that their customers will be more satisfied. Then, what makes their customers more satisfied in terms of service quality here will be the three more important factors that are assessed as Reliability, Empathy and Assurance (This is proven in the bi-factors theory by Herzberg). This partly somehow explains why Tangibles and Responsiveness are rated less important than the 3 factors Reliability, Empathy and Assurance.

#### **4.2.4 Measurement model analysis**

The authors utilized SmartPLS to analyze the findings; the metrics used to verify measurement quality are listed below. The research study employed the composite reliability coefficient CR, the sum extracted variance AVE, single factor loading (outer loadings), and Alpha Cronbach to assess the scale's reliability. Convergent validity is determined by the individual and aggregate confidence of the tested item for each item. Convergent validity necessitates an indicator load of 0.6 or higher. Almost all expression variables (metrics or dimensions) have outside loadings greater than 0.6, indicating that item reliability is satisfactory (Hair et al, 2014). In this study, no variables are eliminated, and all items are satisfied based on the required value of outer loadings.

<b>Factors</b>	<b>Items</b>	<b>Outer Loadings</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>AVE</b>
<b>Reliability (RELS)</b>	REL1	0.785	0.697	0.815	0.526
	REL2	0.766			
	REL3	0.709			
	REL4	0.631			
<b>Assurance (ASSS)</b>	ASS1	0.788	0.703	0.835	0.627
	ASS2	0.791			
	ASS3	0.797			
<b>Responsiveness (RESS)</b>	RES1	0.860	0.746	0.855	0.664
	RES2	0.722			
	RES3	0.855			
<b>Empathy (EMPS)</b>	EMP1	0.810	0.769	0.867	0.685
	EMP2	0.790			
	EMP3	0.880			
<b>Tangibles (TANS)</b>	TAN1	0.878	0.745	0.849	0.654
	TAN2	0.824			
	TAN3	0.715			

***Table 4.6: Measurement model: Outers loadings, CR and AVE***

Furthermore, Table 4.6 shows that all latent variables fulfill the essential criteria of construction level confidence since the observed composite reliability values are larger than the 0.7 cut-off points.

Cronbach's alpha was used to assess internal consistency, and all values were around 0.7 cut-offs, indicating high reliability for all constructs. Furthermore, Fornell & Larcker's (1981) criteria for

convergent value analysis of Average Variance Extracted (AVE) were used. The findings demonstrate that the AVE of each observed variable is larger than 0.5, indicating that the scale assures convergence. Table 4.6 shows that all examined factors are reliable and account for more than 50% of the variation in their own entries (Hair et al., 2018), indicating that all variables exceed the minimal convergence value.

Finally, Tables 4.7 and 4.8 demonstrate that all latent variables had discriminant values that were consistent with the Fornell Larcker and Heterotrait Monotrait (HTMT) approaches (Fornell and Larcker, 1981; Henseler, Ringle and Sarstedt, 2015). This means that each structure is distinct. Discriminant validity concerns develop when HTMT values are high; when constructs are conceptually more different, a lower, more conservative limit, such as 0.9, is recommended (Henseler et al., 2015). More specifically, the researcher can assess if the upper limit of the HTMT's 95% confidence interval is smaller than 0.90 or 0.85. This proves that all factors and data of the research process have high reliability.

<b>Fornell-Lacker Criterion</b>						
	<b>ASS</b>	<b>EMP</b>	<b>REL</b>	<b>RES</b>	<b>SQTOTAL</b>	<b>TAN</b>
<b>ASS</b>	0.792					
<b>EMP</b>	0.629	0.828				
<b>REL</b>	0.591	0.444	0.725			
<b>RES</b>	0.623	0.675	0.581	0.815		
<b>SQTOTAL</b>	0.562	0.502	0.602	0.500	1.000	
<b>TAN</b>	0.449	0.664	0.286	0.540	0.320	0.809

***Table 4.7: Discriminant validity results - Fornell-Lacker criterion***

	<b>ASS</b>	<b>EMP</b>	<b>REL</b>	<b>RES</b>	<b>SQTOTAL</b>	<b>TAN</b>
<b>ASS</b>						
<b>EMP</b>	0.850					
<b>REL</b>	0.829	0.591				
<b>RES</b>	0.857	0.873	0.806			
<b>SQTOTAL</b>	0.669	0.572	0.717	0.572		
<b>TAN</b>	0.565	0.863	0.404	0.706	0.348	

***Table 4.8: Discriminant validity results – HTMT***

#### 4.2.5 Structural model analysis

One of the most important steps in evaluating PLS-SEM results is analyzing the structural model. The performance of the proposed model was analyzed based on the calculating coefficients: path coefficients, p-value,  $R^2$ ,  $f^2$ , and VIF which were also used to give a relevant prediction.

Multicollinearity is a phenomenon where the independent variables are strongly correlated with each other. The regression model occurs with multicollinearity, which will cause many indicators to be skewed, leading to the results of quantitative analysis no longer giving much meaning (Hair et al, 2019). In table 4.4, it can be seen that the VIF value (variance inflation factor) of all variables is less than 5, which means there is a moderate and acceptable correlation (Ron Johnston et al, 2017).

Next, p-value stands for probability value, which is a quantity that helps scientists decide whether their hypothesis is supported or not supported. The smaller the p-value, the higher the reliability of the conclusion and the larger its influence value (Thomas Sellke et al, 2001). In table 4.4, the p-value of variables: assurance, empathy, and reliability were less than 0,05 while the p-value of the remaining variables were larger than 0,05. As a result, H2, H4, H5 were supported while the other hypotheses were not supported. In addition, the value of path coefficients demonstrates the level of impact of variables. According to Shipley, B. (2000), a small value of path coefficient shows a weak effect and vice versa. The level of impact ranked from strong to weak is reliability, empathy, assurance, responsiveness, and tangibles.

Finally, the commonly used measure of the fit of a linear model is the coefficient of determination R squared (Coefficient of Determination). The formula for calculating  $R^2$  (R square) comes from the idea that the entire observed variation of the dependent variable is divided into two parts: the part due to Regression and the part due to the Residual (Regression). In addition, the significance of R-squared is the same as that of R-squared, which reflects the goodness of fit of the model. The adjusted R-squared calculated from R-squared is more commonly used because this value more closely reflects the goodness of fit of the multivariable linear regression model. In table 4.4, the value of  $R^2$  is 0,452 while the value of  $R^2$  adjusted is 0,437. Basically,  $R^2$  must be higher than 0,5 to be acceptable. However, Cohen (1992) claims that  $R^2$  values of 0.26 or above and above values suggest a large impact size.  $R^2$  values below 0.5 can be accepted in some studies in the fields of art, humanities or the social sciences because human behavior cannot be accurately predicted (Cohen, 1992). These values showed that the result of this study is acceptable (Henseler, Ringle and Sinkovics, 2009).

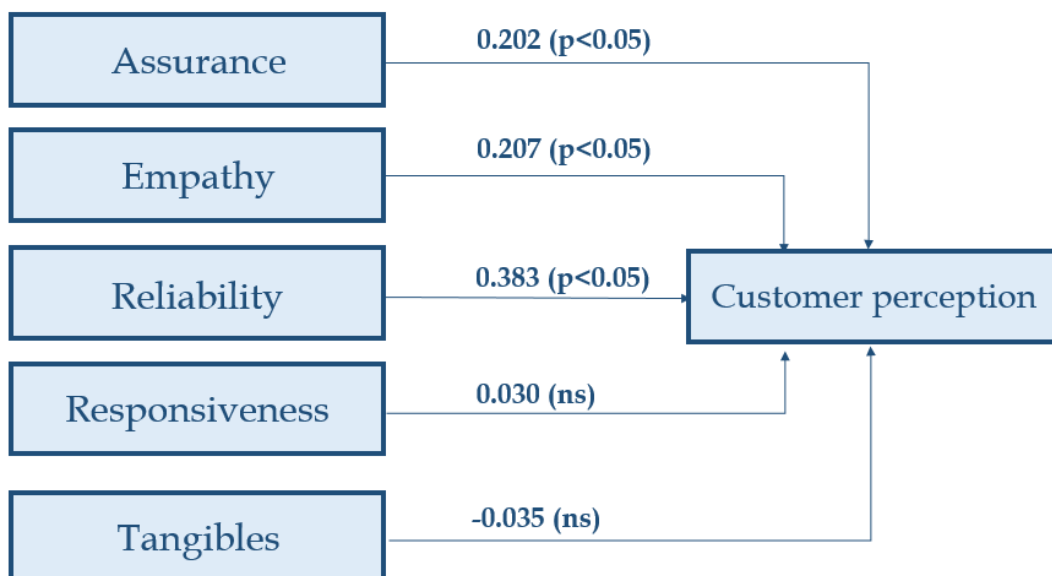


Factors	Path Coefficient	$f^2$	$t$ -value	$p$ -value	VIF	$R^2$ Adjusted	$R^2$
Assurance	0.202	0.035	2.413	0.016	2.150	0.437	0.452
Empathy	0.207	0.029	2.240	0.025	2.667		
Reliability	0.383	0.153	4.896	0.000	1.755		
Responsiveness	0.030	0.001	0.340	0.734	2.409		
Tangibles	-0.035	0.001	0.454	0.650	1.857		

**Table 4.9: Structural model analysis**

Hypothesis	Factor	Result
H1	Tangibles	H1 was rejected
H2	Reliability	H2 was supported
H3	Responsiveness	H3 was rejected
H4	Assurance	H4 was supported
H5	Empathy	H5 was supported

**Table 4.10: Testing hypothesis result**



**Figure 4.1: Structural model results**

The Adjusted R-square value in Table 4.9 is 0.437, indicating that these factors can explain 43.7 percent of the variance in service quality (ASS, EMP, REL).

The p-value of three independent variables is less than 0.05, according to Table 4.9. That is, three aspects in the study model have greater than 95% dependability and match the condition, but two factors are not supported. Furthermore, the VIF score of these components is less than 5, indicating that numerous collinearities do not exist in this scenario.

The positive coefficients show that there is a positive association between service quality and the independent factors. As a consequence, all of the possibilities suggested are verified. Otherwise, according to the standardized coefficients, Reliability has the greatest impact on service quality (with Beta = 0.383). Other elements that influence service quality include, in descending order, empathy, assurance, responsiveness, and tangibles (with Beta equals 0.207, 0.202, 0.030, -0.035 respectively).

#### 4.2.6 Comparison between two groups of bank

The multi-group analysis in SmartPLS allows you to assess whether or not predefined data groups have substantial differences in their group-specific parameter estimations using PLS-MGA (e.g., outer weights, outer loadings and path coefficient). SmartPLS gives findings from three alternative methodologies, each of which is based on bootstrapping data from each group. This approach computes the bias-corrected confidence intervals for the PLS path model's group-specific parameter estimations. If the bias-corrected confidence intervals do not overlap, the group-specific results of a route coefficient are significantly different. This approach is a non-parametric significance test for the difference of group-specific outcomes based on PLS-SEM bootstrapping results. A result is significant at the 5% probability of error level if the p-value is less than 0.05 or more than 0.95 for a given difference in group-specific route coefficients. The PLS-MGA approach (Henseler et al., 2009), as implemented in SmartPLS, is a nonparametric version of Henseler's MGA method (as described, for example, by Sarstedt et al., 2011).

	<b>Path Coefficients (Group 1)</b>	<b>Path Coefficients (Group 2)</b>	<b>Path Coefficients-diff</b>	<b>p-Value original 1-tailed</b>	<b>p-Value diff</b>
ASS → SQTOTAL	0.145	0.306	-0.161	0.843	0.315
EMP → SQTOTAL	0.384	-0.119	0.503	0.003	0.005
REL → SQTOTAL	0.458	0.255	0.203	0.099	0.198
RES → SQTOTAL	-0.131	0.311	-0.441	0.996	0.007
TAN → SQTOTAL	-0.059	0.089	-0.147	0.810	0.380

*\*in which: Group 1 stands for State-owned JSC banks; Group 2 stands for Private JSC banks*

***Table 4.11: PLS-MGA result***

We specifically obtained the findings from the permutation test by heading to Final Results Path Coefficients in the SmartPLS permutation report. The findings indicated that there were only two statistically significant differences between Group 1 (State-owned JSC banks) and Group 2 (Private JSC banks), namely the association between subjective norms and attitude ( $p < 0.05$ ). The bootstrapping approach may be used to calculate the standard error of the PLS parameter estimations. As shown in Table 4.11, just two connections, responsiveness and empathy, have a substantial impact on the quality of international payment, which varies dramatically between the two groups. Two p-values that are less than 0.05. There is a significant difference in the evaluation of enterprises for the two groups of joint-stock commercial banks for Responsiveness, which has an impact on the quality of international payment services of 0.007, and Empathy, which has an impact on the quality of international payment services of 0.005. And the remaining three characteristics do not differ significantly between the two groups of banks, since they are all Tangibles options with little or no influence on the quality of foreign payment services at joint-stock commercial banks. The last two elements, Assurance and Reliability, are the two most essential factors influencing the quality of foreign payments in two groups of institutions. All three p-value indices are more than 0.05 and roughly approximately 0.3. The huge variation in Path Coefficient in the Empathy component between groups 1 and 2. The route coefficient of 0.384 in group 1 is 0.503 more than the Empathy index in group 2. (path coefficient is -0.119). This demonstrates that Empathy has a significant influence on the quality of foreign payments at state-owned joint-stock commercial banks. The next significant difference is seen in Table 4.12, where the Path coefficient index of the Responsiveness factor in Group 1 is -0.131, which is less than the Path coefficient index impacting Group 2 of 0.311. The Responsiveness element, in particular, has a high influence on the group of joint-stock commercial banks and a poor impact on the state-owned joint-stock commercial banks.

## **4.3 Discussion**

### **4.3.1 Tangibles**

According to the path coefficient index at SmartPLS,  $p$  index of dimension tangible is  $0.650 > 0.05$ .

The research results employing SERVPERF, such as the research model presented in this article, show that tangibles are one of the elements affecting international payment services. According to Cung et al. (2020) in Vietnam, tangibles factor affecting international payment services. However, according to the results we obtained, tangibles are not one of the elements influencing the quality of international payment services. According to the qualitative results, it is found that 25% choose tangibles, it still affects the results from the bank's point of view, but from the business' perspective, it does not affect the quality of service.

Three elements are used to assess tangibles: physical facilities, working hours and supporting facilities.

**Appealing physical facilities:** In fact, practically all of the branches' transaction rooms are large, clean and convenient, attracting customers readily. Besides, such perfect facilities give customers a comfortable space and can conquer the most demanding customers.

**Convenient operating hours:** Customers will find it convenient to conduct business with the bank because of its flexible operating hours. At some banks, there are many customers who think that flexible working hours are just average. Besides, there are banks that do not respond to work on weekends, which causes inconvenience to some customers.

**Supporting facilities (flyers, site interface, ...):** Banks concentrate on a wide range of supporting facilities such as: product & service portfolios, leaflets, and website interfaces in order to make it easier for clients to access the bank's information.

#### 4.3.2 Assurance

According to the path coefficient index at SmartPLS,  $p$  index of dimension assurance is  $0.016 < 0.05$ . The research model presented in this article illustrates that assurance is the third impact factor to international payment services. According to Van Dinh & Lee Pickler (2012), assurance is thought to have a significant impact on the quality of international payment services. The results obtained from our study are similar to those of the previous research of Van Dinh & Lee Pickler (2012). Compared with the qualitative results, the qualitative results show that assurance is an important factor accounting for 75% of the answers out of 04 answers. It can be seen that assurance is the third most influential factor in the quality of international payment services in our research.

Three variables are used to determine the level of assurance of banks' international payment services. The survey process yielded the following results in terms of bank satisfaction level of assurance:

**Knowledgeable and trustworthy employees:** The bank's staff are extremely qualified and trustworthy, which improves the customer's experience when utilizing the service. According to the standards for recruiting, banks want their staff to have good communication skills with clients and to be able to advise and guide customers on business matters.

Headquarters personnel is required to handle all procedures and intensive tasks, necessitating a higher level of understanding than IP personnel at branches. Officers in the branches are frequently unfamiliar with specific professional activities due to the hierarchical nature of tasks. As a result, there is a significant disparity in IP qualification between personnel in headquarters and branches, which has a direct impact on customers' assessments of the staff's credentials.

**Staff service attitude:** When working with customers, bank employees have a positive attitude. However, the scenario of unprofessional employees still occurs even though it happens very infrequently.

**Customers feel safe in transactions:** Most customers feel safe when making transactions at the bank. Unfortunately, however, there are still customers who experience a bad experience when making a transaction.

### **4.3.3 Reliability**

According to the results we collected from the survey, Reliability is said to be the most influential factor on IP services with the votes accounting for 39.01% of the total 5 factors. It is also quite similar to our qualitative results when this factor accounts for 75% of the opinions choosing Reliability as a required factor. And according to the research results of Cung et al. (2020) in Vietnam, Reliability is considered to be the most influential factor among the 5 factors affecting the quality of international payment services at banks, similar to the results obtained in this study.

**Security level of customer information:** When doing transactions, especially international payment transactions, the security of personal information and customer transaction information is extremely important. Among the feedback we have collected from businesses, most businesses highly appreciate the information security of the banks they are using.

**Provide service at times and should do as promised:** Along with the security of customer information, the transaction speed of banks is also evaluated quite well. Maybe this is one of the reasons why customers continue to trust the services at these banks.

**Interest in solving customer problems:** International payment transactions often include many stages and are quite complicated. So customers will ask questions and have higher requirements. Therefore, banks need to pay attention to the speed of their customer response. And this factor was also evaluated well when we collected 182 responses from businesses. Even when the research team did the qualitative survey, we also received comments about how the feedback of the bank's customer issues will greatly affect the quality of international payment transactions.

**Smart OTP:** When we conducted qualitative interviews with 4 people from 4 different banks (these banks belong to the 2 groups of banks we are doing research, are state-owned commercial banks and joint-stock commercial banks), there are some risks about smart OTP (is one of the items of Reliability) due to a number of objective reasons such as customer ignorance, customer confusion when entering the code, and so on. But banks have their own solutions, and smart OTP is no longer a problem for both parties when making IP transactions.

Therefore, Reliability is still the most influential factor among the 5 factors according to the assessment of the enterprise survey and the results from the qualitative survey.

#### **4.3.4 Empathy**

According to the path coefficient index at SmartPLS,  $p$  index of dimension tangible is  $0.025 < 0.05$ . Based on the results of quantitative analysis, the Empathy factor has the second strongest influence on the quality of international payment services, after the Reliability factor. With such results, the Empathy factor in this study is similar to the study of Van Dinh & Lee Pickler (2012).

In contrast, in the results of qualitative analysis, after analyzing the results, the banks (providers) did not evaluate the empathy factor whether it affects international payment services, i.e. no which opinion chooses empathy as the most influential factor. 50% of the answers did not mention the empathy factor affecting the quality of international payment services, including the two groups of banks.

#### **4.3.5 Responsiveness**

Quantitative research results show that responsiveness has no influence on the quality of international payment services. With path coefficients 0.030 and  $p$ -value of 0.734, responsiveness ranks only above intangible factors in terms of influence. This result is also similar to the results obtained by Van Dinh & Lee Pickler in their research (2012).

In the results of qualitative research, 50% of the answers said that responsiveness has an impact on the quality of international payment services at banks. However, only the bankers in group 1 highly appreciated this factor while group 2 did not mention it.

**Service fee for international payment transactions:** Banks will provide different service fees, depending on the partner and country where the transaction is made.

**Payment methods:** Two common payment methods chosen by businesses are letters of credit and collection.

**Average payment processing time:** banks take an average of less than 1 week to process international payment transactions. Only Vietcombank has the ability to process transactions in 15-30 minutes.

**Delayed transactions:** International payment transactions can be delayed for many different reasons. However, a common cause is still customers providing incorrect or missing information in their profile.

#### **4.3.6 Discussion about the comparison between two groups of bank**

According to the results of quantitative analysis, there are 2 different factors in 2 groups of banks: State-owned JSC commercial banks and Private JSC commercial banks. “Empathy” and “Responsiveness” are 2 factors that are different in affecting the International payment service. There has previously been no study in Vietnam that compared the elements influencing service quality of two groups of joint-stock commercial banks. This is the first research of its kind on private joint-stock commercial banks. Based on PLS-MGA analysis, it is clear that the impact of empathy and responsiveness has a significant difference between two groups of banks. The chosen empathy factor has a more substantial influence on the group of state-owned joint stock commercial banks than the group of private joint-stock commercial banks. The Responsiveness element, in contrast to the Empathy factor, has a more substantial influence on the group of private joint-stock commercial banks than the group of state-owned joint-stock commercial banks.

## **CHAPTER 5: RECOMMENDATIONS AND CONCLUSION**

### **5.1 Summary of findings - Answer the research questions**

This study examines the components of service quality of two groups of banks (state-owned banks and joint-stock commercial banks) and makes recommendations to improve the quality. At the same time, compare the factors between the two groups of banks and suggest businesses when using IP services. The study carried out both quantitative and qualitative methods.

Regarding the quantitative method, the theoretical model used by us includes five factors: Tangibles, Reliability, Responsiveness, Empathy, Assurance from research by V. Dinh and L. Pickler. And those 5 elements include 16 items that we mentioned in section 2.4.2.

From that, we conclude that the quality of international payment services is positively related to the 3 factors Reliability, Empathy and Assurance.

Regarding the qualitative method, the survey results show that the bank earns customer's trust and high service quality due to the following notable points: transactions are handled accurately, and there are very few inadvertent errors, equipment and support facilities are current and diverse, good employee behavior and qualifications, and clients can access to a variety of convenient transaction sites. However, there are still certain technological and transaction processing time constraints. This result confirms the importance of the above 5 aspects in improving service quality. From there, banks can consider the value of the above 5 factors for service quality, thereby making appropriate policies as well as effectively allocating resources.

Finally, our research proposes some solutions to improve the quality of international payment services at banks, thereby helping to improve the value of business processes. Besides, compare service quality between 2 groups of banks: state-owned JSC banks and private JSC banks and suggest businesses a suitable bank for them.

In Chapter 1, research questions were raised in order to identify and compare the elements influencing service quality in two types of banks: State-owned joint-stock commercial banks and private joint-stock commercial banks. The following questions must be addressed:

#### **5.1.1 Question 1**

*“How is the current reality of the international payment segment at commercial banks?”*

The demand for international payment services in Vietnam is increasing day by day. Import-export businesses are regular customers using this type of service. In fact, almost all commercial banks in Vietnam provide international payment services. Therefore, the competition between these banks is



always very high. Bank leaders can consider the results of this study as a reference to improve the quality of international payment services.

### 5.1.2 Question 2

*“The International Payment operational effectiveness in commercial banks is affected by what factors?”*

According to the data analysis in Chapter 4, the following five elements influence the efficiency of IP operations at two groups of joint-stock commercial banks:

Reliability : Beta Standardized Coefficient = 0.383; Sig = .000

Responsiveness: Beta Standardized Coefficient = 0.030; Sig = .736

Assurance : Beta Standardized Coefficient = 0.202; Sig = .016

Tangible : Beta Standardized Coefficient = -0.035; Sig = .652

Empathy : Beta Standardized Coefficient = 0.207; Sig = .022

Three of the five variables listed, namely reliability, empathy, and assurance, impact the quality of international payment services, whereas the other two, namely responsiveness and tangibles, do not. Quality of foreign payment services at joint-stock commercial banks. With a beta of 0.383, the Reliability factor is the most significant of the five components.

### 5.1.3 Question 3

*“Is there any difference in service quality between the two groups of commercial banks?”*

From the data analysis, conclusions can be drawn comparing the quality of international payment services between the two groups of banks. It was mentioned in section 4.3 of Chapter 4 to compare the influence of direct factors on foreign payments.

According to the qualitative and quantitative data, there appear to be five common impacting factors: Tangibles, Reliability, Responsiveness, Empathy, and Assurance.

The findings of the PLS-MGA analysis revealed a difference between the two groups of banks based on the survey responses. The two most noticeable differences are empathy and responsiveness. Following the second aspect established in Chapter 4 as the Empathy factor, the industry examines the Reliability factor. Furthermore, the Assurance factor is the element that companies employ international payment services at banks with significant effect, and it ranks second instead of the Empathy factor that was previously chosen.

Following a comparison, the project team concluded that there was a difference in the business decisions made using two separate banking groups, as well as the perspectives of banks and various enterprises. On the bank's side, they believe that people, in particular, and the assurance factor, have the greatest influence on the quality of international payment services, and they place a heavy emphasis on innovation and employee training. However, due to the nature of B2B transactions, companies are less concerned with the objective or sensory influencing aspects of the transactions, and instead concentrate on the ones that directly affect them. Their purchase included respect and security from their partners.

## **5.2 Recommendations for each of 5 factors**

### **5.2.1 Recommendations for “RELIABILITY” factor**

#### **Improve technology to increase information security for customers**

In recent years, the information technology industry has infiltrated virtually every aspect of social life. Information technology is used in all fields and professions. Particularly in today's banking sector. The use of information technology in banking is becoming more prevalent, resulting in increased efficiency. This tendency is expected to intensify more in the future.

The importance and practicality of information technology in banking cannot be overstated. Currently, the majority of banks in Vietnam have developed their own Mobile Banking application. Bank employees also urge customers to utilize the app to do transactions rather than walking to the counter. The use of information technology also allows banks to modify their structure, look, and style of operation. Simultaneously, expanding into new financial products and services that benefit the bank, make it easier for clients to utilize the service, and minimize transaction costs.

Today, we cannot dispute the role of information technology in banking. However, in addition to the accomplishments, there are many key shortcomings, mostly resulting from: the capacity to manage, operate, and control risks; the conventional character of the banking system; high-tech crime; etc.

To increase the bank's reliability, it is now important to further improve the quality of technology, therefore appropriate solutions are required. The first optimal solution focuses on modernizing the basic banking system with a digital banking design; synchronizing operations for improved risk management, handling, and control. The following solution is to strengthen the security layer to assure network security, cryptographic safety, and customer data security. The most strategic approach is to expand collaboration, transfer technology, and update the development trend of new and advanced technology. For example, banks can add an extra layer of security to the features and functionality of their applications.

### **5.2.2 Recommendations for “EMPATHY” factor**

#### **Train staff carefully, especially skills in dealing with customers throughout the process of making transactions**

The most effective strategy to increase the quality of banking services is to adjust and improve the service quality of individuals who deal directly with clients, known as tellers. To be able to do so, detailed arrangements for frequent professional training sessions with staff must be in place. Furthermore, strengthening the remuneration policy for employees provides additional motivation to work in order to assist them boost their positive attitude.

Customers gain first as banks pay increasing attention to each transaction with them. However, banks have also been able to find effective solutions to the win-win problem, allowing the quality of goods and services to become an essential contributing factor to the long-term success of banks.

#### **Promote taking feedback from customers to improve service quality**

Taking customer feedback after each transaction can also enhance the service quality of the bank. The first effect of this is the pressure placed on tellers. When they support and serve customers well, their capacity is appreciated, which in turn will enjoy special incentives and the possibility of future promotion. On the contrary, if the teller makes the customer somewhat dissatisfied, the feedback taken from the customer will have a negative impact on their work. In addition, taking feedback from customers will also help the bank know which points need to be promoted and which points need to be remedied for better service quality in the future.

#### **Recommendation for state-owned joint stock commercial bank**

As the result stated that the chosen empathy factor has a significant influence on the group of state-owned commercial banks but a minor influence on the group of private joint-stock commercial banks. Therefore, we would like to make separate recommendations for state-owned banks based on the impact of empathy factor.

In Vietnam, years ago, when it came to the service attitude of tellers at state banks, people often underestimate. However, in the past few years, service quality in the banking system has also changed and improved a lot. That proves the relentless efforts in building strategies and policies so that customers feel more comfortable and confident when using services at banks in this group. Nevertheless, at the present time, somewhere in the clients' mind there are also low evaluations, or feelings of lack of sympathy with the service style of the state banking system. Therefore, in addition to the above recommendations, especially for state-owned commercial banks, they also need to change their image in the eyes of customers. Within the bank, try to build a bank culture by

remembering one thing: "staff need to be aware that their salary is paid by the customer", then serve them with patience and devotion. In addition, in terms of external communication, it is possible to promote the promotion and propaganda of the bank's service quality in an innovative style. Therefore, customers will be excited because they are intrigued, then going to try out the service, and the bank will have opportunities to meet their needs.

### **5.2.3 Recommendations for “ASSURANCE” factor**

Generally, bank employees must have a bachelor's degree in economics, finance, or banking from a college or university or higher to ensure that there is enough knowledge and skills to provide information to customers. In addition to the basic information listed above, officers must be familiar with the State's payment, import-export finance, and foreign exchange management mechanisms and policies. Furthermore, understanding of contracts for the acquisition of import and export commodities, transportation and insurance, international trade, mastery of international practices, and practices in IP operations are the indispensable part of bank employees.

### **5.2.4 Recommendations for “RESPONSIVENESS” factor**

In the general analysis, this variable had no effect on the total Service Quality. However, in PLS-MGA, it has implications for private joint-stock commercial banks. So the research team would like to recommend some ideas about Responsiveness factor that can improve with that group of banks in terms of processing time. Processing time of banks should be faster so that customers do not have to wait too long for transactions. Not only faster, but also ensure accuracy. In addition, the Bank ensures transparency and continuous updates for each transaction period. Because international payment transactions go through many stages, it is necessary to update customers so that when there is an error, it will be less risky. We suggest banks should design a message system to update the stages for customers through apps.

### **5.2.5 Recommendations for “TANGIBLES” factor**

Banks should be more flexible in their working hours by opening on Saturday and Sunday mornings. This allows clients to feel more at ease during transactions if they require it immediately but are unable to do so online and must visit a bank office. Of course, those who work on weekends will be paid twice as much as those who labor during the week. Banks should clean their premises on a regular basis and innovate constantly in order to deliver the finest client experience possible.

### **5.2.6 Recommendations about the comparison**

After comparing qualitative and quantitative findings, the authors discovered a distinct difference between the perspectives of banks and businesses. The bank's 75 % choice is a factor that impacts the quality of foreign payment services but is not viewed as the most significant element, the Reliability

factor, which is perceived by companies as the most essential factor and has the greatest impact on international payment services. The element "Assurance" is perceived as having the greatest influence by the bank, while from the perspective of enterprises, it ranks third out of five dimensions. As a result, banks should have a clear understanding of client perceptions and the factors that influence the quality of international payment services, and implement particular improvements in each of these areas.

The responsiveness factor is seen as an essential element impacting international payment services by both group 1 (state-owned JSC banks) and is not regarded as weak by group 2 (Private JSC banks) which influences variables on qualitative results. In contrast to the results of the business survey, the Responsiveness factor has no effect on state-owned Joint-Stock commercial banks but has a significant influence on Private Joint-Stock commercial banks. Banks in Group 2 should adapt and focus on customers' requirements in order to improve the quality of international payment services and attract more potential customers. Similarly, the bank in Group 1 should focus on elements that are gaining more customers, such as empathy, which was previously overlooked by this group of institutions.

### **5.3 Limitations**

There are always restrictions in research and no research paper is flawless. And our paper is no exception to that.

Firstly, this survey was only conducted in some representative transaction offices of the two groups of banks. And the questions answered by customers are mostly based on their assessment of the service quality of these transaction offices. Therefore, some of the analyzes and conclusions in this study could be improved upon. The second is about the information to learn about dimensions that may not be complete. Because international payment transactions require very high security, we do not get much information. However, we still ensure the objectivity, completeness and accuracy of the information we find. Another limitation is about Control Variables. The results we found may be influenced by several control variables. In our model, there may be some control variables, but due to limited resources, we have not analyzed the role of control variables in this model. The focus of this study is only on determining the determinants of two groups of banks. Finally, the time we have to carry out the survey is limited. The research team started conducting the thesis in September, just over 3 months ago. If we had more time to proceed, we would be able to delve deeper and in more detail.

The above are some of the limitations that we encountered when conducting the research. But above all, we always uphold and guarantee the honesty, accuracy, completeness and objectivity for this thesis.

#### **5.4 Perspective for future research**

The effect of five independent factors on one dependent factor was investigated in this study.

To improve the study's validity, control variables should be incorporated into the theoretical framework of future research. Besides, further studies in Vietnam should extend to more in-depth research on comparisons across banking groups.

With these advancements, it is anticipated that future research will have higher practical relevance, with more objective analysis and findings.

## REFERENCE

*Business Management*, 2709-3557. Available at: [https://www.researchgate.net/profile/Nguyen-Tien-32/publication/354218963\\_Customer\\_service\\_culture\\_at\\_Techcombank\\_in\\_Vietnam/links/612cd4e92b40ec7d8bd23f81/Customer-service-culture-at-Techcombank-in-Vietnam.pdf](https://www.researchgate.net/profile/Nguyen-Tien-32/publication/354218963_Customer_service_culture_at_Techcombank_in_Vietnam/links/612cd4e92b40ec7d8bd23f81/Customer-service-culture-at-Techcombank-in-Vietnam.pdf) [Accessed 8 Oct. 2021]

Byrne, B.M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications* Citeseerx.ist.psu.edu. 2021. [online] Available at: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.438.9005&rep=rep1&type=pdf> [Accessed 24 November 2021].

Content Analysis Method and Examples. Columbia Public Health. 2021. [ONLINE] Available at: <https://www.publichealth.columbia.edu/research/population-health-methods/content-analysis> [Accessed 13 November 2021]

Cronin Jr, J.J. and Taylor, S.A., 1992. *Measuring service quality: a reexamination and extension*. Journal of marketing.

Crossan, F., 2003. Research philosophy: towards an understanding. *Nurse Researcher* (through 2013), 11(1), p.46

Cung, N. & Nguyen, H. (2021). *Influencing Factors of the International Payment Service Quality at Joint Stock Commercial Bank for Investment and Development of Vietnam*. [online] Available at: <https://www.koreascience.or.kr/article/JAKO202029062616386.page> [Accessed 10 Nov. 2021]

Dudovskiy, J. (2018). *Deductive Approach (Deductive Reasoning)*. Research Methodology. [ONLINE] Available at: <https://research-methodology.net/research-methodology/research-approach/deductive-approach-2/> [Accessed 14 Nov. 2021]

Dudovskiy, J. (2018). *Positivism - Research Methodology*. [online] Available at: <https://research-methodology.net/research-philosophy/positivism/> [Accessed 13 Nov. 2021]

Dudovskiy, J. (2018). *Realism Research Philosophy*. Research Methodology. [online] Available at: <https://research-methodology.net/research-philosophy/realism/> [Accessed 25 Nov. 2021]

Dudovskiy, J. (2018). *The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance*. 1st ed. [pdf] New York: SAGE Publications. Available at <https://research-methodology.net/> [Accessed 20 Nov.. 2021]

Dudovskiy, J., 2018. *Research Philosophy - Research Methodology*. [online] Available at: <https://research-methodology.net/research-philosophy> [Accessed 13 Nov. 2021]

Edvardsson B. (1998), "Service Quality Improvement", *Managing Service Quality*, 8 (2)

Ford R. C., Sturman M.C., and Heaton C. P., (2012) *Managing Quality Service in Hospitality How Organization Achieve Excellence in the Guest Experience*, Delmar, Cengage Learning

Fornell, C. and Larcker, D.F. (1981) 'Evaluating Structural Equation Models with

General department of Customs (2020). *Tình hình xuất khẩu, nhập khẩu hàng hóa của Việt Nam tháng 12 và năm 2015*. [online] Available at: <https://www.customs.gov.vn/Lists/ThongKeHaiQuan/ViewDetails.aspx?ID=914&C> [Accessed 19 Oct. 2021]

Hair, J.F. et al. (2017). 'PLS-SEM or CB-SEM: updated guidelines on which method to use'

Han, Sang. & Beak, Seung. 2004. "Antecedents and Consequences of Service Quality in Online Banking: An Application of the SERVQUAL Instrument". *Advance in Consumer Research*. Vol. 31. pp. 208-214.

Huyen, B. (2021). *Cac loại hình ngân hàng ở Việt Nam hiện nay đang hoạt động 2022*. [online] Info Finance. Available at: <https://infofinance.vn/cac-loai-hinh-ngan-hang-o-viet-nam/> [Accessed 10 Oct. 2021]

Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International journal of qualitative methods*, 8(4), 49-62

Jayaraman Munusamy, Shankar Chelliah and Hor Wai Mun, 2010. *Service Quality Delivery and Its Impact on Customer Satisfaction in the Banking Sector in Malaysia*.

Johnston R, Jones K, Manley D, (2018). *Confounding and collinearity in regression analysis: a cautionary tale and an alternative procedure*. Illustrated by studies of British voting behaviour. *Qual Quant*. 2018;52(4):1957-1976. doi:10.1007/s11135-017-0584-6



Joseph F.Hair, MarkoSarstedt, Torsten M.Pieper, Christian M.Ringle, (2012). *The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research: A Review of Past Practices and Recommendations for Future Applications*. [online] Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0024630112000568> [Accessed 3 Dec. 2021]

Khalil, A., 2011. *Online Service Quality and Customer Satisfaction: A case study of Bank Islam Malaysia Berhad*. [online] Mpra.ub.uni-muenchen.de. Available at: [https://mpra.ub.uni-muenchen.de/30782/2/MPRA\\_paper\\_30782.pdf](https://mpra.ub.uni-muenchen.de/30782/2/MPRA_paper_30782.pdf) [Accessed 17 Oct. 2021]

Kotler, P. and Keller, K. L. (2009) *Marketing management* (13th end). New Jersey: Pearson Education Inc, Upper Saddle River

Methods.sagepub.com, (2019). *Learn About Structural Equation Modeling in SmartPLS With Data From the Customer Behavior in Electronic Commerce Study in Ecuador* [online] Available at: <https://methods.sagepub.com/base/download/DatasetHowToGuide/sem-customer-behavior-electronics-ecuador> [Accessed 20 Nov. 2021]

Michael Haenlein & Andreas M. Kaplan, (2004). A Beginner's Guide to Partial LeastSquares Analysis.[online] Available at: [https://www.researchgate.net/publication/228861711\\_A\\_Beginner's\\_Guide\\_to\\_Partial\\_Least\\_Squares\\_Analysis](https://www.researchgate.net/publication/228861711_A_Beginner's_Guide_to_Partial_Least_Squares_Analysis) [Accessed 28 Nov. 2021]

Ngulube, P (2021). *Handbook of Research on Mixed Methods Research in Information Science*

Nguyen, A., Lee, P., Chen, Y. (2009). *Banking Service Quality in Vietnam: A Comparison of Customers' and Bank Staff's Perceptions 2021*. [online] Available at: [https://www.researchgate.net/publication/263152256\\_Banking\\_Service\\_Quality\\_in\\_Vietnam\\_A\\_Comparison\\_of\\_Customers'\\_and\\_Bank\\_Staff's\\_Perceptions](https://www.researchgate.net/publication/263152256_Banking_Service_Quality_in_Vietnam_A_Comparison_of_Customers'_and_Bank_Staff's_Perceptions) [Accessed 18 Oct. 2021]

Nguyen, T. (2018). *Thach thuc trong tan dung co hoi tu cac FTA*. [online] Ministry of Industry and Trade of the Socialist Republic of Vietnam. Available at: <https://moit.gov.vn/tin-tuc/70-nam-nganh-cong-thuong/thach-thuc-trong-tan-dung-co-hoi-tu-cac-fta.html> [Accessed 8 Oct. 2021]

Ollerenshaw, J.A. and Creswell, J.W., 2002. *Narrative research: A comparison of two restorying data analysis approaches*. *Qualitative inquiry*, 8(3), pp.329-347

Pallant, J. (2005). *SPSS survival manual: a step-by-step guide to data analysis using SPSS*. Repr. Buckingham: Open Univ. Press

Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1985), “*A Conceptual Model of Service Quality and Its Implications for Future Research*”, *Journal of Marketing*

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). *A conceptual model of service quality and its implications for future research*. *The Journal of Marketing*, 49(4), 41-50.

Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1988), “*SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality*”, *Journal of Retailing*, Vol. 64

Pham, Y. (2013). *Luan van thac si “Giai phap phat trien hoat dong thanh toan quoc te tai ngan hang nong nghiep va phat trien nong thon Viet Nam chi nhanh Cho Lon”*. [pdf] Vietnam: 123doc. Available at: <https://123docz.net/document/2991294-luan-van-thac-si-giai-phap-phat-trien-hoat-dong-thanh-toan-quoc-te-tai-ngan-hang-nong-nghiep-va-phat-trien-nong-thon-viet-nam-chi-nhanh-cho-lon.htm> [Accessed 29 Oct. 2021]

Phamlocblog.com, (2021). *Đánh giá mô hình cấu trúc SEM trên SMARTPLS*. [online] Available at: <https://www.phamlocblog.com/2021/05/chay-bootstrap-danh-gia-mo-hinh-cau-truc-smartpls.html> [Accessed 25 Nov. 2021]

Phamlocblog.com, (2021). *Đánh giá mô hình đo lường trên SMARTPLS*. [online] Available at: <https://www.phamlocblog.com/2021/04/danh-gia-mo-hinh-do-luong-smartpls.html> [Accessed 23 Nov. 2021]

Researchgate.net, (1997). *Advancing the Theory of Adaptive Structuration: The Development of a Scale to Measure Faithfulness of Appropriation*. [online] Available at: [https://www.researchgate.net/publication/220079721\\_Advancing\\_the\\_Theory\\_of\\_Adaptive\\_Structuration\\_The\\_Development\\_of\\_a\\_Scale\\_to\\_Measure\\_Faithfulness\\_of\\_Appropriation](https://www.researchgate.net/publication/220079721_Advancing_the_Theory_of_Adaptive_Structuration_The_Development_of_a_Scale_to_Measure_Faithfulness_of_Appropriation) [Accessed 22 Nov. 2021]

Researchgate.net, (2020). *Multigroup Analysis using SmartPLS: Step-by-Step Guidelines for Business Research*. [online] Available at: <https://www.researchgate.net/profile/Mumtaz->

Memon/publication/347993745\_Multigroup\_Analysis\_using\_SmartPLS\_Step-by-Step\_Guidelines\_for\_Business\_Research/links/5fec16c292851c13fed3999a/Multigroup-Analysis-using-SmartPLS-Step-by-Step-Guidelines-for-Business-Research.pdf [Accessed 22 Nov. 2021]

Research-system.siam.edu. n.d. [online] Available at: [https://research-system.siam.edu/images/independent/2559\\_Imba\\_%E0%B9%84%E0%B8%95%E0%B8%A3%E0%B8%A1%E0%B8%B2%E0%B8%AA2/SERVICE\\_QUALITY\\_MANAGEMENT\\_IN\\_TALING\\_CHAN\\_FLOATING\\_MARKET\\_BANGKOK/6.2Chapter2.pdf.pdf](https://research-system.siam.edu/images/independent/2559_Imba_%E0%B9%84%E0%B8%95%E0%B8%A3%E0%B8%A1%E0%B8%B2%E0%B8%AA2/SERVICE_QUALITY_MANAGEMENT_IN_TALING_CHAN_FLOATING_MARKET_BANGKOK/6.2Chapter2.pdf.pdf) [Accessed 27 Oct. 2021]

*Satisfaction – A Case of a Commercial Bank in Vietnam*. [ebook]. Available at:

Saul McLeod, (2019). 'What does effect size tell you?'. [online] Available at: [https://online210.psych.wisc.edu/wp-content/uploads/PSY-210\\_Unit\\_Materials/PSY-210\\_Unit09\\_Materials/McLeod\\_EffectSize\\_2019.pdf](https://online210.psych.wisc.edu/wp-content/uploads/PSY-210_Unit_Materials/PSY-210_Unit09_Materials/McLeod_EffectSize_2019.pdf)

Shipley, B. (2000). *Cause and Correlation in Biology: A User's Guide to Path Analysis, Structural Equations and Causal Inference*. Cambridge University Press

Studentsrepo.um.edu.my. n.d. [online] Available at:

[http://studentsrepo.um.edu.my/3216/6/Chapter\\_3.pdf](http://studentsrepo.um.edu.my/3216/6/Chapter_3.pdf) [Accessed 26 Oct. 2021]

Thomas Sellke, M. J. Bayarri, and James O. Berger, (2001). *Calibration of p Values for Testing Precise Null Hypotheses*. [online] Available at: <http://www.dcscience.net/Sellke-Bayarri-Berger-calibration-of-P-2001.pdf> [Accessed 16 Nov. 2021]

Tien, et al. (2021). Customer service culture at Techcombank in Vietnam. *Himalayan Economics and Trung tam WTO*, (2021). *Tong hop cac FTA cua Viet Nam tinh den thang 05/2021*. VCCI – WTO Center. [online] Available at: <https://trungtamwto.vn/thong-ke/12065-tong-hop-cac-fta-cua-viet-nam-tinh-den-thang-112018> [Accessed 8 Oct. 2021]

UKEssays. November 2018. *Definition of Service Quality*. [online]. Available from: <https://www.ukessays.com/essays/marketing/definition-of-service-quality-marketing-essay.php?vref=1> [Accessed 23 Oct. 2021]

*Unobservable Variables and Measurement Error*, Journal of Marketing Research

Vo, H. (2015). *Luan van tot nghiep dai hoc “Phan tich hoat dong thanh toan quoc te tai ngan hang tmcp dau tu va phat trien Viet Nam chi nhanh Can Tho giai doan 2012 – thang 06/2015”*. [pdf] Vietnam: 123doc. Available at: <https://123docz.net/document/3324812-phan-tich-hoat-dong-thanh-toan-quoc-te-tai-ngan-hang-tmcp-dau-tu-va-phat-trien-viet-nam-chi-nhanh-can-tho-giai-doan-2012-thang-06-2015>

[toan-quoc-te-tai-ngan-hang-tmcp-dau-tu-va-phat-trien-viet-nam-chi-nhanh-can-tho.htm](http://toan-quoc-te-tai-ngan-hang-tmcp-dau-tu-va-phat-trien-viet-nam-chi-nhanh-can-tho.htm) [Accessed 29 Oct. 2021]

## APPENDIX

### APPENDIX 1: QUALITATIVE RESEARCH (IN-DEPTH INTERVIEW)

No.	Questions	Sub-questions
<b>Demographic questions</b>		
1	How old are you?	
2	Which bank are you currently working at?	
<b>Part 1: General question</b>		
3	How do you rate the quality of international payment services at your bank?	
4	In your opinion, what factors determine the quality of international payment services at your bank?	How would you explain/define that factor?
5		What role does that factor play for international payment services?
6		How does that factor affect the quality of international payment services in general?
7	What are the most important factors in your opinion?	
8	What do you think the bank needs to improve to develop the quality of international payment services?	
<b>Part 2: Detailed questions following the 5 factors of the research</b>		
9	<b>Reliability</b>	What types of security does the bank have? (SMS OTP, APP OTP, ...)
10		Please list some risks (if any) that have occurred in the process of international payment transactions and how to handle them.
11		How do you rate the bank's technology platform? Please list some risks of the system and how to handle it (if any).

12	<b>Assurance</b>	At your bank, what professional exams do employees have to take?
13		To work at your bank, what conditions do employees need to meet?
14	<b>Responsiveness</b>	How much is your bank's average international payment service fee?
15		What international payment methods do the bank's customers usually choose to use? (Collection, letter of credit)? Which method is the most chosen by businesses? Why?
16		How long does it take to process an international payment transaction on average?
17		In international payment transactions, how long is the payment delay (if any)? What is the reason for the delay (if any)?
18	<b>Empathy</b>	What are the duties of a customer support agent during working time? How has the staff's customer service quality improved in the last 3 years (if any)? Is this evidenced by any specific figures or events?
19		How many branches and transaction offices does the bank have across the country? Does the bank regularly hold meetings to expand and train employees of branches and transaction offices? If yes, please indicate the frequency of those events (e.g. every 6 months)
20		What is the most important factor for a branch or transaction office? (location, how convenient the payment place, ...)
21	<b>Tangibles</b>	Does the bank often take staff's evaluations of uniforms, facilities, remuneration policies, etc.?

## APPENDIX 2: QUANTITATIVE SURVEY

### ASSESSMENT OF INTERNATIONAL PAYMENT SERVICE QUALITY AT BANK

#### ASSESSMENT QUESTIONS

##### **Part 1: Evaluation of the bank's service quality**

In this part, we use 5-point likert scale for businesses to make assessments, in particular:

- 1- Very poor
- 2- Poor
- 3- Normal
- 4- Good
- 5- Excellent

No.	Encode	Description	Degree				
			1	2	3	4	5
1	SQTOTAL	How do you rate the quality of international payment services of that bank? (This part of the question is only for businesses that make international payments at two groups of banks: State-owned Joint Stock Commercial Bank, Private Joint Stock Commercial Bank. And "that bank" mentioned here is the bank that the business gave priority to use when making international payment transactions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### **Part 2: Evaluation of the quality of international payment services (for the bank which was mentioned in Part 1)**

Please indicate your level of satisfaction with the factors below on a scale of 1 to 5, with the convention:

- 1- Strongly disagree
- 2- Disagree
- 3- Normal
- 4- Agree
- 5- Strongly agree

No.	Encode	Description	Degree
-----	--------	-------------	--------

			1	2	3	4	5
<b>Reliability</b>							
2	REL1	The bank provides timely and accurate services as committed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	REL2	The bank cares about solving customer's problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	REL3	Customer information is absolutely confidential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	REL4	The bank has many security technologies: Smart OTP, self-service technology (e-zone) combined with many online transactions, innovative products such as SWIFT GPI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Assurance</b>							
6	ASS1	The bank's staff is highly professional and reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	ASS2	Bank employees have a good service attitude when working with customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	ASS3	Customers feel safe when making transactions at the bank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Responsiveness</b>							
9	RES1	The bank's transaction processing time is fast and accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	RES2	Transparency is guaranteed by the bank throughout the transaction process (the bank always updates and informs customers about the transaction status)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	RES3	The bank is always ready to help customers solve arising problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Empathy</b>							
12	EMP1	Customers are always taken care of by the staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	EMP2	Bank staff always understand the specific needs of each customer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



14	EMP3	Employees receive the trust and love of many customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Tangibles</b>							
15	TAN1	The bank's facilities are modern, clean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	TAN2	The bank's working hours are flexible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	TAN3	Support facilities (brochures, website interface...) are diverse and convenient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Part 3: Evaluation of the importance of 5 factors

Please rate the importance of the factors below on a scale of 1 to 5, with the convention:

- 1- Very unimportant
- 2- Unimportant
- 3- Neutral
- 4- Important
- 5- Very important

No.	Encode	Description	Degree				
			1	2	3	4	5
18	REL	Reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ASS	Assurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RES	Responsiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	EMP	Empathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	TAN	Tangibles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### DEMOGRAPHIC QUESTIONS

Choose one answer for each question:

*"All business information you provide will be absolutely confidential and used for research purposes only"*

1. What is your type of business?

- Limited Liability Company
- Joint Stock Company
- Private Enterprise
- Partnership Company
- State-owned enterprise

Others:...

2. What is your business scale?

- Small business size (Number of employees: 01-50 people)
- Medium business size (Number of employees: 51-1000 people)
- Large enterprise scale (Number of employees: over 1000 people)

3. What is the major of your business?

- Agriculture, forestry and fisheries
- Extraction
- Manufacturing and processing industry
- Production and distribution of electricity and gas
- Supply of clean water; waste management and treatment activities
- Construction industry
- Wholesale and retail
- Warehousing transportation
- Information and communication
- Financial activities, banking, insurance
- Administrative activities and support services
- Accommodation and catering services
- Education and training
- Health and social assistance activities
- Others:...

4. How many banks does your company now use for international payment transactions?

- 1 bank
- 2-3 banks
- 4-5 banks
- More than 5 banks

5. Which bank is the top priority for your business when it comes to international payment transactions?

- Vietcombank
- Vietinbank
- BIDV
- Techcombank
- SeABank
- GPBank
- Others:...

6. How often does your business make international payment transactions?

- Less than 5 times/month
- 5-10 times/month
- 10-15 times/month
- More than 15 times/month

7. Which payment method does your business use the most?

- Cash in advance
- Open account
- Telegraphic Transfer Reimbursement
- Collection
- Letter of Credit

***The research team would like to thank you for filling out the survey!***

---