

BACHELOR OF INTERNATIONAL BUSINESS THESIS

FACTORS AFFECTING THE CHOICE OF DELIVERY TERMS UNDER INCOTERMS 2020 OF EXPORT ENTERPRISES IN VIETNAM

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EXECUTIVE SUMMARY

Due to international economic integration, import and export activities between Vietnam and other countries are increasing recently, playing an increasingly important role in the economic development of the country. Operating in the field of import and export is growing and expanding in size and stature for both businesses in the world in general and enterprises in Vietnam in particular.

However, the more strongly international trade activities are promoted, the increasing number of exporters and importers, the more complicated transaction and transportation processes, leading to many problems and disputes arising related to obligations, risks and costs between the two parties - the contents are summarized in the Incoterms rules. Since then, understanding and choosing delivery terms according to Incoterms becomes even more essential, becoming effective support for businesses if appropriate and beneficial terms are selected. This improvement led to the critical need about how to choose appropriate delivery terms under Incoterms 2020 of enterprises, especially exporters in Vietnam.

Many researchers from all over the world have been interested in this topic over the years. However, there are still few studies that clearly define the factors affecting the choice of delivery terms under the latest version of Incoterms (Incoterms 2020), specifically with the exporting environment of Vietnam and how to improve it. In this study, the authors have tried to study the influence of these factors on the choice of delivery terms under Incoterms 2020 in Vietnam's export activities. The authors applied the research model of Unal and Metin (2021) in our thesis research and carried out not only by the quantitative method but also by the qualitative methods to ensure both objective and subjective views. In addition, the author team also collects opinions of export businesses in Vietnam by conducting an online survey.

After 263 responses from export enterprises in Vietnam, the study identified three main factors which influence the choice of delivery terms under Incoterms 2020: Resource-Advantage (RA), Efficiency-Cost (EC), Legitimacy – Environment (LE). Then, after collecting other qualitative data from reliable sources, analyzing, discussing, the authors suggest some possible recommendations to improve the effectiveness of choosing delivery terms under Incoterms 2020 of export enterprises in Vietnam.

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ABBREVIATIONS AND ACRONYMS LIST

AHP	Analytical Hierarchy Process		
APEC	Asia-Pacific Economic Cooperation		
ASEAN	Association of Southeast Asian Nations		
CEIC	Census and Economic Information Center		
CFR	Cost and Freight		
CIF	Cost, Insurance and Freight		
CIP	Carriage and Insurance Paid To		
CPT	Carriage Paid To		
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership		
DAP	Delivered at Place		
DDP	Delivered at Place Unloaded		
DPU	Delivered Duty Paid		
EC	Efficiency-Cost		
EFA	Exploratory factor analysis		
EU	European Union		

Eurocham	European Chamber of Commerce in Vietnam
EXW	Ex Works
FAHP	Fuzzy Analytical Hierarchy Process
FAS	Free Alongside Ship
FCA	Free Carrier
FDI	Foreign direct investment
FOB	Free on Board
FTA	Free Trade Agreement
ICC	International Chamber of Commerce
ICD	Inland Container Depot
IEC	International Electrotechnical Commission
Incoterms	International Commercial Terms
ISO	International Organization for Standardization
IT	Information Technology
ITU	International Telecommunication Union
KMO	Kaiser– Meyer– Olkin
LE	Legitimacy-Environment
MIC	Military Insurance Corporation
PJICO	Petrolimex Joint Stock Insurance Corporation
RA	Resource-Advantage
SMEs	Small and Medium-sized Enterprises
SPSS	Statistical Package for the Social Sciences
VASEP	Vietnam Association of Seafood Exporters and Producers
VAT	Value-added tax
VCCI	Vietnam Chamber of Commerce and Industry
VIAC	Vietnam International Arbitration Centre
VIFOREST	Vietnam Timber and Forest Products Association
VJCC	Vietnam - Japan Human Resource Cooperation Center
VLA	Vietnam Logistics Service Business Association
VNSC	Viet Nam Shippers' Council
W&WP	Wood and Wood Products
WTO	World Trade Organization



INTRODUCTION

This chapter focuses on introducing topic background, giving an overview of the practical problem of choosing appropriate delivery terms under Incoterms 2020 in export activities. To investigate the problem, the research objectives, research scope, research questions are identified.

CHAP 1: INTRODUCTION

1.1 Background

1.1.1 Topic background

Today, Vietnam's economy, with the global integration, strong participation in industrialization and modernization, have been many changes compared to the previous period, contributing to the development of the global economy. Possessing favorable conditions both outside such as geographical location, weather and climate, and inside in terms of people, Vietnam has gradually become an international trading partner of other countries in the world. As a result, import and export activities on this S-shaped land are growing and bustling more than ever. In particular, export activities play an increasingly important role in the development of Vietnam's economy in the new era.

About 'export' activities, this is a part of international trade, which is defined as the exchange of goods and services across national boundaries (Belay Seyoum, 2009). Along with import, it is the most traditional form of international business activity and has played a major role in shaping world history, being an important part of the national economy. However, with global development and modernization, the export process has become increasingly complex and challenging, causing a lot of conflicts and problems in issues of: delivery, payment, risks, responsibility and costs. One of the reasons for the above problem comes from the choice of delivery terms under Incoterms - a common rule in international trade.

Incoterms (an acronym for International Commercial Terms) is a set of commercial rules that express the transactional practices between transactions of businesses in contracts for the sale of goods by the International Chamber of Commerce (abbreviated as: ICC). Since then, Incoterms have been revised and supplemented six times in 1953, 1967, 1976, 1980, 1990, 2000, 2010 and the latest version is Incoterms 2020 in order to bring them into conformity with current international commercial practice. Incoterms are not government-imposed laws, but guidelines agreed upon by the parties to a contract. Incoterms 2020 has been modified, optimized and has a lot of differences compared to Incoterms 2010. Incoterms 2020 has 11 delivery terms divided into 4 groups as follows: E terms (EXW); F terms (FCA, FAS, FOB); C terms (CFR, CIF, CPT, CIP); D terms (DDP, DAP, DPU)

The negotiation of trade agreements is complicated and diversified due to the large number of suppliers and customers; for example, transportation expenses, transportation risk, and obligations. As a result, a trade agreement between importers and exporters, also known as Incoterms, is critical since it establishes the roles, responsibilities, transportation liability, and remuneration that are universally recognized (Suraraksa, Amchang and Sawatwong, 2020).

Due to the complexity and diversity in today's international trade transactions, choosing the appropriate delivery terms under Incoterms for each transaction is an urgent issue that requires exporting businesses in the world in general and Vietnam in particular to put attention to. This is also the reason that motivates the authors to carry out thesis topic "Factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam". Since then,

proposing solutions and recommendations in order to create conditions for export enterprises in Vietnam to make more suitable and effective choice of delivery terms under Incoterms 2020.

1.1.2 The need of the research topic

Choosing the appropriate Incoterms for each international commercial transaction is a critical task. If the inappropriate term is used, the business will be responsible for unnecessary damages. For instance, according to Nanto et al (2011), in March 2011, when a tsunami destroyed a container terminal in Japan, hundreds of packages were damaged, and exporters who used inappropriate Incoterms were held liable for damages that might have been prevented by using the appropriate Incoterms. This implies that choosing the inappropriate Incoterms can have negative repercussions, such as using an Incoterms that only applies to sea for road transportation, instead of an Incoterms that covers all modes of transportation (IncotermsExplain, no date). If the parties employ the inappropriate terminology, the Incoterms will not assist commerce (Ramberg, 2011).

Companies frequently lack knowledge about how to use Incoterms appropriately (Malfliet, 2011), which results in the choice of a biased and ineffective Incoterms rule. This may have a detrimental impact on the transaction's profitability and in some situations, result in significant losses for a business (Hajdukiewicz and Pera, 2021); have a negative influence on payment, delivery schedules, produce extra expenditures. Because of that, businesses can suffer negative consequences such as raising risks, increasing costs, even causing conflicts with clients. As a result, choosing Incoterms is frequently seen as a difficult task in international transactions (Hajdukiewicz and Pera, 2021).

Hardship in choosing suitable Incoterms 2020 rule is not only a problem to foreign enterprises but also a huge objection to exporters in Vietnam. Recent years, businesses in Vietnam are increasingly realizing the role of import-export and the unprecedented opportunities from globalization. Besides, seizing the opportunities from import and export, Vietnamese government also has taken several actions to encourage international trade activities such as actively participating in the multilateral and regional economy organizations, such as Association of Southeast Asian Nations (ASEAN), Asia-Pacific Economic Cooperation (APEC), and especially the World Trade Organization (WTO) and so on. Vietnam also has been participating in both bilateral and multilateral free trade agreements (FTAs and also keeps close trade relationships with many countries in the world to improve competitive opportunities and enhance the export value. Therefore, international trade activities are becoming more massive in number as well as diverse in form and manner, creating a strong driving force for the growth of the national economy.

Thanks to the expansion of international trade and dynamic import-export activities in contemporary years, Vietnam's economy is still developing in a steady manner despite unstable economic conditions due to the effects of the Covid-19 pandemic. In the latest reports, Vietnam's total exports grew 26.3 % year on year in November 2021. Nevertheless, the monthly export value reached an all-time high of 29.7 USD in March 2021 and Vietnam trade balance recorded a surplus of 1.3 USD in November 2021 (CEIC Data). However, participating in complex

multilateral trade agreements also causes certain difficulties for businesses in Vietnam when they have to face different countries' regulations and complicated negotiation processes. In addition, reality data prove that enterprises in Vietnam still have various shortcomings in choosing the appropriate term of Incoterms 2020. According to Mr. Vo Nhat Thang, a referee at VIAC, export companies in Vietnam often do not understand which terms are appropriate for bulk cargo, and which terms are appropriate for goods transported by container. These unnecessary mistakes can cost export businesses in Vietnam dearly with the consequences mentioned above (Thang, 2020).

Therefore, export enterprises need to actively learn about Incoterms, not limited to only 1-2 common commercial terms, but all of the latest Incoterms 2020 to flexibly use and avoid superfluous legal problems because if a dispute occurs, it will be difficult to resolve according to To Binh Minh - Director of Vietnam - Japan Human Resource Cooperation Center (VJCC); in order to strengthen their competitiveness under intense pressure from global rivals.

With the mentioned difficulties, it can be seen that choosing the delivery terms under Incoterms 2020 is not an easy task for exporters in the whole world in general and in Vietnam in particular. In fact, choosing delivery terms under Incoterms 2020 could be influenced by various different factors. There have been research studies on the factors influencing exporter choice of delivery terms under Incoterms 2020 in several countries throughout the world. In previous studies, researchers have indicated some influencing factors such as: transportation expenses, staff experiences, relationship between exporter and importer, modes of transportation, regulations in 2 countries and so on. However, there have been no research articles on this topic in Vietnam. The choice of appropriate Incoterms rules has a significant impact not only on the firm's financial condition and competitive advantage but also on the country's economy. Because of the aforementioned pressing difficulties, this research will investigate and highlight the factor affecting the choice of delivery terms under Incoterms 2020 for exporters in Vietnam, in order to assist exporters in Vietnam in making informed decisions and avoiding unnecessary risks. In addition, this research will be a fundamental research to contribute to the further in-depth studies in the future.

1.2 Research objectives

The primary goal of this study was to identify the key factors influencing the choice of delivery terms under Incoterms 2020 for exporters in Vietnam. The authors then give some theories and solutions, as well as suggestions for how to expand for more suitable choice. The research was conducted by implementing the following objectives:

- 1. Objective 1: To overview the theories of Incoterms 2020 in international trade as well as the role and meaning of choosing delivery terms under Incoterms in export activities.
- 2. Objective 2: To identify the critical factors and evaluate the impacting level of each factor on the choice of delivery terms under Incoterms 2020 of exporters in Vietnam.
- 3. Objective 3: To propose some feasible recommendations to deal with existing limitations in choosing delivery terms under Incoterms 2020 of export companies in Vietnam.

1.3 Research questions

This study intends to achieve these objectives by examining the factors with the aim of finding the priority of impacting level of each factor to exporters in Vietnam. As a result of the aforementioned reasons, the authors address the following research questions (RQ):

- 1. RQ1. What is the role and meaning of the choice of delivery terms under this rule in export activities?
- 2. RQ2. Which factors influence the choice of delivery terms under Incoterms 2020 and extent of their influence?
- 3. RQ3. What is the recommendation for the choosing process of delivery terms under Incoterms 2020 for export firms in Vietnam?

1.4 Scope

In this topic, we will focus on analyzing the factors influencing the choice of delivery terms under Incoterms 2020 for exporters in Vietnam, under the below conditions:

- ▶ Firstly, the Incoterms version is Incoterms 2020.
- Secondly, the thesis relied on in-person interviews and a survey to collect primary data. The participants of this survey are export firms in Vietnam.
- > Thirdly, the secondary data is collected from 2017 to 2022.

1.5 Methodology and data overview

To meet the purpose of selecting and evaluating the factors that affect the choice of delivery terms under Incoterms of exporters in Vietnam, the authors have synthesized, critically reviewed and selected factors and models from previous research papers. Then, the authors designed questionnaires based on the hypothesis model developed and conducted in-depth interviews and email surveys to collect the primary data. Data were gathered from more than 300 employees who are working in export firms or any firms that have export activities in Vietnam, then statistically analyzed by the Statistical Package for the Social Sciences (SPSS) to examine the prioritization of the factors to be considered when choose Incoterms rule in export activities of businesses in Vietnam.

In this study, the data collected are both primary and secondary data. Primary data will be collected through interviews and email surveys as described above, secondary data is used and collected from reputable and reliable sources, such as official newspapers, government publications and company's websites.

About the research techniques, this study will be conducted by using both quantitative and qualitative techniques. By utilizing that, the research results will answer our above research questions, indicate the factors that influence the choosing process of delivery terms under Incoterms of exporters in Vietnam, then render constructive recommendations aimed to improve and support the more efficient Incoterms choice in their business operations.

1.6 Conclusion

In this chapter, authors give an introduction to the research topic, as well as provide background information related to our research. It focuses on introducing topic background, affirming the importance and urgency of this topic through practical problems in the choice of delivery terms under Incoterms 2020 for exporters in Vietnam. In addition, this chapter also presents the research objectives, research questions, research scope and briefly summarizes the methodology and data collection process.

1.7 Thesis outline

The following are the five chapters of this thesis (excluding the abstract, appendix, reference, list of tables and figure, abbreviations and acronyms list):

Chap 1: Introduction brief summary of information about the research topic overview, background, objective give research questions and the methodology as well.

Chap 2: The literature review presents relevant theories as the basis for developing research questions, selectively reviewing prior research to identify influencing factors and hypotheses. Finding common definitions and theories of Incoterms choosing rule is also indicated to aid research.

Chap 3: Methodology discusses research philosophy, the method approach to the thesis, contains qualitative, quantitative and observational experiments included; research process and ethical issues. Data collection and analysis methods are clarified in this chapter, as well as explaining why those methods are used.

Chap 4: The findings and analysis analyzed the data using the proposed methods to categorize the factors, and evaluate the influence and arrange the priority of impacting level of factors affecting the choice of delivery terms under Incoterms 2020 for exporters in Vietnam.

Chap 5: Recommendations and conclusion final chapter responds to the research question by summarizing the highlights and providing recommendations for appropriate choice of delivery terms under Incoterms 2020 for exporters in Vietnam



LITERATURE REVIEW

The second chapter focuses on clarifying the basic theories about export activities as well as Incoterms by systematically defining, characteristics of each term, the role of choosing delivery term under Incoterms in export activities. Based on comparing and evaluating documents related to this topic, the last part develops hypotheses for research into four factors:

- ✓ Resource Advantage (RA)
- ✓ Efficiency Cost (EC)
- ✓ Legitimacy Environment (LE)
- ✓ Choice of appropriate delivery terms under Incoterms (CH)

CHAP 2: LITERATURE REVIEW

2.1 Overview of export

2.1.1 Definitions of export

Export activity is a part of international trade, and it is originally defined as the act of sending goods to another country for sale (Oxford Language). Export is not only one of the most traditional forms of international trade but also the first mode of foreign market entry widely used by large companies because of its low level of commitment and risks (Belay Seyoum, 2009). This is a low-cost method of determining a product's market approval before investing in local manufacturing facilities. Although at first export was all about barter, today export has been shown and developed in many different forms. According to Oxford Languages, export is sold a commodity, article, or service abroad on the basis of currency payment. With globalization, the number of export enterprises has always exploded over the years. Export company is any company that has export activity in their business or business that sells goods to another country (Cambridge Dictionary).

Theoretically, it is likely that a company can export as many products as they can, into the international market. However, despite how potential it seems to be, there are several notable difficulties that exporters have to face as both the volume and complexity of exporting increases. Common issues found by export enterprises such as trade barriers, language barriers, different customs procedures, various legal systems and so on (Blackthorne International Transport, 2020), may raise a red flag of misunderstanding which can lead to costly disputes. Nevertheless, export companies could reduce the possibility of unnecessary controversy and legal complications by clearly separating the regarding topics such as risk, cost, delivery and customs clearance in the contract for the sale of goods (ICC, 2019).

2.1.2 Importance of export

Export activities advantages not only one but all three parties: the world economy in general, each country's economy in particular and the export enterprises themselves.

Along with import, export is a major form of foreign trade activities, it plays a particularly important role in economic development. Each country only has competitive advantages in some specific areas. Therefore, export activities help to exploit strengths, minimize weaknesses, create a balance in the development process and encourage the world economy to grow (Shawn Grimsley, 2021).

Export is considered a matter of strategic significance for economic growth of the country. The role of exports is reflected in the following aspects: it creates the main source of capital for imports that balances the payments and contributes to the process of economic restructuring. In addition, export also has a positive effect on employment rate and national income (Tejvan Pettinger, 2017).

Compared to the general economy, exporting seems to benefit export enterprises the most in the short-term. The increases in sales and profits are visible if exporters enter new markets

and capture a particular market share. Besides, export companies could probably reduce financial risk by avoiding the cost of establishing manufacturing operations in the foreign country and spreading business risk by diversifying into multiple markets. Through exporting, enterprises achieve experience curve effects and location economies which drive down the production costs. Finally, companies that export might discover new technologies and insights into foreign competitors (Investopedia, 2021).

2.2 General theories of delivery terms under Incoterms 2020

2.2.1 Theories of delivery terms under Incoterms

2.2.1.1 Definition & Characteristics

'Delivery terms' according to Cambridge Dictionary, are the agreements made between a seller and a buyer of products concerning when and how the things will arrive, be paid for and so on. In order to enable both parties to understand who is liable for all expenses and risks involved with a sales contract, such delivery information must be explicitly defined in an international commercial contract. Knowing the international delivery terms included in worldwide sales contracts can help businesses and their partners avoid misunderstandings, limit disputes between two parties. Instead of detailing each delivery terms in a contract, the International Chamber of Commerce (ICC) has standardized the delivery terms used in international trade as Incoterms (Rosal, 2016).

Abbreviation for the phrase "International Commercial Terms", the term 'Incoterms' is used to refer to "a set of internationally accepted definitions and rules of interpretation for most common commercial terms used in contracts for the sale of goods" (ICC, 2020). The Incoterms rules provide specific guidance to individuals participating in the import and export of global trade on a daily basis.

Incoterms are issued by the International Chamber of Commerce (ICC), which proposed the first set of uniform interpretation rules of trade terms in 1936 to address the problem of different interpretations of trade terms in different countries and branches of industry and thus provide greater certainty regarding the actual content of the contract (Malfliet, 2011; Davis and Vogt, 2021). The purpose of Incoterms is to serve as a contractual shorthand for a large amount of language that would otherwise have to be specified anew in the details of each of the millions of sales agreements executed each year (Davis and Vogt, 2021).

In a codified form, each Incoterms rules consists of three letters indicating the rule to be used, conveying a lot of information regarding how the contract parties are going to allocate certain risks and responsibilities between them, reflecting business practice in contracts for the sale and purchase of goods. Therefore, by referring to Incoterms, the importers and exporters are able to understand the rights, duties, obligations and responsibilities in the fulfillment of their contractual obligations, in relation to the delivery of goods and the delivery-related services such as customs clearance and transport movements (Bergami, 2013).

In detail, Incoterms answered three fundamental questions: (1) Which delivery tasks will be performed by the importer and exporter (e.g. organizing carriage or insurance, obtaining shipping documents)? (2) How will delivery costs be distributed between the buyer and seller?; and (3) When does the risk pass from seller to the buyer under each of these rules? (Yaakub *et al.*, 2018). Incoterms do not cover such matters as the transfer of title to shipment, terms and methods of payment, remedies for breach of contract and do not replace contracts of carriage and insurance.

In fact, although Incoterms are the most common rules which are approved worldwide by governments, legal authorities, and business professionals, the use of Incoterms is not obligatory. As the ICC is not a governmental organization, it cannot make laws, however, it can recommend solutions and make rules that traders may follow on a voluntary basis, through incorporation of these rules into contracts of sale (Bergami, 2013). Thus, Incoterms are a tool offered to companies which can choose to apply them or not. Still, the decision not to use Incoterms in a contract can cause significant difficulties when determining the customs value of goods, making them quasi-compulsory in some countries (Hien, Laporte and Roy, 2009).

2.2.1.2 History of Incoterms

Since its founding in 1919, ICC has been committed to the facilitation of international trade. Different practices and legal interpretations between traders around the world necessitated a common set of rules and guidelines. As a response, ICC published the first Incoterms rules in 1936 (ICC, 2020). With changes in economic structure, business markets and means of transport, which require the adjustment of Incoterms rules to fit the actual commercial transaction situation, the ICC issued revised versions of Incoterms. The modernized sets of rules were published in the years: 1953, 1967, 1976, 1980, 1990, 2000, 2010 and 2020. Currently, the latest version of Incoterms being applied is the Incoterms 2020 version with 11 terms divided into 4 groups E F C D, which officially effective January 1st, 2020.

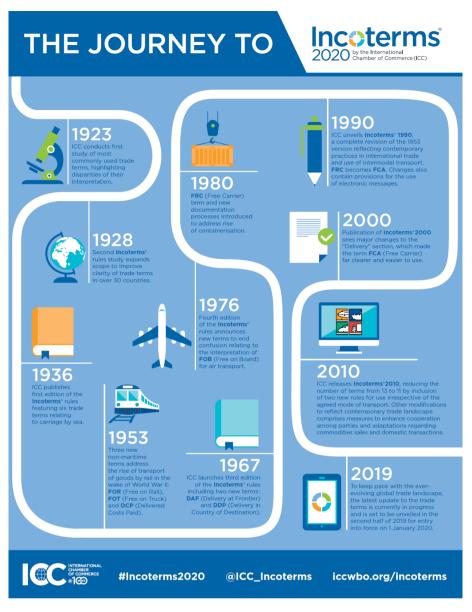


Figure 2.1: The history of Incoterms (Source: ICC, 2020)

2.2.1.3 Roles of Incoterms in export activities

In today's global economy, goods are traded between parties in more countries, in larger quantities and with a wider variety. As the volume and variety of commercial transactions increases, so does the potential for misunderstandings and costly disputes if sales contracts are not drafted appropriately. Incoterms are considered to be the "Bible of international commerce", therefore, with both exporters and importers, knowledge and understanding of Incoterms is vital (Holley and Haynes, 2003).

Incoterms for nearly a century have facilitated the conduct of commercial transactions. Incoterms reduce the uncertainty due to the high degree of heterogeneity in international commercial practices by creating a common frame of reference for the signatories (Hien, Laporte and Roy, 2009). Thanks to the uniformity and worldwide application of the Incoterms rules, international traders can avoid or at least significantly reduce inconsistencies in the

interpretation of these terms in different countries. The reference to Incoterms in the sales contract clearly defines businesses' obligations to minimize and conveniently settle disputes arising from the sales contract, especially the contract between the parties (VIAC, 2020).

Incoterms rule provides great help to import-export staffs, especially fresher, who are new to and not knowledgeable about international trade. By using Incoterms for contracts, a degree of certainty regarding the responsibilities of the seller and the buyer can be achieved in order to reduce the disadvantage. In addition, Incoterms ensure a reasonable balance between the rights and obligations of the parties to prevent disputes from occurring. Even when a dispute occurs, Incoterms also help the parties as well as the mediator and adjudicator to significantly reduce the time and effort to clarify some issues. Thus, the standardization of trade conditions can facilitate businesses by minimizing transaction costs and trade risks.

2.2.1.4 About Incoterms 2020

The new version of Incoterms comes into effect on January 1, 2020 and includes some changes. With the adaptation of Incoterms 2020 to today's global trading activities, the new version is continuously updated and oriented towards practice. The purpose of the amendment is to make the Incoterms more user-friendly.

There are 11 rules in Incoterms 2020 provisions divided into 4 groups E, F, C, D with obligations gradually shifting from buyer to seller, from minimum responsibility to the maximum responsibility of the seller, and vice versa for the buyer. In this research, the author team will also analyze into 4 groups to help readers understand the common characteristics of the rules and the basic differences between the groups. Besides, the authors also clarify the change between Incoterms 2020 compared to Incoterms 2010.

a, Incoterms 2020 Group E:

Under the EXW term (Ex Work), the seller makes the goods available to the buyer at the "named place of delivery". This is commonly, but not necessarily, the seller's place of business. The seller has no responsibility to load the goods onto a truck or other transport vehicle or to clear the goods for export. This trade term places the greatest responsibility on the buyer and minimum obligations on the seller. EXW is often used when making an initial quotation for the sale of goods. EXW is commonly used in courier shipment when couriers pick up the shipment from the seller's premises and load the courier's own truck.



Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared Figure 2.2: EXW term Incoterms 2020 (Source: ICC, 2020)

b, Incoterms 2020 Group F: FCA, FAS, FOB

FCA - Free Carrier

Subject to FCA terms (point of departure) – This term means that the seller delivers the goods, cleared for export, to the carrier nominated by the buyer at the named place of delivery. If the named place of delivery is the seller's place of business, the seller is responsible for loading the goods onto the transport vehicle. If it is any other location, the seller delivers by making the goods ready for unloading from the seller's means of transport. With FCA, the named place of delivery is domestic to the buyer. FCA is often used when making an initial quotation for the sale of goods.

Previously with Incoterms 2010, FCA terms were just the seller delivers the goods, cleared for export, to the carrier nominated by the buyer at the named place of delivery. Sellers or buyers (or more likely their banks if a letter of credit is in place) may request a bill of lading with an on-board note when items are sold FCA for marine shipment. The FCA rule, on the other hand, requires delivery to be completed before the items are loaded onto the vessel. The seller's ability to secure an on-board bill of lading from the carrier is far from assured. That carrier is likely to be obligated and entitled to provide an on-board bill of lading only after the cargo has been loaded into the ship.

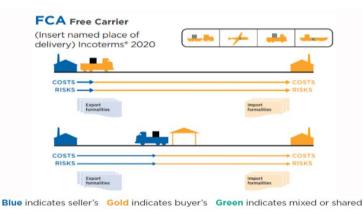
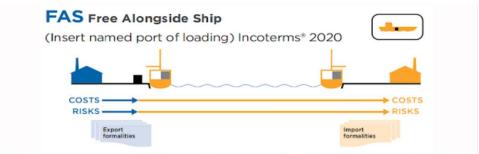


Figure 2.3: FCA term Incoterms 2020 (Source: ICC, 2020)

FAS - Free Alongside Ship

Under FAS terms (port of departure) – This term means that the seller delivers when the goods are placed alongside the vessel at the named port of shipment. The seller is required to clear the goods for export. The buyer has to bear all costs and risks of loss or damage to the goods from that moment. This term can be used for sea transport only. With FAS, the named port is domestic to the seller. FAS is commonly used in the sale of bulk commodity cargo such as oil, grains...

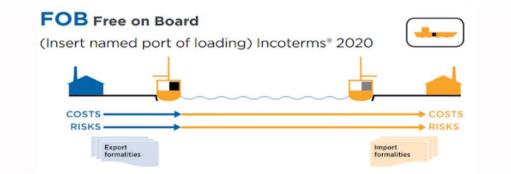


Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.4: FAS term Incoterms 2020 (Source: ICC, 2020)

FOB - Free on Board

FOB terms (port of departure) – This term means that the seller clears the goods for export and delivers them on board the named vessel at the "named port of shipment". This means the buyer has to bear all costs and risks to the goods from that point. With FOB, the named port of shipment is domestic to the seller. If the shipment is containerized or to be containerized, common practice is to deliver the shipment to the carrier at a terminal and not on board a ship. In such a situation, the FCA term is recommended. The FOB term is commonly used in the sale of bulk commodities such as oil, grains...



Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

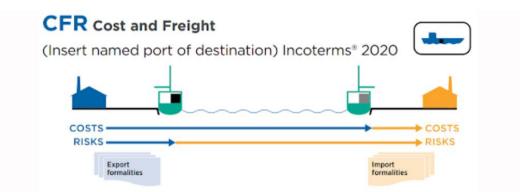
Figure 2.5: FOB term Incoterms 2020 (Source: ICC, 2020)

c, Incoterms 2020 Group C: CFR, CIF, CPT, CIP

Group C terms are different from the other groups because the seller's liability will increase, the seller will have to take care of all costs from chartering, to carriage and loading of goods, as well as insurance for risks. risk during transportation

CFR - Cost and Freight

For CFR terms, this term means the seller clears the goods for export and delivers them on board the ship at the port of shipment. This is where risk passes from the seller to buyer. The seller, however, is responsible for contracting for and paying the costs associated with transport of the goods to the named port of destination. This is where costs transfer from seller to buyer. Note that the transfer of risk occurs at a different point than the transfer of costs.

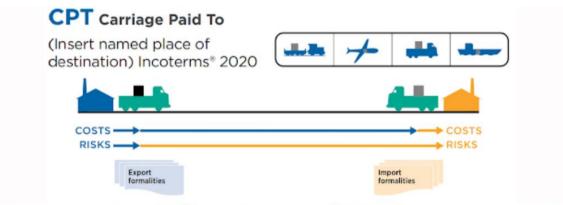


Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.6: CFR term Incoterms 2020 (Source: ICC, 2020)

CPT - Carriage Paid To

Under CPT terms (destination) – This term means that the seller clears the goods for export and delivers the goods to the carrier for transport. This is where the risk passes from seller to buyer. The seller, however, is responsible for contracting for and paying the costs associated with transport of the goods (but not insurance) to the "named place of destination". This is where costs transfer from seller to buyer. Note that the transfer of risks occurs at a different point than the transfer of costs. In CPT, the named place of destination is domestic to the buyer. CPT is often used in sales where the shipment is by air freight, containerized ocean freight...

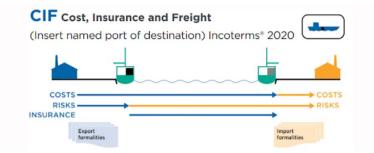


Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.7: CPT term Incoterms 2020 (Source: ICC, 2020)

CIF - Cost, Insurance and Freight

Under CIF terms (port of destination) the seller delivers when the goods pass the ship's rail in the port of shipment. Seller must pay the cost and freight necessary to bring goods to the named port of destination. Risk of loss and damage are the same as CFR with the exception about insurance. Insurance coverage must comply with "Institute Cargo Clauses (C)" or similar. Seller also has to procure marine insurance against buyer's risk of loss/damage during the carriage. Sellers must clear the goods for export. This term can only be used for sea transport.



Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.8: CIF term Incoterms 2020 (Source: ICC, 2020)

CIP - Carriage and Insurance Paid To

Under CIP terms (port of destination) terms - freight, insurance and freight, this term is the same as CPT with the exception of insurance. The risk of damage to the goods is transferred from the buyer to the seller when the goods are placed on board the ship. In Incoterms 2010, the seller only buys insurance with a minimum level of ICC (C) and allows the seller and the buyer to agree with each other to be able to buy a higher level of insurance, while in Incoterms 2020 the seller of the goods will be stipulates that insurance can only be purchased with a maximum amount of ICC (A) and allows the seller and the buyer to discuss and agree on the purchase of other insurance with a lower level.



Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.9: CIP term Incoterms 2020 (Source: ICC, 2020)

d, Incoterms 2020 Group D: DAP, DPU, DDP

DPU - Delivered at Place Unloaded

DPU terms (destination) – Delivered at the place of discharge, the seller will deliver the goods to the buyer's warehouse and unload the goods from the vehicle. The seller bears all risks to bring the goods to the named place and unload.

In the Incoterms 2010 rules, the only difference between DAT and DAP was that in DAT, the seller delivered the goods after they were unloaded from the arriving means of transport into a "terminal," whereas in DAP, the seller delivered the goods after they were placed at the buyer's disposal on the arriving means of transport for unloading. It should also be remembered that the DAT Guidance Note in Incoterms 2010 prohibited the use of the term "terminal" in a wide sense to encompass "any place, whether covered or not..." DAT and DAP

have undergone two adjustments as a result of ICC's decision. First, the sequence in which the two Incoterms 2020 rules are given has been reversed, with DAP now appearing before DAT, indicating that delivery occurs before unloading. Second, the rule DAT has been renamed DPU (Delivered at Place Unloaded), highlighting the fact that the final destination might be any location, not only a "terminal."

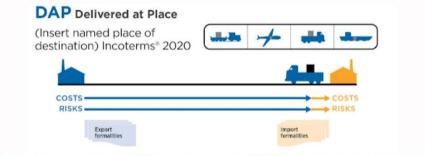
If the location is not at a terminal, the seller must ensure that the location where the items will be delivered is one where the goods may be unloaded.

DPU Del	livered at Place Unloaded	
	ned place of) Incoterms® 2020	s →
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COSTS -		► COSTS
	Export formalities	Import formalities
Blue indicates selle	er's Gold indicates buver's	Green indicates mixed or share

Figure 2.10: DPU term Incoterms 2020 (Source: ICC, 2020)

DAP - Delivered at Place

DAP terms (destination) – Delivered at the destination, the seller delivers the goods to the buyer and transfers risk to the buyer when the goods are placed on a means of transport under the control of the buyer and ready for unloading at the destination. specified point. After the seller delivers the goods to the named place, the risk passes to the buyer at the named place. In addition, the seller must contract and deliver the goods to the named place.



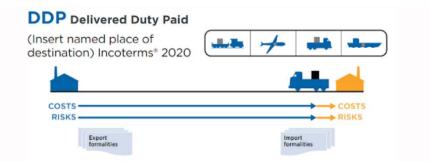
Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.11: DAP term Incoterms 2020 (Source: ICC, 2020)

DDP - Delivered Duty Paid

Under DDP terms (destination) – Tax paid, the seller delivers the goods to the buyer for import customs clearance and taxes, and the goods are transported to and under the control of the buyer.

All costs incurred before the goods are delivered to the named point will be borne by the seller. Risk is transferred when the goods are placed under the control of the buyer.



Blue indicates seller's Gold indicates buyer's Green indicates mixed or shared

Figure 2.12: DDP term Incoterms 2020 (Source: ICC, 2020)

2.2.2 Choosing delivery terms under Incoterms in export

Choosing is the action of picking someone or something out of two or more possibilities as being the best or most suited. Also, the choice of Incoterms is also an important thing for import and export businesses to consider carefully, especially when the transactions that Incoterms refer to be on the international trade scope. Choosing delivery terms under Incoterms is something that both importers and exporters need to put effort to choose the costefficient and appropriate Incoterms rule for their international. Overall, currently, importexport businesses still face many difficulties in this important task.

2.2.2.1 Importance of choosing appropriate delivery terms under Incoterms in export

The number of negotiated contracts has expanded dramatically in recent decades, while also becoming more complicated and diversified. Furthermore, as previously mentioned, there are several negative consequences that might arise if the exporter lacks knowledge or is subjective in choosing the delivery term. As a result, choosing delivery terms under Incoterms is critical since they provide clarity and understanding amongst the parties to the agreement, who frequently represent various cultures, religions, languages, and so on.

a. Importance for national economy

For nearly a century, Incoterms have contributed to the performance of economic transactions. The purpose of Incoterms is to establish a comprehensive set of standards for interpreting the most often used commercial terms. Inconsistencies in the interpretation of these requirements in different nations can be avoided or at least greatly reduced. Choosing appropriate delivery terms under Incoterms 2020 will make import and export activities more efficient and easier. From there, extending and supporting external economic relations is a necessity for constructing international transportation bridges. This is also a crucial step in the purchase and sale of tangible products between individuals and organizations in various nations, and it is a link in the chain of national economic activity.

In some circumstances, choosing appropriate delivery terms assists companies in gaining the right to transport and insurance, which means the firm will be awarded the opportunity to select a domestic carrier and insurance provider. As a result, it provides circumstances for domestic carriers and insurers to increase revenue and indirectly generate revenue for the

government through tax collection. Furthermore, it contributes to resolving the issue of employment for a huge workforce in the country's import-export, transportation, logistics, and insurance industries. Renting a means of transport and buying insurance in the country will help the country earn and retain a large amount of foreign currency.

Without Incoterms, international trade activities will face many difficulties to survive and develop. By contrast, when Incoterms are well applied, export activities will be boosted, thereby increasing the prestige of each country in the international market, increasing the amount of foreign currency, and at the same time attracting investment capital to develop the domestic economy and strongly promote foreign economic activities.

b. Importance for export company

Understanding, flexibly choosing different delivery terms under Incoterms is beneficial for exporters, especially when they obtain transport and insurance rights.

Take advantage of trading opportunities: If neither the seller nor the buyer can afford to hire transportation and insure the goods, the transaction cannot be completed. Enterprises that can organize these jobs will take advantage of trade opportunities with clients that they are unable to perform for various reasons (such as a lack of knowledge, finance, etc.).

Be proactive about delivery time and place: Choosing appropriate delivery terms under Incoterms for exporters reduces a lot of risks in terms of time and place of delivery. Without a thorough grasp of Incoterms and choosing delivery terms under Incoterms group F, the buyer will always select a time and location that is convenient for them. If the delivery time does not match with the preparation time, the seller may be subject to a penalty for late delivery or compensation for harm caused by non-delivery. In contrast, if the seller is ready to deliver the products but the buyer has not chosen a mode of transportation, the seller will be responsible for the expenses and risks incurred while the goods are in storage. Therefore, the choice of delivery terms under Incoterms group C or D will bring advantages to the exporter. The seller can base on his goods preparation situation to designate the means of transport to arrive at the right time, thus avoiding storage costs, risks of goods and avoiding capital stagnation while waiting for means of transport.

Actively move the risks and arising costs related to the buyer's goods: When selling goods under Incoterms group F, the seller can only deliver the goods and pass the risk to the buyer when the buyer has specified means of transportation. If the buyer does not specify it in time, it is very difficult to make the buyer bear the risks and costs incurred in connection with the goods. Whereas if the goods are sold under the terms of group C or D, the seller delivers the goods on his own initiative and passes the risk on to the buyer when delivering the goods to the seller's nominated carrier (group C) or when the carriage chartered by the seller to the destination (group D)

Gain the right to choose a quantity tolerance: When selling goods in bulk, the contract often stipulates a tolerance on the quantity. In accordance with commercial practice, the transportation provider usually obtains the right to choose a tolerance to match the load of the

rented vehicle. If at the time of delivery, the market price is higher than the contract price, the seller wants to choose a minus tolerance (-), and the buyer wants to choose a plus tolerance (+), otherwise, if the market price is lower at the time of delivery, the seller wants to choose a plus (+) tolerance, and the buyer wants to choose a minus (-) tolerance. It is clear that the party that wins the option to choose the tolerance will be more profitable than the other when the market price at delivery fluctuates up or down compared to the price specified in the contract.

Avoiding disadvantages arising from contracting the customer's transport and insurance: When selling under Incoterms group F, the means of transport hired by the buyer may not be suitable for the place of delivery (such as the vessel has a large tonnage that cannot dock at the wharf), so the seller has to bear the additional costs and risks to deliver the goods to that means of transport. Therefore, to avoid these arising disadvantages, exporters should choose appropriate delivery terms under Incoterms group C or D.

In summary, choosing the appropriate delivery terms under Incoterms is very crucial. It is not only meaningful to the national economy but also helps exporters take advantage of many opportunities, avoid disputes, reduce costs, and avoid risks. In order to choose the suitable delivery terms under Incoterms, importers and exporters who are direct users of the terms of trade need to actively learn about all the rules, evaluate considered factors in the Incoterms choosing process, because properly used Incoterms can be an effective management tool (Hajdukiewicz and Pera, 2021). According to the Incoterms 2020 book published by ICC, Incoterms 2020 rules take account of the increased attention to security in the movement of goods. It also offers a simpler and clearer presentation of all the rules, featuring revised language, an expanded introduction and explanatory notes, and articles reordered to better reflect the logic of a sale transaction. Incoterms 2020 is also the first version of ICC's Incoterms rules to include a horizontal presentation, grouping all like articles together and allowing users to clearly see differences in treatment of particular issues across the 11 Incoterms rules.

2.2.2.2 Advantages and difficulties when choosing delivery terms under Incoterms

a. Advantages of choosing delivery terms under Incoterms

In fact, Incoterms are not a law, they do not force buyers and sellers to apply in international transactions, but when importing and exporting participants use Incoterms, they will have the following advantages:

First, Incoterms are a set of unified international trading rules that can be applied globally recognized by the International Chamber of Commerce (ICC). Export enterprises can apply Incoterms in both international and domestic contracts for the sale of goods (ICC, 2017), and have standardized rules with any different countries in the world. Information about Incoterms is easy to find because each time a new Incoterms is published, the ICC's new e-commerce platform (ICC Knowledge 2 Go) will be publicly updated with detailed explanations of each rule in both print and digital formats. By reading them, exporters can better understand what Incoterms are, each term in this version, the obligations, delivery costs and risks of the buyer and seller.

Second, the choice of Incoterms will be much easier and more convenient in terms of infrastructure and transportation than before. If in the past, when exporting, exporters had difficulties with lack of means of transport, lack of containers, lack of warehouse locations or loading tools, recently, with the development of advanced and modern infrastructure, import and export becomes more frequent, transportation risks are also significantly reduced, new means of transport appear, creating more options for exporters when participating in international transactions.

b. Difficulties when choosing delivery terms under Incoterms

The purpose of Incoterms was written to encode in a short and simple way the provisions on obligations, costs and risks of two parties in international commercial transactions, therefore, with different groups of Incoterms will bring about advantages and disadvantages for exporters. However, in order to choose the terms that are in best interest, it requires the exporter to have a complete and detailed understanding on the subject. In fact, up to now, Incoterms has 9 different versions, the latest version includes 11 complicated terms, making it easy for import and export businesses to confuse, especially for those who do not have much knowledge and experience or when the scope is a international with buyer and seller have their business places in different nations (Yaakub *et al.*, 2018). Lacking of knowledge will lead to the choice of a biased and ineffective Incoterms rule, which causes disadvantages in the contract performance process, bears responsibility for risks, and directly affects the trading performance of the enterprise there.

This is also the difficulty of most businesses in Vietnam, the choice of appropriate Incoterms tends to be considered as a constraint rather than as an opportunity to improve the efficiency of an international deal, especially nowadays, globalization integration is growing stronger, so the use of Incoterms is indispensable in import and export, not just decided by one person or a group of people, this makes it important to study an organization's internal knowledge about Incoterms. For instance, according to lawyer Vo Nhat Thang, the VIAC arbitrator, businesses in Vietnam often do not understand which rules are appropriate for bulk cargo, and which rules are appropriate for goods transported by container. In another case, because of unfamiliarity with CIP rules, the exporters still sign as CIF, as a result, if any damage or loss occurs on the way from ICD to terminal, the insurance refuses and the seller can hardly refuse to pay compensation to the buyer.

The second difficulty comes from within the exporting enterprise that affects the choice of appropriate delivery terms under Incoterms related to the enterprise's existing network of relationships with related parties in the logistics chain, typically like with suppliers, customers and carriers. When exporter does not have a long-term cooperative relationship with carrier, they will have many difficulties when choosing Incoterms which includes the duty to pay the cost and risk of the main carriage.

The third most common difficulty of exporters when choosing delivery terms under Incoterms comes from the importing country. The choice of Incoterms terms will become even more complicated and important when placed in transactions between different countries, with

different regulations and standards. Not only understanding about Incoterms, export enterprises need to carefully study customs clearance costs, regulations on standards of qualified goods that can be cleared, and also refer to warehouse costs, surcharges and risks in the transaction process. As a result, negotiating to choose the delivery terms under Incoterms becomes easier, more reasonable, ensures the rights and obligations of both parties, and provides the best support to ensure a successful transaction.

The geographical distance between the two parties also creates pressure on the mode of transport (air, sea or multimodal), on the route of goods transportation (through the transshipment point, partial transfer or not), the risk of long-term transportation, affects choosing Incoterms. For multi-product exporters, commodity parameters such as goods classification, cost, volume will create differences in Incoterms provisions in each different transaction, requiring exporting staff to be flexible and improvise with appropriate terms.

In conclusion, with the aforementioned difficulties of choosing delivery terms under Incoterms, many companies have to suffer bad results in international trade. This may negatively affect the profitability of the transaction and in some cases even cause serious losses for a company (Hajdukiewicz and Pera, 2021). To be more specific, misused Incoterms can affect payment, delivery schedules and extra costs, resulting in weak inventory control or a negative customer experience (Huuhka, 2019). Using the inappropriate Incoterms can lead to the risk that goods in the shipment may be invalidated from the insurance or result in significant clearance delays (Purolator International, 2015). Furthermore, traditional trading procedures do not entirely correspond to current transportation needs, raising risks for traders and posing even greater challenges for the right use of Incoterms (Hajdukiewicz and Pera, 2021).

2.3 Recent studies relating to thesis's topic

2.3.1 Foreign studies

In the world, there are many research articles on topics related to Incoterms, each of which has special features of in-depth analysis of an aspect of Incoterms. However, the observational documentations and analysis on the factors affecting the choice of delivery terms under Incoterms of particular exporters is still modest, of which it is worth noting the following research:

Prior to the release of the Incoterms 2020 edition, identifying the main environmental factors to consider when deciding which Incoterms rules to use has been one of the main goals of several well-known research papers, which have since become the foundation studies for future in-depth research. According to Hien et al. (2009), the importance of considering both the internal and external business environments in the Incoterms choosing process and its contribution to increased export performance is highlighted. The authors feel that, in addition to being one of the most important factors in negotiating foreign sales contracts, the choice of Incoterms appears to be a critical component in a company's export success.

Based on Duncan's study (1972) and their own review of the literature, Hien et al. developed a list of environmental factors that includes ten factors: "international experience, shipment value, habits and practices of the organization, financial resources of the organization, chosen mode of transportation, client's characteristics, country risk, competitive intensity and regulations of the destination country (Hien, Laporte and Roy, 2009). Following an interview and questionnaire, the research discovered that organizations who select Incoterms based on foreign experience, client bargaining strength, and competitive intensity in the destination country do better than those that do not. This finding was also found out and confirmed in the research of Sabariah Yaakub et al. (2018).

Similarly, Shangina (2007) studied the factors affecting the decision-making of an international trade agreement for seafood exports from Norway to Japan and Russia because the export protocol is related to and controlled by different laws. In that research, Incoterms are the most important element for international fishery trade. In general, quantity or value and control of delivery, which are legal obstacles, are the factors that most influence the choice of Incoterms. Each country has different criteria for choosing trade terms depending on location, convenience of suppliers, laws and regulations, etc.

Unlike the divide into 10 factors affecting the choice of delivery terms under Incoterms of the above studies, Malfliet (2011) focuses on research and analysis on 4 main factors. These are: (1) the nature of the goods (containerized goods, manufactured goods, bulk goods...); (2) the mode of transportation (maritime, non-maritime, multimodal); (3) the payment terms and the corresponding documentary requirements; (4) the seller's or buyer's ability and efficiency in carrying out the obligations related to the delivery of the contracted goods. Concentrated on the 2nd factor - the mode of transportation - in the study paper, he identified which Incoterms rules are acceptable for each transaction. He claims, for example, that EXW is contrary to international trade practice. Contracting parties are advised to pick the FCA seller's premises instead, and so on with the rest of the Incoterms rules (Malfliet, 2011). However, this is an assessment of the import-export situation 10 years ago and based on Incoterms 2010, so, while not directly applicable, it is still an important source of information that this study needs to attention.

Realizing that the previous documents did not have up-to-date information about Incoterms 2020 and the arrangement of the influence of each factor, the authors focused more on searching for studies closer to the research topic. With a new version applied just two years ago and related to the thesis topic, our research critically reviewed three research articles by Suraraksa et al (2020), Hajdukiewicz, Pera (2021) and Unal, Metin (2021), from which to collect the following valuable information:

Suraraksa et al. (2020) discovered four elements that influence manufacturers' Incoterms decision-making in Thailand's automotive components business. Operating expenses, collaboration and negotiating power, knowledge and understanding, and operation duration are four main Incoterms choosing criteria, which were then subdivided into fifteen subcriteria, as shown in the table below.

Main criteria	Sub-criteria	
A. Operating costs	A1. Expenses of each shipment	
	A2. Annual budget	
	A3. Value of products	
B. Cooperation and bargaining	B1. Negotiation between the buyer and seller	
	B2. Trust between the seller and buyer	
	B3. Collaboration within the company	
power	B4. Agreed terms between the seller and buyer	
C. Operation duration	C1. Payment terms	
	C2. Transportation period	
	C3. Duration to change carriers	
	C4. Duration for risk taking	
D.K.	D1. Incoterms Rules	
D. Knowledge and understanding	D2 Experience in choosing Incoterms	
	D3. International trade laws	
	D4. Complicated documents	

Table 2.1: The priority weights and ranking of sub-criteria (Suraraksa et al. 2020).

In this study, Suraraksa et al. use the Analytical Hierarchy Process (AHP) method to analyze the data - a technique for resolving complicated decision-making problems including a wide range of selection criteria and decision-makers. The data may then be arranged to show the relative importance of each element, revealing that "operating costs" are the first and most essential criterion that the manufacturer considers when determining which Incoterms to use. Three operational costs sub-criteria, including "annual budget," "transportation costs" and "value of products," were scored highest, which was aligned with the secondary criteria's priority. The second most important factor was "knowledge and understanding" which refers to the state of knowledge about international trade and Incoterms. Next, "cooperation and bargaining power", which includes sub-criteria like: "negotiation between the buyer and seller", "trust between the seller and buyer", "collaboration within the company", "agreed terms between the seller and buyer" was relatively less important. "Operation duration" which was broken down into four sub-criteria was assessed as the least important factors to consider when selecting Incoterms 2020.

Hajdukiewicz, Pera (2021) evaluated influencing factors into groups of internal and external factors. Similar to Suraraksa et al. (2020), they found out among these internal factors, the cost of transportation was the factor affecting the choice of Incoterms the most. For external factors, the findings indicated that legal regulations on foreign markets and geographical distance were the external factors which had the strongest influence on companies' decision-making on Incoterms. These two factors are mentioned in the first study by Suraraksa et al, but the influences have not been ranked high.

Last but not least, in comparison of each factors' influence levels between exporters and importers, in 2021, Unal and Metin, by using the Fuzzy Analytical Hierarchy Process (FAHP) method, analyzed the importance weights of each factor and ranked them. With reference to previous research papers, the authors aggregated the 13 sub-criteria into three primary criteria that were confirmed by foreign trade specialists and utilized to create a research model. The main criteria and sub-criteria were shown in the figure 2.13. The study's findings found that

"transportation costs" was the most important element determining the choice of international commercial terms for both exporters and importers, while "firm size" was the least important. In summary, the "transportation costs" is considered to be the factor that has the greatest influence on the choice of delivery terms under Incoterms 2020 in all three of the above studies.

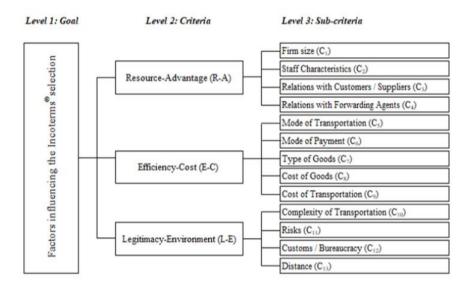


Figure 2.13: Decision hierarchy of the factor affecting the Incoterms selection Source: Unal and Metin, 2021

Importers and exporters were impacted differently in their selection processes by four factors: "relationships with forwarding agents," "type of goods," "complexity of transportation," and "distance". Exporters' relationships with forwarding brokers and distance were shown to be more important, but importers' types of commodities and transportation complexity were more influential. Cost-related criteria impacted the most Incoterms judgments, and with the exception of a few parameters, there was no substantial difference in importer and exporter selection decisions (Unal and Metin, 2021).

2.3.2 Domestic studies

In fact, there are many research papers on the Incoterms topic. However, research and analysis articles on factors affecting choosing Incoterms rules in Vietnam are still quite modest, in which attention is paid to the following research articles.

With this research topic, the qualitative analysis method is the most widely used research technique in Vietnam. It is an analytical method that has become popular in many studies and focuses on theoretical analysis based on the experience and qualifications of the researcher. In the majority of research papers in Vietnam on this topic, the authors base their findings on theory, personal knowledge, and experience from their predecessors to determine the factors affecting the businesses' choice of Incoterms.

Notably, research papers such as Diem (2019), Hien (2014). The authors presented the theoretical framework, the factors affecting the decision to choose Incoterms rules, as well as

the advantages and disadvantages of using Incoterms by enterprises in Vietnam by concluding gathered materials from textbooks and scientific articles.

Specifically, the study by Hien (2014) on the practical application of Incoterms in international sale of goods contracts in Vietnam. This study approaches the research object on the basis of meta-analysis; method of combining theory and practice; comparative method. Specifically, Hien's (2014) study presents the basic theoretical issues in the provisions of Incoterms and international sale of goods contracts. On that basis, study the practical application of Incoterms in international goods sale and purchase activities of Vietnam. The study deals with the application of Incoterms in Vietnam, including the practice of selecting and applying Incoterms rules in international sales contracts of Vietnam. Since then, she concluded that the factors affecting the choice of enterprises are the capacity of supporting industries and services, transportation infrastructure, and the capacity of enterprises (Hien, 2014). From there, some propose some directions to improve the effectiveness of Incoterms application in international goods trading activities of enterprises in Vietnam.

In recent years, quantitative analysis, as well as a combination of qualitative analysis and quantitative methods, has become more popular in research papers. However, as mentioned before, most of the research literature on this mainly uses qualitative analysis to assess the factors affecting enterprises to choose Incoterms. A prominent example that can be mentioned is Diem's study in 2019 about the actual application of Incoterms 2010 in Vietnam. This study points out the advantages and disadvantages of Vietnam in applying Incoterms to export activities. Besides the advantages to promote strategic orientation and shape to develop the domestic economy in particular as well as international trade in general. However, domestic enterprises still seem to face many difficulties and challenges in applying the delivery terms under Incoterms, which is about misunderstanding knowledge and expertise about Incoterms; Vietnam's weak negotiating position in the international market; the limited capacity of domestic exporters, so they do not fully understand the benefits and disadvantages in choosing the suitable terms (Diem, 2019).

Other research studies show that the factors affecting the use of Incoterms by export enterprises in Vietnam are the profit of the enterprises, relationships with countries around the world and passively, habitual choice by Tuan Anh et al. (2014). Most Vietnamese exporters often choose to use Group F terms such as FCA and FOB for export contracts. Enterprises in Vietnam are less proactive in choosing commercial terms, so they do not win the right to transport or buy insurance. Businesses do not put their trust in domestic transport service providers. The fear of qualification as well as the lack of facilities in the country, does not create trust in customers, sometimes in Vietnam, there are no vehicles with tonnage suitable to the goods requirements. Like previous studies, in this study, the authors also mentioned that enterprises still lack understanding of foreign markets to be able to use proficiency and diverse Incoterms rules. Therefore, businesses use Incoterms passively and habitually such as choosing FOB, CIF; even almost no enterprise uses Incoterms group E or D (Tuan Anh et al., 2014). In Vietnam, because of these habitual choices mentioned in the above study, this makes businesses in Vietnam face many risks. Moreover, in the research study on the current situation of using Incoterms in Vietnam in 2014, Van et al. mentioned Vietnamese enterprises are still too small and young compared to other partners, so they have no weight on the negotiating table; many small companies are confused about the risk exemption in terms C meanwhile foreign partners don't understand transport operations, lead to fear of hiring ships to carry goods, want to simplify by receiving goods right at their ports (Van et al., 2014).

In addition, Mr. To Binh Minh - Director of VJCC also provided some factors to consider when choosing delivery terms under Incoterms. First, external affecting factors are regulations and instructions of competent authorities; mode of transport; market situation, insurances and risks in the journey. For example, in case when the competent authority has regulations or policies to encourage renting vehicles or buying insurance, exporters will be required or advised export with Incoterms group C or D to win the right to hire their own means of transport or buy insurance. With the mode of transport, when goods are transported in not only through marine transportation, choosing FAS, FOB, CFR, CIF are no longer suitable, exporters should replace by FCA, CPT, CIP. The choice of delivery terms under Incoterms 2020 also is affected by the situation of commodity market such as using C or D terms to offer will create more competitive advantage when selling to highly competitive markets. Moreover, exporters can choose Incoterms rule to take advantage of the right to "surfing" on the transport and insurance market (VIAC, 2020).

Besides, he also included some internal factors such as the ability of enterprises; transaction method; terms in the contract of sale. If the business cannot directly or indirectly export the goods in the seller's country, the buyer should not use EXW terms. For transit clearance, if there is no possibility of transit clearance, the seller should use group E, F, C, otherwise, the buyer should use group D. He also mentioned special transactions can affect the choice of appropriate Incoterms rules that the above studies have not mentioned. The transaction methods considered here include reciprocal trade, re-export, and outsourcing; auctions, and tenders. Finally, terms in the sales contract include delivery conditions; payment conditions; test conditions also affect the choice of delivery terms under Incoterms 2020.

2.3.3 Summary of literature review

There are several previous researches that determined factors influencing the choice of delivery terms under Incoterms. Each research paper has different approaches and indicates different influencing factors. To sum up, the table below shows the factors suggested in some typical research and demonstrates a comparison between those studies

No.	Reference	Thesis/Article title	Factors
1	Hien et al. (2009)	Business environment factors, Incoterms selection and export performance	 International experience Shipment value Habits of the organization Practices of the organization Financial resources of the

			 organization 6. Chosen mode of transportation 7. Client's characteristics 8. Country risk 9. Competitive intensity 10. Regulations of the destination country
2	Yaakub et al (2018)	Incoterms selection factors and its effect on export performance	 International experience Client negotiating power Competitive intensity
3	Shangina (2007)	Main factors in choice of delivery terms: a multiple case study of Japanese and Russian importers in seafood trade with Norway	 Internal factors Type of goods Volumes of goods Control over delivery Common practice External factors Supplier's condition Relationship with the insurer Customs clearance fees 4 Demand for insurance 5 Legislation obstacles 6 Relations with the carrier 7 Speed of deliveries 8 Location of goods
4	Malfliet (2011)	Incoterms 2010 and the mode of transport: How to choose the right term	 The nature of the goods: transported in containers, manufactured goods, bulk goods, etc The means of transport: maritime, non-maritime, multimodal The terms of payment and the documentary requirements corresponding to these terms The ability and the efficiency of the seller or the buyer to carry out the obligations related to the delivery of the contracted goods
5	Suraraksa et al. (2020)	Decision-making on Incoterms 2020 of automotive parts manufacturers in Thailand	 Operating costs: 1.1 Annual budget 1.2 Transportation expenses 1.3 Value of products Cooperation and bargaining power:

			 2.1 Negotiation between the buyer and seller 2.2 Trust between the seller and buyer 2.3 Collaboration within the company 2.4 Agreed terms between the seller and buyer 3. Knowledge and understanding: 3.1 Incoterms® rules 3.2 Experience in choosing Incoterms® 3.3 International trade laws 3.4 Complicated documents 4. Operation duration: 4.1 Payment terms 4.2 Transportation period 4.2 Duration to change carriers 4.3 Duration for risk taking
6	Agnieszka Hajdukiewicz, Bożena Pera (2021)	Factors affecting the choice of Incoterms: The case of companies operating in Poland	 External factors: External factors: Tax regulations Transport and logistics infrastructure Freight forwarding services 4 Complexity of transportation 5 Geographical distance 6 Counterparty negotiating power and expectations T Legal regulations on foreign markets 8 Risks on foreign markets 9 Foreign and domestic competition Internal factors: 1 Employee experience 2 Knowledge of foreign market 3 Financial resources 4 Material Resources 5 Mode of payment 6 Relations with the forwarding agent 7 Relations with the contracting party 8 Transaction value 9 Type of goods 10 Cost of transportation and warehousing 11 Mode of transportation
7	Unal and	Do the factors affecting	1. Resource-advantage criterion:

	Metin (2021)	Incoterms selection differ for exporters and importers? A Fuzzy analytical hierarchy process (FAHP) application	 1.1 Firm size 1.2 Staff characteristics 1.3 Relations with customers/suppliers 1.4 Relations with forwarding agents 2. Efficiency-cost: 2.1 Mode of transportation 2.2 Mode of payment 2.3 Type of goods 2.4 Cost of goods 2.5 Cost of transportation 3. Legitimacy environment: 3.1 The complexity of transportation 3.2 Risks 3.3 Customs/bureaucracy 3.4 Distance
8	Hien (2014)	Practical application of Incoterms in contracts for the international sale of goods in Vietnam	 The capacity of supporting industries and services Transportation infrastructure The capacity of enterprises
9	Diem (2019)	Research about Incoterms 2010, changes in Incoterms 2020 and the current situation of application in Vietnam	 Knowledge and expertise about Incoterms conditions Country's negotiating position in the international market The capacity of domestic exporters Transport mode
10	VIAC To Binh Minh (2020)	Incoterms 2020 explanations and guidelines for use	 External factors Regulations Instructions of competent authorities Mode of transport Market situation S Risks Internal factors Internal factors Transaction method Conditions in the contract of sale.
11	Tuan Anh et al. (2014)	Research about the general use Incoterms of Vietnamese import and export enterprises	 Relationship with forwarder Infrastructure facility Relationship with customers Knowledges and experiences Insurance issue

			6. 7.	Firm's capability Risks
12	Van et al. (2014)	The situation of using Incoterms in Vietnam	1. 2. 3. 4. 5. 6.	Firm size Risks Domestic fleet Mode of transportation Business capability Knowledges and experiences

Table 2.2: Summary of recent studies

2.4 Literature gap

In general, many researches, both internationally and domestically, have been conducted research on the choice of delivery terms under Incoterms as well as the factors that influence it. However, each author had determined their objectives, research questions, scope, methods differently therefore resulting in a diverse range of outcomes and findings.

In particulars, with some foreign studies, the influencing factors on Incoterms choosing have been discussed quite detailed but only applicable to the targeted country. On the other hand, with the authors' literature analysis, there is a shortage of Vietnamese research on this topic because it is a relatively new aspect of the issue that received only little attention.

The two Vietnamese studies, Hien (2014) and Diem (2019), mentioned earlier in the article have only briefly stated the factors affecting the choice of Incoterms; the quantitative method has not been used to increase reliability and validity level. It is clear that they have not yet thoroughly analyzed and evaluated the degree of influence, the priority of the factors, nor provided recommendations for export companies in Vietnam.

Furthermore, the research scope of previous studies was not focused and the results are now out of date. Therefore, the authors have narrowed down the thesis scope to exporters in Vietnam only in order to give the most accurate information and precise results. In addition, the most recent domestic research related to this topic is Diem (2019), which was released 3 years ago and no further research about the latest version of Incoterms (Incoterms 2020) has been done until now. As the actual situation changes constantly, the finding of previous research might no longer be applicable or useful for businesses.

In summary, this is the first and latest study to analyze factors affecting the choice of delivery terms under Incoterms 2020 in export enterprises in Vietnam through both qualitative and quantitative methods. This research provides a closer look on the current situation of using Incoterms 2020 in export activities, and then render constructive recommendations aimed to improve the efficiency of Incoterms 2020 choice in Vietnamese business operations.

2.5 Proposed model and hypothesis

2.5.1 The original model

From the critical reviewing of earlier studies related to this thesis topic, after carefully analyzing and comparing, the authors realized the similarity between those previous factor models. Based on the findings of the previous studies, the following research papers were inherited and developed. In particular, the factors affecting the choice of delivery terms under Incoterms are no longer listed at random, it can be clearly seen the relationship as well as the order of priority of these factors, typically through two latest research papers: Suraraksa et al. (2020) and Unal and Metin (2021). In addition, there are some factors that appear throughout many models and prove their importance in Incoterms choosing process such as: organization resources; staff characteristics; relations with customers/suppliers; mode of transportation; mode of payment; nature of goods; cost of transportation; risks; distance; country's regulation and so on.

At this point, the model of Tugce Danacı Unal, Ismail Metin (2021) stands out with advantages that no previous research paper has. First, this is the most complete and fulfilled research model up to now, it covers all the typical factors as mentioned and it also arranges these factors in a scientific, systematic and highly practical manner. Second, this model is the latest research paper, published in 2021 and research on the latest version of Incoterms (Incoterms 2020) which is consistent with the subject and scope of this thesis. Third, the methodology of this conceptual model shared some similarities in the approaches to the topic with this study. For example, in first part, criteria were obtained and categorized as a consequence of literature review and expert decisions and second part uses questionnaire forms were filled out to analyze the criteria by using quantitative methods.

Therefore, the authors decided to choose the model of Tugce Danacı Unal, Ismail Metin (2021) to develop the hypothesis framework for this study. In this model, the influencing factors have been divided into three main criteria, respectively: Resource-Advantage (R-A), Efficiency-Cost (E-C) and Legitimacy-Environment (L-E). To detailed clarify the content, each criteria will have suitable sub-criteria, which will be shown in the figure below:

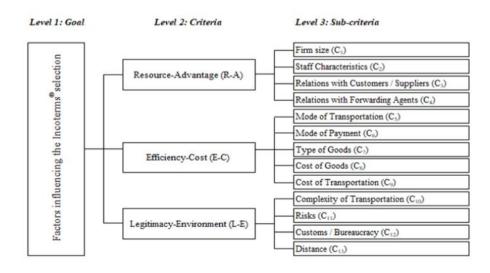


Figure 2.14: Decision hierarchy of the factor affecting the Incoterms selection (Unal and Metin, 2021)

2.5.2 The proposed research model

The model of Unal & Metin (2021) has many advantages compared to others, however, based on other valuable previous research and in order to be well-adapted to this research scope, the authors consider one change in the research model, adding observed variable "Cost of Insurance" in efficiency-cost (EC) factor. Incoterms 2020 has been improved in terms of insurance requirements, specifically in CIF and CIP terms. When choosing these two terms, insurance is an integral part that needs to be considered.

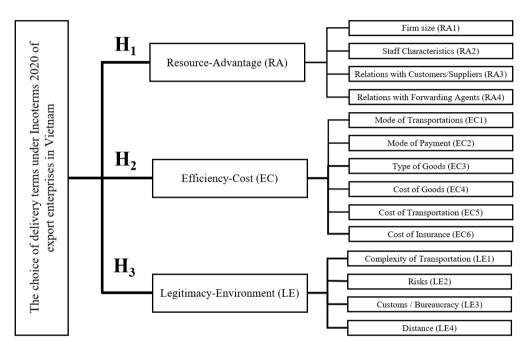


Figure 2.15: The proposed research model

2.5.3 Description of variables and Proposed hypothesis

2.5.3.1 Resource-Advantage (RA) factor:

The first factor that directly impacts the choice of delivery terms under Incoterms 2020 is Resource-Advantage. Firm resources are the sources of a firm's sustainable competitive advantage, according to the Resource-Based View (Barney, 1991). According to Barney, in order to have the potential for long-term competitive advantages, a firm's resource must exhibit four characteristics that comprise the VRIN model: valuable, rare, non-substitutable, and imperfectly imitable. They are classified into three categories: (1) physical capital resources (a firm's plant and equipment, location, technology, and so on), (2) human capital resources (training, experience, relationships, intelligence, and so on), and (3) organizational capital resources (formal and informal planning, coordinating and controlling systems, and informal relations within and outside of a firm).

The authors suppose that these resources are effective in the bargaining power of the parties in choosing the terms. A company with sustainable competitive resources in terms of physical capital, knowledge and experience will be more proactive, negotiate persuasively as well as dominate when choosing terms. Therefore, the company can easily choose the suitable delivery terms under Incoterms 2020 for the goods, and choose a reputable shipping or insurance company.

For the RA factor, there are 4 variables that have been identified that affect the choice of delivery terms under Incoterms 2020 of export companies in Vietnam as following:

<u>*RA1: Firm size*</u>, in research relating to Incoterms rules, a firm's capital is discovered to be studied as a factor. In general, small and inexperienced exporting enterprises choose particular terms, and the buyer executes the shipping procedure and the cost plan (Malfliet, 2011). On the contrary, if the exporter is a large-scale company, it will be easier to have a negotiating advantage to choose delivery terms in their favor.

<u>*RA2: Staff characteristics*</u>, as human capital resources, include all personnel's expertise, experience, and attitudes, including employees and supervisors, and can influence term choice. A firm's export performance will improve if it has a better understanding of international business terminology and considers them.

<u>RA3: Relations with Customers/ Suppliers</u> as an organizational capital resource, it refers to the reasonable trust and bargaining between sellers and buyers. Because it plays a crucial part in decision making, relationship quality may be related with the choosing of Incoterms. This is especially relevant when decisions in supply chains concern risk distribution and risk transfer from the seller to the buyer, i.e. the choice of delivery terms (Shangina, 2007).

<u>RA4: Relations with Forwarding Agents</u> are also an organizational capital resource; if exporters have solid relationships with forwarding agents, they will lower the risk of extra charges and transportation quality. In reality, the exporter's choice of forwarding agents is an important decision because if the carriers are untrustworthy, of bad quality, or have weak financial capacity, this will result in a slew of losses such as damage to products, no reimbursement, fraud, and so on.

=> H1: Firm resources and advantages affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

2.5.3.2 Efficiency-Cost (EC) factor

Unal & Metin employ the Transaction Cost Approach to build the conceptual framework of this research because choosing term is a type of business behavior that occurs as a result of decisions affecting a company's cost and risk control actions. The Transaction Cost Approach is founded on "efficiency factors" (Yiu and Makino, 2002). It posits that reducing transaction costs is critical, and that transactions must be dimensionalized as (1) uncertainty, (2) frequency, and (3) asset specificity (Williamson, 1981). Trade terms are determined by the relationship between the exporter and the importer and have an impact on the expenses of the trading process, particularly in global supply chains (Blanco and Cueto, 2015).

The meaning of choosing Incoterms in international trade is to create a unified set of rules to help importers and exporters transact more efficiently, avoid disputes and optimize costs. Therefore, Efficiency-Cost is a factor that directly influences the choice of delivery terms under Incoterms 2020. In order for the delivery process to be efficient, the exporter must choose the right term with characteristics suitable for the goods and the company's needs. It includes modes of transport, mode of payment, insurance issues. In addition, other cost-related influencing factors should also be considered.

For the EC factor, there are 6 variables that have been identified that affect the choice of delivery terms under Incoterms 2020 of export companies in Vietnam as following:

EC1: Mode of transportation

Mode of transportation refers to different ways by which goods are transported from one place to the other through land, air or sea. There are different modes of transportation such as roadways, railways, air transport, maritime transport. When choosing delivery terms under Incoterms, it is clear that exporters should consider mode of transportations. For example, all D-Terms may be used for any transport mode, including multimodal, but other terms, such as FOB, are utilized as marine terms. Choosing the suitable delivery terms under Incoterms will meet the needs of the means of transport as well as the condition of the goods.

EC2: Mode of payment

Mode of payment is a way that importers pay for the goods to exporter. In international transactions, there are four main popular methods: cash in advance, open account, documentary collection and letter of credit. If the parties have agreed on the payment in advance, the Incoterms must be chosen in line with the payment's features and requirements. For example, if selecting the L/C payment method and the documents need bill of lading loaded on board as well as insurance policy, the CIF rule is most appropriate.

EC3: Type of goods

According to Malfliet (2011), choosing the 'right' Incoterms requires the parties to a contract of sale to consider, amongst others, the nature of the goods: containerized, manufactured goods, bulk goods or commodities, etc. Depending on the type of goods that need to be stored in the right terms, properties, and pressure, the exporter will choose delivery terms to meet those needs, avoiding damage to the goods.

EC4: Cost of goods

The cost of the goods being delivered may also influence the choice of Incoterms. A high cost of products generally translates to a higher shipping value, which leads to a higher risk. In this situation, the exporter would frequently select terms with less obligations. Importers, on the other hand, want more control over larger-value goods. For instance, for larger cost of goods, FOB delivery terms may be more appropriate. At the same time, the CFR term may be more suitable for a smaller one, as mentioned by Shangina, 2007.

EC5: Cost of transportation

Cost of transportation is always a factor to be considered very carefully when choosing delivery terms. This was because the company estimated the operating costs every year to plan the annual budget. If shipping costs are too high, the company will lose profits or will have to increase product prices. Both negatively affect the business performance as well as the competitive position of the exporter.

In addition, when the exporter anticipates the transportation cost will tend to decrease, enterprises should use the terms that they provide this service to profit from the fluctuation of freight premiums between the time of signing two types of sales and carriage contracts. And conversely, anticipating the shipping cost to tend to increase, the exporter should use the terms that the other party provides this service.

EC6: Cost of insurance

Incoterms 2020 has clear levels of insurance coverage between CIF and CIP, in CIP insurance coverage must comply with "Institute Cargo Clause A" or similar and CIF insurance coverage must comply with "Institute Cargo Clause C" or similar. In addition, the insurance shall cover, at a minimum, the price provided in the contract plus 10% (i.e. 110%). Each level of insurance will cover different types of risks and the cost for each type of insurance will also be different. Therefore, in order to balance the cost of insurance to match the expected budget, the exporter and importer need to agree on the choice of delivery terms that comply with the appropriate level of insurance.

Moreover, as well as the cost of transportation, when the exporter anticipates the insurance premium on the insurance market will tend to decrease, enterprises should use the terms that they provide this service to profit from the fluctuation of insurance premiums between the time of signing two types of sales and insurance contracts.

=> H2: Efficiency and cost affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

2.5.3.3 Legitimacy – Environment (LE) factor

Export is a typical activity in foreign trade, one country and another will exchange goods or services with each other. Every foreign market has its own characteristics. Therefore, the exporters need to raise questions about the legitimacy and environment conditions within the importer nationals. These are also the factors that have a definite effect on choosing delivery terms under Incoterms.

The foundation of Institutional Theory is the concept of "legitimacy criteria" (Yiu and Makino, 2002). Firm behaviors are a type of reaction to institutional isomorphic changes in an environment through (1) political influence and the challenge of legitimacy, (2) uncertainty, and (3) professionalization (DiMaggio and Powell, 1983). The business environment is defined as the total of physical and social elements that are taken into account by personnel in an organization when making decisions (Duncan, 1972). The internal environment includes

social and physical factors relating to organizational personnel, functional and staff units, and organizational level components within a firm, whereas the external environment includes factors relating to customers, suppliers, competitors, technological, and socio-political components outside the firm's boundaries. In another studies, the external factors influencing foreign market entry mode choice are host country restrictions, uncertainty-risk, market size, and the availability of acceptable partners and associates, while the internal factors are the firm's desire to establish itself quickly, internal resources (capital and personnel), and corporate policy (Erramilli, 1992). Exporters must be aware of the business environmental elements that influence their judgments on the most advantageous international commercial conditions.

For the LE factor, there are 4 variables that have been identified that affect the choice of delivery terms under Incoterms 2020 of export companies in Vietnam as following:

LE1: Complexity of transportation

In many ways, exporters must consider not just mode and cost of transportation, but also the process of delivery. The complexity of transportation such as the need for multiple transit stops or the use of multiple modes of transport will increase the risk to the exporter's goods and the delivery time may be delayed. At this point, if the exporter chooses the more obligatory delivery terms, the higher the risk they have to bear.

LE2: Risks

A difficult risk distribution and transfer between importers and exporters will have an impact on the delivery terms chosen (Shangina, 2007). There are many risks associated with legitimacy - environment such as delivery risk, country risk. When transporting goods, exporters may face risks that affect the quality of goods and transit time such as bad weather, old means of transport, poor quality warehouses... In addition, country risks such as political problems, exchange rate risk or market situation also should be considered when exporters choose delivery terms under Incoterms that impose a variety of duties and risks on them.

LE3: Customs/bureaucracy

International commerce of commodities is governed by a variety of international and domestic rules and laws that exporters and importers must adhere to in order to conduct effective commercial operations (Bergami, 2013). In order to minimize additional expenses, risks, delays, and potential future losses, sellers and purchasers should understand each country's business environment and negotiate what can and cannot be done depending on each country's rules and regulations.

LE4: Distance

If the distance between the two parties is close, the seller can be more proactive in choosing terms in all groups. For close distances, whether the importer wants to choose EXW or DDP delivery terms, the duties or risks that the exporter needs to bear will be significantly reduced compared to long distances.

=> H3: Country legitimacy and business environment affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

2.6 Conclusion

In this chapter, the research team has clarified the basic theories about export activities as well as Incoterms by systematically defining, characteristics of each term, the role of Incoterms choosing activities in export. Based on the literature review, the authors have compared and evaluated documents related to this study. Furthermore, the literature gap is also given to make sure that this thesis is implemented with more completeness. On that basis, the authors propose 3 factors affecting the choice of delivery terms under Incoterms 2020 of export enterprise in Vietnam.

H1: Firm resources and advantages affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

H2: Efficiency and cost affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

H3: Country legitimacy and business environment affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.







METHODOLOGY

The third chapter provides interpretation of the methods and the reason why that is used in this research. This chapter includes 6 parts: Introduction, Data sources, Data collection methods, Data analysis methods, Ethical considerations and procedures and Conclusion. Each method is selected based on its characteristics to suit the basis of this research.

CHAP 3: METHODOLOGY

3.1 Introduction

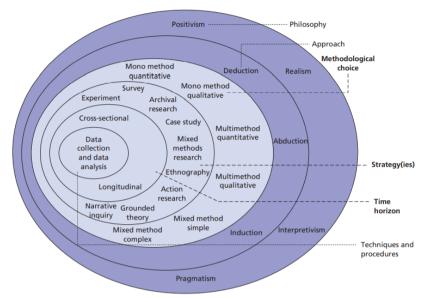


Figure 3.1: The research onion (Saunders, Lewis and Thornhill, 2012)

The onion model is a research paradigm suggested by Mark Saunder, Phillips Lewis and Adrian Thornhill in 2019. This is a popular practice in colleges and universities. The data collecting step is at the core of this concept, which represents research as an onion, a multi-layered process. To understand and conduct a study, researchers must peel away multiple "shells" around a topic in order to get to the center of it.

3.1.1 Research philosophy

Research philosophy is an important part of research methodology. These philosophical approaches enable one to decide which approach should be adopted by the researcher and why, which is derived from research questions (Saunders, Lewis and Thornhill, 2012). Research philosophy has many branches related to a wide range of disciplines. Within the scope of business studies in particular there are four main research philosophies: Pragmatism, positivism, realism, interpretivism.

Pragmatism which is a problem-solving research technique focused on differences. Pragmatists believe that an ideology or concept is valid if its meaning can be discovered in the practical implications of accepting it, and they reject unrealistic notions.

Positivism is a philosophical philosophy that claims that each legitimately reasonable assertion can be scientifically validated or is logically or mathematically verifiable. Based on the evidence, these researchers form an impartial opinion on the topic they are studying.

Realism which is a philosophy that explores realism based on the premise that reality is independent of the human mind. For the study of factors affecting international payment using decisions, the research philosophy used is pragmatism. Using this approach, the authors obtain

objective and reliable results that can be viewed from many perspectives, data are collected by questionnaires and direct surveys.

Interpretivism maintains that each individual is an objective and independent entity, and that the heart of the problem is determined by each person's opinion. Therefore, this research frequently gives a subjective viewpoint through qualitative data.

To conclude, the research philosophy about factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam is **pragmatism**. The collected data measured by preparing questionnaires and surveys (with a wide range of sample) and persons who are interviewed (with a small range of sample) are included. Using this approach, the authors get objective and trusty results which are seen from many aspects.

3.1.2 Research process

The research process is a process of multiple steps in organizing the whole research work. Each step is interdependent with other steps. According to Saunders (2012), the research process can be divided into 9 steps as follows:

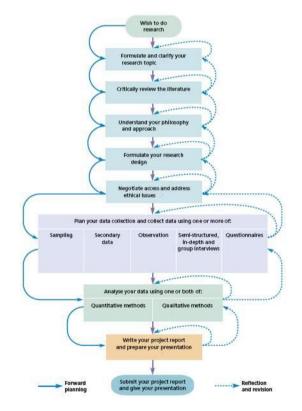


Figure 3.2: The research process Source: Mark Saunders, Philip Lewis and Adrian Thornhill 2012

Step 1: Formulate & clarify the research topic

Determine the research question, objectives: The main research objective of the model is analysis of factors influencing the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam

Step 2: Critically review the literature

Review the previous research and build a theoretical framework: Factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam based on the approaches of the previous model to identify 3 independent factors, respectively: Resource-Advantage (RA), Efficiency-Cost (EC) and Legitimacy-Environment (LE)

Besides, the authors also built up 3 dependent variables for factor: The choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam (CH).

Step 3: Formulate the research design

Determine the research design as follows: the research philosophy chosen is pragmatism; the research approach is deduction; the research method used is multiple method; the data source used are both primary and secondary data; the research strategy chosen is survey; the time-horizon is determined as longitudinal.

Step 4: Address the ethical issue

Step 5: Plan the data collection & collect data

1/ Criteria are obtained and categorized as a consequence of the literature review and expert decisions to construct the questionnaire form. In this part, 11 experts who have knowledge and over 5 years of experience in the import-export area will be selected to participate in the in-depth interview. Most interviewees are expert employees in typical import-export enterprises in Vietnam.

In the first part, a preliminary model will be provided to the expert group. Those experts, with their in-depth knowledge and experience, will give suggestions and comments on the influencing factors of the choice of delivery terms under Incoterms 2020. If necessary, the conceptual factor model will be adjusted, modified based on the contributions of the expert group.

In the second part, the authors will adjust the factor model and design the questionnaire based on the earlier comments and suggestions of the expert group. The preliminary questionnaire will be sent to the expert group to revise the questionnaire again, to see if the variables are appropriate, the scale properly measuring the impact of the variables or if the survey is clear, easy to understand and stick to the research objective, then construct a final formal survey to send to the selected sample of this study.

2/ Conducting a formal survey: Questionnaire forms will be sent out to over 300 export firms in Vietnam. The collected data then will be analyzed by using quantitative methods.

Step 6: Analyze the data

After completing the scale, conducting a formal survey and collecting the complete group of factors from step 5, using the SPSS 26.0 tool to analyze the data of the research model. Test models and research hypotheses by:

- Test by Cronbach's Alpha's confidence coefficients to remove variables that are correlated <0.3 with the total variables and Cronbach's Alpha coefficients is ≥ 0.7 .

- Exploratory factor analysis (EFA) aims to remove variables that have Factor Loading factor <0.5, total extracted variance is not ≥ 50%, and the KMO coefficient is guaranteed (0.5 ≤ KMO ≤ 1).
- Then tested by Pearson correlation coefficient analysis, multivariate regression analysis.

Step 7: Discussion & Recommendations

On the basis of the research results on the influence of factors, present a discussion of the research implications of 3 hypotheses, from which proposing recommendations for export enterprises to be able to select a more appropriate delivery terms under Incoterms 2020.

Step 8: Write the project report and prepare the presentation

Step 9: Submit the project report and give the presentation

3.1.3 Research approaches

The research approach can be divided into three categories: deduction, induction, and abduction based on the study's complexity. Each approach method has its own characteristic and then appropriate with different types of research.

Inductive approach begins with unique observations and then generalizes the findings. This approach helps generalize existing ideas therefore it is advantageous for those researches which the theory is absent.

In contrast to inductive approach, deductive approach is formulating a hypothesis based on existing theory and then devising a research plan to test it. The special feature of this approach is that if the premise theory is true, the final conclusion is always true. Therefore, the deductive approach is widely used all over the world.

Abductive method is focused on the explanation of 'incomplete observations'. The abductive approach is a combo approach: it creates space to generate new ideas and give best predictions that may be true as suggestions for future directions.

Reasoning	Departing point	Aim	Drawing conclusions
Abduction	Empirical observations	Developing new	Suggestions
	(unmatched by/deviating	understanding	(for future directions,
	from theory)		theory/paradigm/tool)
Induction	Empirical observations	Developing theory	Generalization/
	(theory is absent)		Transferability of results
Deduction	Theoretical framework	Testing/evaluating	Corroboration or
		theory	falsification

Table 3.1: Comparison of research approaches

Due to this research's characteristics, the deductive approach stood out as the most appropriate approach strategy in order define and determine the prioritization of the influencing factors when choosing delivery terms under Incoterms 2020 of export enterprises in Vietnam.

3.1.4 Research method

According to Saunders (2012), researchers can apply a variety of research methods: quantitative or qualitative or even a mix method. To meet the purpose of this research, the authors decided to use both quantitative and qualitative techniques.

Quantitative method is an approach that focuses on quantity or the load of calculation. By analyzing the relationship between variables, quantitative analysis helps to test the hypotheses. For the quantitative research method, the authors use the SPSS 26.0 tool to evaluate the data and rank the main and sub-criteria in the conceptual factor model.

Qualitative analysis, otherwise, is focused on the quality related or the qualitative phenomena. This method is malleable and is not required for a large amount of data. In the scale of this research, when applying the qualitative technique, the authors use the expert method through indepth interviews. The purpose of this interview is for experts to give comments, and make suggestions on the variables.

3.2 Data sources

Data sources for this thesis research include both primary and secondary data sources. For each data type, the author team has its own data collection method to get the most honest and reliable data source for the research:

Primary data is the form of data collected directly from the research it is also known as the original data. Primary data has many advantages such as high accuracy and directly. However, the primary data is time consuming to prepare quality questions to ask, to look for an interviewer that is suitable for the topic to be asked, and then to wait for the answer to have research results. Not only does it take time, but primary data is costly and difficult to collect, especially with the outbreak of Covid-19.

Secondary data is the available and widely known form of data, namely internal secondary data and external secondary data. Internal secondary data means data collected by each company for financial purposes or for reporting marketing activities. External secondary data is described as data collected by external sources such as government publications, company websites, books, articles which can be found through the reliable Internet sources.

Using secondary data will help researchers saving in resources, time and money. Secondary data generally provides a source of data that is often permanent and available in a form that may be checked relatively easily by others. However, secondary data also has many disadvantages. Although many of the secondary data sets available from governments and data archives are of higher quality than you could ever collect yourself, this is not always the case, therefore, data sources must be evaluated carefully and ensure matching with the research topic. Furthermore, the access to secondary data may be difficult or costly, where data collected for commercial reasons may cost a great deal if the reports that you require are not available online via your library. Last, getting detailed and up-to-date data is sometimes not possible with secondary data.

3.3 Data collection method

3.3.1 Preliminary research

Qualitative research methodologies were used to conduct preliminary study. Qualitative researchers use this phase to try to understand study participants rather than trying to fit their responses into established categories with minimal space for qualification or explanation (Hair *et al.*, 2010). Qualitative research frequently reveals unexpected discoveries and emotions, therefore, gaining preliminary insights into study difficulties is a typical goal of qualitative research. In the following phase, these preliminary ideas are followed up with quantitative research (questionnaires) to confirm the qualitative findings.

After evaluating and analyzing existing studies (both domestic and international) related to the research topic, the authors used the expert approach to build scales for the model's independent and dependent variables. With the use of in-depth interviews, the draft scale will be adapted to the real situation of choosing delivery terms under Incoterms 2020 for export enterprises in Vietnam, finally the authors collect data from export enterprises with questionnaires.

3.3.1.1. The first time of expert interview

To design the official scale that will be used in a large-scale survey for quantitative research, the authors use an expert technique to create and alter draft scales for the model's independent and dependent variables. The authors created their own questionnaires to interview experts based on data gathering, review, and analysis from past research (both domestic and international) on factors impacting export enterprises' choice of delivery terms under Incoterms 2020. In detail, the writers conducted an interview with specialists in the fields of international trade, import-export enterprises and banks to examine the factors in detail and in depth. Expert interviews can be through indirect calling (or emailing/texting). The authors only select quotes that are poignant and/or most representative of the research findings.

All of the respondents wanted to assist the author's study and were willing to provide feedback so that a comprehensive scale could be created. The first question was, "*Has your company ever used Incoterms 2020 when exporting? If yes, how often?*" According to respondents, Incoterms 2020 was relatively new but most of them have experienced using Incoterms version 2020 at least once while exporting. Most indicated that the change in the proportion of Incoterms 2020 applications would likely occur: "*Recently more and more companies choose to use Incoterms 2020 instead of 2010… There are many reasons, to update according to world trends or simply to satisfy customer requirements, for example.*" However, they also commented that "Of course, most export orders currently still use Incoterms 2010… This trend still needs time to expand to the whole industry". "Choose the one you have experience and are used to, which is still safer and more secure" was the way one person phrased it.

As for the change from the original model from the author's team - adding an observation variable "Cost of Insurance" in EC criteria. "Yes, insurance is also important when choosing delivery terms... even if you don't choose CIP or CIF as under Incoterms, you still have to be concerned about insurance issue" as an expert said. All of experts agree that adding this variable while

choosing the delivery terms under Incoterms 2020 is reasonable, this comes from the reason that Incoterms 2020 has had a clearer change in insurance requirement compared to Incoterms 2010.

When interviewing more deeply about the factors affecting the choice of Incoterms 2020, the findings show that the majority of experts agreed on the structure and factors of the proposed model. The experts describe the factors they usually consider when choosing Incoterms, "*I found that while using Incoterms I am most concerned about the cost issue… can be mentioned as cost of transportation, insurance…, cost of goods…*". Others indicate about the resources within organization and legitimacy problem: "when your company is big and strong enough, actually you can choose any delivery terms under Incoterms, it doesn't matter… but it depends on each specific case… also have to pay attention to the laws and bureaucracy things in each country too, and then the risks… in general you need to pay attention to many things." All the respondents can point out 3 main factors and over 10/14 variables in the proposed model.

Besides, the experts also mentioned some influencing aspects that have not been included in the research model of this article. As when asked further about how the elements affect the choice of Incoterms, about three fourths of the experts commented: "Besides the correlation between company size, it must also be mentioned that, sometimes exporters in Vietnam do not have much decision-making power on Incoterms... we usually default customers in the US and Japan or Europe, they will be chosen first, we just need to follow." However, one also said that "Well, the country's bargaining position.... also has a real influence, ...but it's small, much less than the ability of your company". To make the scale more complete, the authors still decided to add the observation variable "Country negotiating position" to the Legitimacy – Environment (LE) factor because depending on the negotiating position of each country when cooperating, the export enterprises will choose the level of obligations, risks and costs that they incur responsibility. Moreover, the experts also explained that adding this observation variable will help the research to be closer with the research scope in Vietnam.

In addition, when discussing external, environmental elements influencing the choice of delivery terms under Incoterms 2020, an expert mentioned the component "The competitive level of commodity market" states in the book "Incoterms 2020-Explanations and instructions for use" published by VIAC. The experts emphasized that "for each type of product, there will be fierce competition in the market or not, depending on the desire to achieve that trading contract, export enterprises may make different choices in delivery terms under Incoterms 2020." After receiving the confirmation of the influence of this element from the remaining 10/11 experts, the author decided to absorb "The competitive level of commodity market" to the LE factor in this study's model.

The above are suggestions for making the scale more comprehensive by correcting and adding certain expert-observed factors. According to the concept of data saturation, which is the point at which no new information or themes are observed in the data from the completion of additional interviews or cases, the authors ended up this study's first time of expert interview after interviewing 11 experts. Then, the author team will adjust and propose the final model, then conduct the second in-depth interviews with this complete scale before including it into the large-scale survey.

3.3.1.2. Final proposed model

Based on previous recommendations from the expert group, the authors decided to add two more variables in the L-E criteria, which are: Country negotiating position (LE5) and "The competitive level of commodity market" (LE6). Those added variables can be described as follows:

LE5: Country negotiating position

Vietnam is a developing country, and its economy is dependent on a few big countries, therefore Vietnam's bargaining position in the international arena remains fairly low, and the choice of delivery terms remains rather poor. Meanwhile, international corporations are well-versed in Incoterms, and they are continuously looking for the best terms to benefit themselves (Diem, 2019). When there is an intense competition in the market, corporations would try to influence their Incoterms choice by proposing a group D delivery term.

LE6: Competitive level of commodity market

According to Vietnam International Arbitration Center (VIAC), when choosing delivery terms according to Incoterms, exporters should also consider the situation of the commodity market. For the commodity market, when exporting to highly competitive markets, using the delivery terms of group C or D to make an offer will create a higher competitiveness than that of group E, F. It can be said, Incoterms are not only rules for interpreting commercial terms, but also an effective tool for enterprises to increase their competitive position in comparison to competitors in the global trading market (VIAC, 2020).

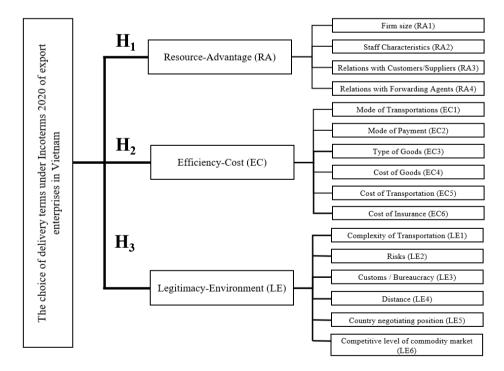


Figure 3.3: Final proposed model

Finally, the research model has been added by the author with three additional observed variables, they are "Cost of Insurance" (EC5), "Country negotiating position" (LE5), "Competitive level of

commodity market" (LE6). From that, the thesis will examine three hypotheses with 16 observed variables which are stated below:

H1: Firm resources and advantages affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

H2: Efficiency and cost affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

H3: Country legitimacy and business environment affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

Factors	Item Code Items		Items reference	
Resource -	RA1	Firm size		
Advantage	RA2	Staff Characteristics		
	RA3	Relations with Customers/Suppliers		
	RA4	Relations with Forwarding Agents		
Efficiency -	EC1	Mode of Transportations	Unal and Metin, 2021	
Cost	EC2	Mode of Payment	2021	
	EC3	Type of Goods		
EC4		Cost of Goods		
	EC5	Cost of Transportation		
	EC6	Cost of Insurance	Qualitative results	
Legitimacy -	LE1	Complexity of Transportation		
Environment	LE2	Risks		
	LE3	Customs / Bureaucracy	Unal and Metin, 2021	
	LE4	Distance		
LE5		Country negotiating position		
	LE6	Competitive level of commodity market	Qualitative results	

Table 3.2: Summary of variables

3.3.1.3. The second time of expert interview

After the first time of expert interview, the authors design the questionnaire based on the final proposed model, then conduct the second time of expert interview. Details of the design of the questionnaire content are described in Section 3.3.2.1.

The aim of the second part of the expert interview is to fine-tune the content of the scales in order to accomplish the official scale before including it into the large-scale survey for quantitative research. The survey questionnaire will be interviewed with the group of experts specified in the first section, with the intention of providing feedback on the clarity and rationality of the observed variables in the questionnaire. The form of the scale is reviewed by ensuring that the language and grammar used in questions are appropriate to provide consistency, clarity, and that respondents are not confused while completing the survey. The author performed the second part of the expert interview by indirect telephone interviews based on questionnaires sent to each person's email address.

The findings of the second part revealed that most of the questions in the draft scales were judged to be consistent in form and content. The expert group only proposed that a few sentences should be rewritten to make it easier to understand and appeal to a larger number of responders. For example, in EC2, the statement "If the parties have agreed on the payment in advance, the Incoterms must be chosen in line with the payment's features and requirements" should be substituted with "Depending on each payment method used in the sales contract between importer and exporter, the Incoterms must be chosen in line with the such payment method's features and requirements" or suggest consistency of word "Incoterms rules" instead of "conditions" or "terms". The expert comments provide the author a more objective view from the respondent's perspective; as a result, the author's team modifies the scales for more precision.

3.3.2 Design questionnaire to official research

3.3.2.1 Design questionnaire

According to Hair et al. (2010), there are seven critical steps in the process of constructing a research questionnaire: Confirm the research goals; choose the best data collection methods; Formulate questions and a scale; Determine the layout and evaluation of the questionnaire; The questionnaire should be pretested, revised, and finalized; Carry out the survey. Following those stages, the survey questionnaire for this study was created in both Vietnamese and English and was divided into three sections:

<u>*Part 1*</u>: Includes questions to gather information about interviewers as well as general business information.

<u>*Part 2:*</u> Designed to gather responses from export businesses on factors influencing the choice of delivery terms under Incoterms 2020, based on three independent factors and one dependent factor in the proposed research model.

<u>*Part 3:*</u> Contains two open questions that invite interviewees to recommend on how to increase the efficiency of choosing appropriate delivery terms under Incoterms 2020.

Specifically, part 2 of this questionnaire has a total of 19 observable variables from four factor groups. Observable variables from RA1 to RA4 are included in the RA factor; observable variables from EC1 to EC6 are included in the EC factor; observable variables from LE1 to LE6 are included in the LE factor; and observable variables from CH1 to CH3 are included in the CH factor. The

proposed model includes 16 observable variables to quantify three independent factors: Resource-Advantage (RA), Efficiency-Cost (EC), and Legitimacy – Environment (LE) criteria. The remaining three observable characteristics are utilized to assess the appropriateness of delivery terms under Incoterms 2020 (dependent factor).

This assessment is based on a five-point Likert scale, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating intermediate (neither agree nor disagree), 4 indicating agree, and 5 indicating strongly agree.

For in-depth interview questionnaire, 11 experts will answer a questionnaire consisting of 3 main parts (details are shown in Appendix section)

Part 1: Confirming specialist and company information

<u>*Part 2:*</u> Including the general question about the application of Incoterms 2020 as well as job position and seniority

<u>Part 3:</u> Designed to gather responses from experts on factors influencing the choice of delivery terms under Incoterms 2020

3.3.2.2 Sampling

a. Sampling method

Hair (2010) differentiates between two types of sample designs: probability and nonprobability. Probability sampling method employs random selection as a sampling methodology. Every unit in the population has an equal chance of being chosen via a predetermined procedure. In contrast to the above-mentioned method, the nonprobability sampling approach is based on the researcher's judgment or intuition. Throughout the collecting process, various units of the population have varied possibilities of being picked.

The nonprobability sampling approach was used to choose for both in-depth interview method and the observed sample in this study. This strategy aids the researcher in saving money. Furthermore, the authors' desire for sample objectives is met by the nonprobability sampling technique. In this study, all respondents who were chosen to fill out the survey questionnaire are export enterprises in Vietnam.

b. Sampling design

The survey questionnaire design's goal is to collect data from a specified sample and find correlations between the research model's factors. To minimize misunderstanding by the person conducting the survey, the questions must be unambiguous. As a result, the scales must be explained in order to identify various sorts of data. There are four data scales in statistics: nominal scale, ordinal scale, interval scale, and ratio scale.

Nominal scale: is a scale for attribute data that has no hierarchical difference between the manifestations of the data.

<u>Ordinal scale</u>: A scale that has a higher measuring level than a nominal scale. All observations are assigned to one of the categories on a hierarchical scale, which are subsequently rated according to a certain characteristic.

Interval scale: Hierarchical linkages, such as hierarchical scales, and the difference in values between ratings on equal scales, are provided by this scale.

<u>Ratio scale</u>: is a measurement scale that symbolizes the highest of the scales, possessing all of the qualities of the three scales stated above. The scale has a real zero foundation and gives rankings as well as equal differences between ranks.

To summarize, the data in this research were measured using the nominal scale, the ordinal scale and the interval scale. The authors of this study were able to collect factual data by surveying exporters in Vietnam to provide information about choosing suitable delivery terms under Incoterms 2020. As a result, the scales listed above are the best fit for this investigation.

c. Sample size

For quantitative method, the sample size is determined by the analytical method utilized; in this case, exploratory factor analysis was applied (EFA). At least 200 observations are required for factor analysis (Gorsuch, 2014); some other researchers do not specify the number of samples required, but rather the ratio between the number of samples required and the number of parameters to be estimated. The sample size for factor analysis is determined by the number of variables included in the factor analysis. According to Hair et al. (2010), the minimum sample size for EFA is 50, ideally, 100, and the number of observations/measurement variables is 5:1, with each measure requiring at least 5 observations. On the other hand, some researchers argued that the sample size for the multivariate regression model is derived according to the formula: $N \ge 50 + 8p$ (Tabachnick and Fidell, 2019).

Inside: N is the sample size.

p is the number of independent variables included in the regression model.

Applied to the regression model of the author group with 16 independent variables, the minimum sample size will be 178 (= 50 + 8*16). To ensure the sample size as above, the author team will send surveys to 300 export enterprises in Vietnam.

For qualitative method, the minimum appropriate sample size in qualitative research is fifteen (Bertaux and Kohli, 1984). Other authors advised at least six participants for phenomenological investigations, about thirty-fifty for ethnographies, grounded theory studies, and ethnoscience studies, and one hundred to two hundred units of the object being examined in qualitative ethology (Morse, 2000). Another researcher suggested five to twenty-five interviews for phenomenological research and twenty-thirty interviews for a grounded theory investigation (Creswell, 2013). In contrast, the concept of sampling evolved from the concept of data saturation, argued that it is the stage at which no new information or themes emerge from the data as a result of the completion of more interviews or cases (Glaser and Strauss, 1967; Guest, Bunce and Johnson, 1995). This is helpful when considering sample size in qualitative research. This technique indicates that a single case study or interview is never sufficient because data saturation

can only be determined when at least two (and generally more) examples are analyzed. This concept of sampling until data saturation is reached may be used to justify the use of a certain sample size in any qualitative research that is driven by this concept.

In this study, the authors select the number of experts to interview based on the concept of data saturation, conducted with 11 experts in related fields as mentioned.

3.3.2.3 Designing the content of the scale

A scale is a tool that is used to standardize analytical units based on the expression of variables. Within the scope of this issue, the authors used the suggested research methodology to create a scale for factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam. Furthermore, amend and augment depending on preliminary study results (second group discussion).

The author has updated the scale with 16 observed variables to assess 3 independent factors as a preliminary study result: (1) Resource - Advantage, (2) Efficiency - Cost, (3) Legitimacy - Environment and three dependent variables to measure (4) The choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam

3.3.2.4 Collecting data

Research data were obtained by online survey, and an in-depth interview were used before to clarify and complete the research scale in questionnaire. A total of 300 surveys were conducted, with the following target sample:

- Type of survey: Online survey.
- Respondent: Export companies in Vietnam.

The questionnaire consists of 32 questions, most of which are closed-ended. The detailed collecting process will be stated below.

- Information of export enterprises were found on '*List of prestigious export enterprises in 2020*' published by the Import-Export Department of the Ministry of Industry and Trade, from export groups or trangvang.com (website about businesses' contact), then these enterprises are sent a survey via email
- Questionnaire format: Questionnaires sent to companies through an online survey created by Google Forms
- Time period: The questionnaires were sent in one batch in March 2022. Reminders were sent approximately one weeks after the first mail.

Following the data collection, it will be handled by SPSS software version 26.0.

3.4 Data analysis methods

3.4.1 Descriptive analysis

Descriptive statistics is a common method to help summarize the whole population or sampled set of data so that the viewer has the best overview of the collected data. There are some main tools usually used to summarize and present data: frequency, descriptive and custom expressed through tables, graphs, charts and plots. While the frequency table is strong in terms of the statistics of the number of values, the percentage structure of the values of the variable, the descriptive table is more inclined to generalize the most basic descriptive factors such as minimum value, maximum value, mean, median, standard deviation... In case of this research, the authors will use both tools of descriptive analysis.

3.4.2 Reliability analysis

Reliability is the amount of confidence that an instrument provides by answering the following questions: are the variables in the scale accurate; do their meanings accurately represent the content to be assessed; and are there opportunities to enhance the scale? Cronbach's Alpha tests can provide answers to these questions. Cronbach's alpha is used to assess the suitability of observed variables that are part of a study variable.

Cronbach's Alpha	Internal consistency
$\alpha \ge 0.9$	Excellent
$0.9 > \alpha \ge 0.8$	Good
$0.8 > \alpha \ge 0.7$	Acceptable
$0.7 > \alpha \ge 0.6$	Questionable
$0.6 > \alpha \ge 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Table 3.3: Rule of Cronbach's Alpha (Cronbach, 1951)

The total correlation coefficient indicates the relative strength and direction of the relationship between one observable variable and other variables. The authors will rely on Item - Total Correlation (the degree of correlation between a variable in the questionnaire) to determine which observed variable does not contribute much to the description of the concept to be measured to remove or keep. This reflects the contribution of a particular observed variable to the value of the factor. The rating criteria will be explained below:

- Variables with an item-total correlation of less than 0.3 will be removed.
- When the Cronbach's Alpha value is more than 0.7, the scale is legitimate.

Finally, after delete these variables, rerun the scale test and redefine Cronbach's Alpha coefficient to determine whether or not the next variable is eliminated.

3.4.3 Exploratory factor analysis

Exploratory factor analysis (EFA) is a quantitative analysis method used to reduce a set of observed variables into a more significant set of factors. In research, the researchers often collect a fairly large number of variables and many observed variables in which they are correlated with each other. For example, instead of going to study 19 small characteristics of an object, we can study only four main factors, in each of these consist of 4-6 observational variables that are correlated with each other. This saves more time and money for researchers.

For exploratory factor analysis EFA, the authors must use the KMO index (Kaiser– Meyer– Olkin) and the Barlett statistic to determine whether factor analysis is appropriate for the initial data. The factors are adequate when the KMO index is more than 0.5 and the observed significance is small (sig < 0.05). The number of extracted factors and the variables that correspond to each factor are then determined using the factor extraction and factor rotation methods. Simple correlation coefficients between variables and factors called factor loadings. This coefficient is less than 0.5 in EFA and will continue to be eliminated in order to maintain the value of variable convergence. The breakpoint when extracting factors has Eigenvalue (condition to identify the number of factors in EFA analysis) greater than 1, the total variance retrieved is equal to or greater than 50%, and the method of extracting coefficients is Principal components.

In conclusion, for the table of rotation matrix results to be statistically significant, the following conditions must be met:

- KMO coefficient must be between 0.5 and 1
- Barlett test has sig must be less than 0.05
- Eigenvalue is greater than or equal to 1
- Total variance extracted is greater than or equal to 50%

3.4.4 Correlation analysis

The correlation coefficient (also known as the *r* coefficient) is a statistic that is used to determine the strength or degree of a relationship between two different variables. A positive or negative magnitude and direction are required for the correlation *r* value. It can have a range of values ranging from -1 to +1. According to Richard Taylor (1990), for two variables x and y from n samples, the Pearson correlation coefficient is calculated and interpreted as below:

A correlation value of 0 shows that there is no correlation between two measured variables. If the coefficient r = 1, the two variables have a perfect positive correlation, meaning that as variable x rises, variable y rises in the same way. Conversely, if the coefficient r = -1, the link between two variables is also perfect, but in the other direction.

The greater the existing association showing a more linear relationship between the two variables, the closer the *r* coefficient approaches -1 or +1, regardless of direction. A positive correlation coefficient (r > 0) shows that a rise in the first variable corresponds to a rise in the second variable (x increases, y increases, and vice versa), meaning that the two variables have a direct relationship (Taylor, 1990). A negative correlation coefficient (r < 0) denotes an inverse connection (x increases, y decreases and vice versa).

The Pearson correlation coefficient test is used to determine if the independent and dependent variables have a linear relationship. When studying regression, the problem of multicollinearity must be considered if the independent variables are highly correlated (hypothesis H0: correlation coefficient is zero).

3.4.5 Regression analysis

Regression analysis is an important step for quantitative analysis, it assists to evaluate the relationships between a dependent variable (often called the 'outcome' or 'response' variable) and one or more independent variables (often called 'predictors', 'covariates', 'explanatory variables' or 'features'). By using the regression analysis, the authors will be able to identify how each independent variable impacts on dependent variables as well as forecasting the change in the value of the dependent variable if there is a change in the independent variable.

3.5 Ethical considerations and procedures

Any research method raises ethical concerns, identifying and devising strategies to prevent them is a critical task of researchers. There are several ethical issues to explore and address in this study, which is based on the theory of research methods of Saunders et al, 2012, as follows:

Respect for the person, make sure of the voluntary nature of participation and right to withdraw: When collecting data, the author team will offer accurate information about the project, as well as information about the sender, to the participants answering the question. Make certain that the secret identity is not hidden and that data is collected rather than consent is requested. In addition, the authors always respect the participants' freedom and desires; do not push or bother them too frequently.

Confidentiality of data and anonymity of participants' identities: To promote confidence and safety for participants, information security and anonymity will be explicitly indicated in the survey description. The group will not keep these online talks or use excerpts from them without permission; nevertheless, when using these comments, proper anonymity will be used.

Collecting and analysis of data and reporting of findings: Throughout the data gathering process, the authors stressed the importance of accuracy. The authors ensure that the information given is valid, highly authentic and reliable from official websites, research articles. The collected findings were guaranteed not to have been altered, manipulated, added, or withdrawn. The metric run outcomes will be provided completely and properly, even if they differ from the intended findings.

3.6 Conclusion

In summary, this third chapter indicates the detail of methodology and the final proposed model used in this research. In this chapter, the authors divide into five main parts: introduction about research philosophy, research approach, research process, method; data sources; data collection method; data analysis methods and ethical considerations. This study uses analytical methods such as correlation analysis, descriptive analysis, regression analysis, and reliability analysis to give the final results. Then the results and the data analysis process are shown in the next chapter in detail.



FINDINGS AND ANALYSIS

The research model and method were implemented in the previous chapter. The data collected from the survey is analyzed in this fourth chapter to determine three factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam from 2017 to now.

CHAP 4: FINDINGS AND ANALYSIS

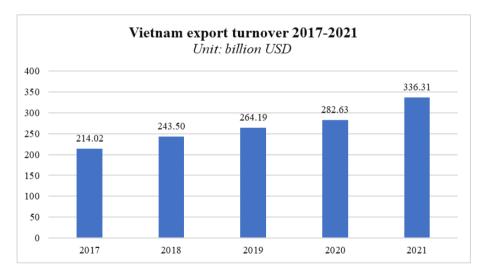
4.1 Vietnam's export activities from 2017 up to now and the general use of Incoterms of export enterprises in Vietnam

4.1.1 Overview of Vietnam's export activities from 2017 up to now

Vietnam's export activities have improved significantly in the last five years because of the process of opening up and integrating into the global economy. In the global market, in the period 2017-2021, a lot of great changes took place such as the US-China trade war erupted in April 2018, the Covid-19 epidemic raged in 2020, Russian-Ukrainian War, severely hurting the global economy in general and export activity in particular. However, under the direction of the Government and ministries, Vietnam's export efforts overcame obstacles and achieved several significant accomplishments in 2021.

Export growth

Overall, Vietnam's total export turnover is still increasing year by year, growing impressively with 19% in 2021. Export turnover in the period 2017 - 2021 increased from 214.02 billion USD to nearly 336.31 billion USD, export growth averaged about 11.4%/year (Chart 4.1).





The year of 2021 continues to witness many difficulties and challenges for global economic development when the COVID-19 epidemic situation is still complicated. However, in 2021, there are still very positive growth figures of Vietnam's trade with the world. Export turnover in 2021 reached a record number of 336.31 billion USD, up 19% over the previous year. In which, the domestic economic sector reached 91.09 billion USD, up 14.2%, accounting for 27.1% of total export turnover; the foreign-invested sector (including crude oil) reached \$245.22 billion, up 20.9%, accounting for 72.9% (General Department of Vietnam Customs, 2022).

Export activities

Vietnam's export trade activities with Asia totaled 161.94 billion USD in 2021, up 15.5 percent from 2020, and accounted for the biggest share (48.2%) of the country's overall export value. In addition, the export value between Vietnam and other continents: Americas (114.19 billion USD increased by 26.6% in compare with 2020), Europe (51.04 billion USD, up 14.2%), Australia (\$5.52 billion, up 23.9%), and Africa (\$3.61 billion, up 18.1%).

	Export				
Market	Value (billion USD)	Compared to the same period in 2020 (%)	Proportion (%)		
Asia	161,94	15,5	48,2		
- ASEAN	28,77	24,8	8,6		
- China	55,95	14,5	16,6		
- Korea	21,95	14,9	6,5		
- Japan	20,13	4,4	6,0		
America	114,19	26,6	34,0		
- USA	96,29	24,9	28,6		
Europe	51,04	14,2	15,2		
- EU(27)	40,06	14,1	11,9		
Australia	5,52	23,9	1,6		
Africa	3,61	18,1	1,1		
TOTAL	336,31	19,0	100,0		

Table 4.1. Export value by continent, country block and some major markets in 2021 and compared to 2020 (Source: General Department of Vietnam Customs)

Total export value increased 19 percent to \$336.31 billion in 2021, in which: machinery, equipment, tools, and other spare parts increased by USD 11.2 billion (equal to 41%); iron and steel of all kinds increased by USD 6.54 billion, equal to 124.3%; phones and components increased by USD 6.35 billion, equal to 12.4%; computers, electronic products, and components increased by USD 6.25 billion, equal to 14% (Chart 4.2).

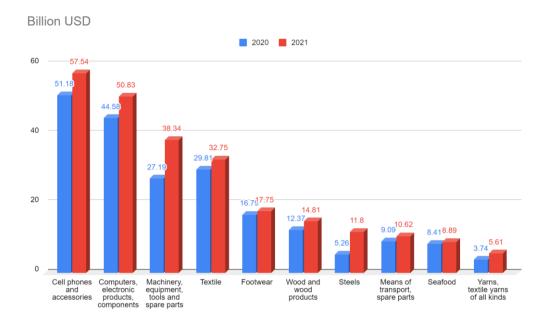


Chart 4.2: Export value of 10 largest commodity groups in 2021 compared to 2020 (Source: General Department of Vietnam Customs)

Despite the fact that 2021 will be a challenging year due to the COVID-19 outbreak, the trade surplus will be maintained. According to the General Department of Vietnam Customs, in the first two months of 2022, export turnover of products was recorded at 53.79 billion USD, up 10.2 percent over the same time in 2021. There are 9 items with an export turnover of over 1 billion dollars in the last two months, accounting for 71.6% of total export turnover (there are 4 export products with over 5 billion USD, accounting for 52%).

4.1.2 The general fact of choosing delivery terms under Incoterms by export enterprises in Vietnam

Vietnam possesses a favorable geographical position with a coastline stretching over 3000 km, a strongly developed seaport infrastructure stretching from the North to the South, which creates great conditions for businesses in Vietnam to export goods through sea transport. In fact, despite being heavily affected by the COVID-19 epidemic, the total volume of goods through Vietnam's seaports in 2021 is still reach more than 703 million tons, up 2% compared to 2020, in which exports in particular reached more than 184 million tons, up 4% (Vietnam Maritime Administration, 2022). Regarding agricultural product exports, the Ministry of Agriculture and Rural Development confirmed that during this time, enterprises exporting by sea have tripled over the same period. Therefore, export enterprises in Vietnam usually prefer to choose Incoterms terms for maritime transport, mainly FOB and CIF delivery terms (Ho Chi Minh City's Party Committee, 2022).

Take an example to illustrate the above trend, according to the Vietnam Coffee Association, before the Covid-19 epidemic appeared in the world, 90% of coffee exports used the FOB term. The Association of Seafood Exporters and Producers said that seafood enterprises exporting

goods to the US, Japan and the EU mainly deliver goods through Cat Lai ports, Tan Thuan ports, and Saigon ports by FOB term. Based on Customs data in 2019, the Vietnam Wood and Forest Products Association (Viforest), said the industry's export value reached 10.33 billion USD, of which the proportion of exporting under FOB reached 8.21 billion USD, accounting for 79.5% of total export value. While exporting under CFR only accounted for 10.7% (reaching 1.10 billion USD); exporting under CIF decreased to 4.3% (reaching 443.84 million USD; by other terms accounted for 5.5% (reaching 568.53 million USD).

The export situation at FOB prices of Vietnamese enterprises is also mentioned by VIAC in the book "Incoterms 2020 - Explanation and User Manual". In the opposite direction in transactions, their customers import at FOB price and export at CIF price. As such, Vietnamese exporters often lose transportation and insurance rights to importers – rights that bring significant benefits to businesses (VIAC, 2020). However, in the past 2 years, the Covid-19 epidemic is a factor promoting the trend of export under CIF which has become more popular (VnEconomy, 2021). According to the Vietnam Coffee and Cocoa Association, from 2020 up to now, the freight rates for shipping routes from Asia to Europe and North America have continuously increased, now increasing 5-6 times over the same period last year. Therefore, coffee importers do not want to sign FOB term anymore but require the exporters in Vietnam to switch to CIF term. In 2020 and in the first half of 2021, about 35% of coffee exporters agreed to switch to the CIF term.

Involving the aspect of wood export market, Mr. Ngo Sy Hoai, Vice President and General Secretary of Vifores, said that in the past few years, wooden furniture has been exported to key markets of the US, Japan and China and EU have had a big change in choosing delivery terms. Statistical data shows that the market that accounts for nearly 60% of the total export turnover of the wood industry is the United States, currently the export turnover to this market at FOB term is decreasing from 98% in 2018 remaining 96.9% in 2020. About the Chinese market, wood exports under FOB dropped sharply from 49% in 2018 to 43.2% in 2019, and 2020 is only at 39.1%. With Japan, which market accounts for 10-11% of the wood industry's export turnover, exports under CIF are also increasing from 25.4% in 2018 to 25.7% in 2020. The transition from export under FOB to CIF is an opportunity for exporters in Vietnam to increase profits, improve skills, and become more professional in international trade. At the same time, become more proficient in risk management and response, closely linked with industry management agencies and domestic and regional shipping networks.

4.2 Factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam

4.2.1 Survey analysis

The data was gathered for three weeks (from 10th March to 31st March). A total of 282 online survey samples were gathered with 263 samples approved for examination after 19 invalid samples from online samples were rejected.

4.2.1.1 Respondent profile

According to the study sample, most of the representatives of all businesses participating in the survey are import-export staff accounting for 40.3%, the number of survey respondents holding positions as document staff and sales staff (accounting 22.05% and 11.03% respectively) and other positions accounted for a relatively small number (26.24%). In which 37.64% are those with less than 5 years seniority, 46.77% have 5-10 years seniority, 14.07% have 10-20 years seniority and 1.52% have more than 20 years. Besides, the majority of companies carry out 5-10 transactions per month (46.01%), the remaining 30.42% of enterprises perform less than 5 transactions a month, and 23.57% of enterprises make more than 10 transactions a month.

Regarding the export market: the survey sample recorded feedback that Asia is the market where businesses operate the most (accounting for 62.36%, of which 15.21% is the Southeast Asian market). The most exported products are light industry and handicrafts (such as textiles, clothing, handicrafts, consumer appliances) accounting for 39.16%.

According to the data gathered, 120 export enterprises from the North region of Vietnam participated in the survey, accounting for 45.63 percent of the total, followed by 117 businesses from the Southern and 26 businesses from the Central. According to the data survey, the size of enterprises is divided into 3 levels, of which 114 medium enterprises (51-500 staffs) account for the highest proportion of 43.35%, followed by 41.06% (108 enterprises) of small businesses (less than 50 staffs) and finally 41 large enterprises (over 500 staffs).

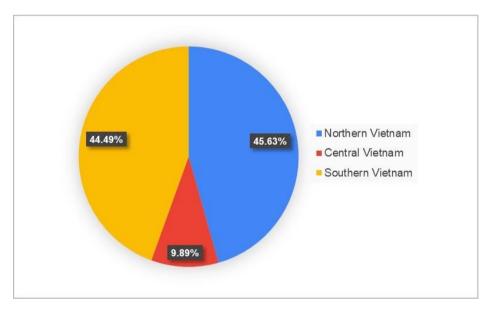


Chart 4.3: Location of export enterprises in Vietnam (Source: Data compiled from survey results)

Regarding the choice of delivery terms under Incoterms 2020, after excluding 7 enterprises using the Incoterms 2010 version, the remaining 263 data have the application of Incoterms 2020 when exporting. Among the 11 rules, the two most commonly used by export enterprises in Vietnam are CIF terms and FOB terms (account for 50.19% and 62.74%).

4.2.1.2 Descriptive Statistics

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
RA1	263	1	5	3.79	.961	.924
RA2	263	1	5	3.81	.965	.931
RA3	263	1	5	4.05	.839	.704
RA4	263	1	5	4.14	.931	.867
EC1	263	1	5	3.87	.952	.907
EC2	263	1	5	4.28	.888	.789
EC3	263	1	5	3.89	.923	.851
EC4	263	1	5	4.31	.825	.681
EC5	263	1	5	4.33	.829	.688
EC6	263	1	5	4.04	.992	.983
LE1	263	1	5	3.73	1.003	1.005
LE2	263	1	5	4.23	.840	.706
LE3	263	1	5	4.10	.881	.776
LE4	263	1	5	3.93	.968	.938
LE5	263	1	5	3.59	1.077	1.159
LE6	263	1	5	3.77	1.023	1.047
CH1	263	1	5	4.30	.842	.709
CH2	263	1	5	4.13	.894	.800
CH3	263	1	5	3.97	1.094	1.198
Valid N (listwise)	263					

Table 4.2: Factor descriptive analysis (SPSS results)

Overall, most observed variables have a mean of around 3 to 4, which may be closed using the neutral option. As a result, none of these receives a high rating.

4.2.1.3 Assess the reliability of the scale through Cronbach's Alpha coefficient

a. Evaluate the scale of the independent variable

The authors used the Cronbach's Alpha coefficient to test the samples reliability after collecting 263 survey samples, and the findings are shown in the table below:

Variable Corrected Item-Total Correlation		Cronbach's Alpha if Item Deleted						
Resources - Advantages (RA)								
	Cronbach's Alpha = .856							
RA1	.729	.803						
RA2	.700	.816						
RA3	.680	.825						
RA4	.690	.820						

Variable	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted		Variable	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I	Efficiency - Cos	t (EC)		Legitim	acy - Environi	nent (LE)
C	ronbach's Alpha	a = .865		Cronbach's Alpha = .830		
EC1	.583	.856		LE1	.623	.797
EC2	.734	.828		LE2	.600	.803
EC3	.648	.844		LE3	.660	.791
EC4	.645	.845		LE4	.598	.802
EC5	.667	.841		LE5	.558	.813
EC6	.692	.836		LE6	.584	.806

 Table 4.3: Reliability analysis result of independent variables (SPSS results)

Cronbach's Alpha values more than 0.7 and Corrected Item-Total Correlation coefficients greater than 0.3 are found in all 16 observed variables, suggesting that they are all competent to move on to the next analytical stage.

b. Evaluate the scale of the dependent variable

Variable	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted						
Choice of	Choice of appropriate delivery terms under Incoterms (CH)							
	Cronbach's Alpha = .812							
CH1	.717	.700						
CH2	.724	.683						
СН3	.581	.855						

Table 4.4: Reliability analysis result of dependent variables (SPSS results)

For all dependent variables, Cronbach's Alpha coefficients above 0.7 and Corrected Item-Total Correlation above 0.3 were achieved. As a result, these dependent variables will be eligible to advance to the next stage of the study.

4.2.1.4 Exploratory factor analysis (EFA)

a. Analysis of exploratory factors for all independent variables

After making a thorough reliability assessment of the 16 observed variables collected, the authors conducted an EFA exploratory factor analysis with these 16 variables to determine whether the question posed by the authors truly represented the element that the organization was affecting or if it was conflicted with all other factors.

KMO and Bartlett's Test								
Kaiser-Meyer-	.913							
Bartlett's Test	of Sphericit	У			Sig.	.000		
Initial Eigenvalues					tion Sums of Loadings	Squared		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %		
1	6.978	43.616	43.616	6.978	43.616	43.616		
2	1.548	9.677	53.293	1.548	9.677	53.293		
3	1.291	8.072	61.364	1.291	8.072	61.364		
4	.877	5.481	66.845					
5	.704	4.401	71.247					

Rotated Component Matrix							
		Component					
	1	2	3				
EC2	.805						
EC5	.774						
EC4	.751						
EC6	.746						
EC3	.664						
EC1	.536						
LE5		.798					
LE1		.685					
LE4		.654					
LE6		.637					
LE2		.590					
LE3		.590					
RA1			.811				
RA4			.767				
RA2			.761				
RA3			.756				

 Table 4.5: Results of Exploratory factors analysis for independent factors (SPSS results)

As shown in the table above, the KMO index and Sig. coefficients are .913 and .000, respectively. This demonstrates that the EFA factor analysis produced positive findings with 16 variables. Furthermore, Eigenvalue = $1.291 \ge 1$ and extracting 3 factors that have the best information summary meaning, Cumulative % of Variance shown for these groups is $61.364\% \ge 50\%$ shows that the EFA model is suitable. Thus, 3 factors are extracted to condense 61.364% variation of observed variables. The results of the rotation matrix show that 16 observed variables are grouped into 3 factors, all observed variables have Factor Loading coefficients greater than 0.5.

b. Analysis of exploratory factors for dependent variables

	KMO and Bartlett's Test								
Kaiser-Meyer	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.								
Bartlett's Test	Bartlett's Test of Sphericity Sig.								
Component		Initial Eigen	values	Extraction Sums of Squared Loadings					
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %			
1	2.229	74.289	74.289	2.229	74.289	74.289			
2	.520	17.337	91.625						
3	.251	8.375	100.000						

Component Matrix					
	Component				
	1				
CH1	.898				
CH2	.892				
СН3	.791				

Table 4.6: Results of exploratory factors analysis for dependent factors (SPSS results)

Shown in the table 4.6, the KMO value is 0.683 (higher than 0.5) and the Sig. value is.000 (smaller than 0.05). The analysis yields one element with Eigenvalues of 2.229 (greater than 1). This component is defined by all three development items with factor loadings greater than 0.5. The total variance is 74.289%, implying that this component explains 74.289% of the variance.

4.2.1.5. Correlation analysis

According to Evans (1996), the Pearson Correlation values (r) illustrate the strength of correlation as following: 0.00 - 0.19 "very weak"; 0.20 - 0.39 "weak"; 0.40 - 0.59 "moderate"; 0.60 - 0.79 "strong"; and 0.80 - 1.0 "very strong". Additionally, if the Sig. (2-tailed) value of Pearson's correlation coefficient is under 5%, then it can indicate that the variables are related to each other. The larger r value is, the stronger linear correlation implies. In this test, all independent variables need to be considered to correlate with dependent variables.

	Correlations								
		СН	RA	EC	LE				
	Pearson Correlation	1	.544**	.666**	.557**				
СН	Sig. (2-tailed)		.000	.000	.000				
	Ν	263	263	263	263				
	Pearson Correlation	.544**	1	.534**	.564**				
RA	Sig. (2-tailed)	.000		.000	.000				
	Ν	263	263	263	263				
	Pearson Correlation	.666**	.534**	1	.593**				
EC	Sig. (2-tailed)	.000	.000		.000				
	Ν	263	263	263	263				
	Pearson Correlation	.557**	.564**	.593**	1				
LE	Sig. (2-tailed)	.000	.000	.000					
Ν		263	263	263	263				
	rrelation is significant at t elation is significant at th								

Table 4.7: Multiple linear regression results (SPSS results)

As can be seen in table 4.7, the results show that all the independent variables have correlation with dependent variables with Sig. (2-tailed) value of .000 (less than 5%). In more detail, factor Efficiency-Cost (EC) has strong correlation with r equal to 0.666, while factors Resource-Advantage (RA) and Efficiency-Cost (EC) shows a moderate relationship with r equal to 0.544 and 0.557 respectively with dependent variable (CH).

4.2.1.6. Regression analysis

In order to find out the linear relationship between independent variables and dependent variables, regression analysis is applied through the entering method. Moreover, hypothesis models can be tested and concluded after regression analysis. The multiple collinearity phenomena among variables is tested by using variance inflation factor (VIF). The regression equation is established as following:

$$CH = B_0 + B_1 * RA + B_2 * EC + B_3 * LE$$

I<u>n which:</u>

B₀: Constant

B_i: Regression coefficients (i=1, 2, 3)

RA, EC, LE: the independent factors (Resource-Advantage, Efficiency-Cost,

Legitimacy-Environment)

CH: the dependent factor (The choice of appropriate delivery terms under Incoterms)

Model Summary ^b								
Model	el R R A Square		Adjusted R Square	Std. Error of the Estimate	Durbin-Watson			
1	.714 ^a	.510	.504	.57017	1.851			

a. Predictors: (Constant), RA, EC, LE

b. Dependent Variable: CH

	ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	87.497	3	29.166	89.713	.000 ^b			
	Residual	84.201	259	.325					
	Total	171.698	262						

a. Dependent Variable: CH

b. Predictors: (Constant), RA, EC, LE

Table 4.8: Development model summary and result of ANOVA test (SPSS results)

In table model summary, Adjusted R-square value is 0.504 (greater than 50%), which indicates that 50.4% of the variance in 'The choice of appropriate delivery terms under Incoterms 2020' can be explained by these predictors (RA, EC, LE). Otherwise, the Durbin-Watson statistic shows a value of 1.851 (ranges from 1.5 to 2.5); that means there is no autocorrelation in the sample.

In Table ANOVA, sig. of the F test is 0.000 less than 0.05. Therefore, the dependent factor can be explained by the variables of three independent factors.

Coefficients ^a								
Madal	Unstandardized Coefficients		Standardize Coefficients	4		Collinearity Statistics		
Model	В	Std. Error	Beta	l	Sig.	Tolerance	VIF	

1(Constant)	.351	.234		1.500	.135			
RA	.214	.058	.204	3.696	.000	.620	1.613	
EC	.528	.066	.455	8.027	.000	.590	1.694	
LE	.196	.066	.172	2.966	.003	.563	1.776	
a. Dependent Variable: CH								

Table 4.9: Development Coefficients (SPSS results)

According to Table 4.9, the Sig. value of 3 independent factors is less than 0.05. This implies that 3 of the research model's factors are completely reliable and meet the criteria. Multiple collinearity is not evident in this scenario since the VIF score of these factors is lower than 2. The regression by these Beta values. The linear regression equation is given by the Coefficients outcome:

CH = 0.455*EC + 0.204*RA + 0.172*LE

The positive coefficients indicate that the choice of appropriate delivery terms under Incoterms has a positive relationship with independent variables. As a result, all the proposed hypotheses are confirmed. Following the standardized coefficients above, Efficiency-Cost has the strongest influence on 'The choice of appropriate delivery terms under Incoterms 2020' (with Beta = 0.455). Other factors impact on 'The choice of appropriate delivery terms under Incoterms 2020' in the following order: Resource-Advantage and Legitimacy-Environment (with Beta equals 0.204, 0.172 respectively).

4.2.1.7. Hypothesis conclusion

In Chapter 2 of this research, three hypotheses were indicated. The result of hypotheses tested will be demonstrated as in the table below:

Hypothesis	Sig.	Result
H1: Firm resources and advantages affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.	.000	Confirmed
H2: Efficiency and cost affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.	.000	Confirmed
H3: Country legitimacy and business environment affect the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.		Confirmed

Table 4.10: Hypotheses tested results

4.2.2 Findings and Discussion

4.2.2.1 RA factor

According to the survey results of 263 responses, the authors found that the RA factor has the second strongest influence on the choice of delivery terms under Incoterms with a regression coefficient of 0.204. Compared with the original research model of Unal and Metin (2021), the findings are slightly different when the RA factor affects the least of the three factors above, ranked after the LE factor.

RA1: Firm size

According to the data gathered, 64.26% of respondents strongly agree and agree, 7.60% disagree and strongly disagree for "firm size" variable. According to the findings in the study by Sararaksa et al (2020) and a study by Unal and Metin in 2021, "firm size" is a less influencing factor when choosing delivery terms under Incoterms 2020.

The scale of enterprises was divided into 3 groups: small enterprises with 01-50 people, medium enterprises with 51-500 people and large enterprises with over 500 people (Bygrave and Zacharakis, 2011). According to the data from the survey, most of the exporting enterprises in Vietnam are almost medium-sized from 51-500 employees (43.35% of the total 263 responses), only 15.59% large-scale enterprises (over 500 employees).

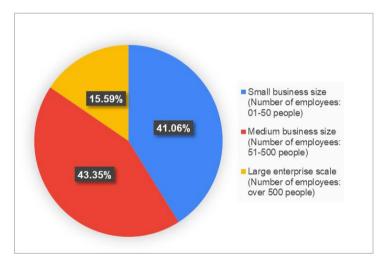


Chart 4.4: Firm size of exporters enterprise in Vietnam (Source: Data compiled from survey results)

For small-scale companies with poor experience, reputation and prestige, they often choose the EXW term which has the least obligation, and no need to complete customs procedures. As for large-scale enterprises that have a lot of experience in applying Incoterms in international transactions, they will consider the appropriate factors and carefully choose the terms in their favor. If the seller does not want to take the risk and cost associated with the goods in transit, the seller will use Incoterms groups E and F. Conversely, if the seller ready to bear both the risks and costs associated with the goods in transit, the seller will choose Incoterms group D. In cases where

the seller accepts to bear the costs but does not wish to bear the risks associated with the goods in transit, group C is appropriate.

RA2: Staff Characteristics

According to the data gathered, "Staff Characteristics" variable records a good rate (64.64% of respondents strongly agree and agree). This variable in the opinion of Unal and Metin (2021), Suraraksa et al. (2020), Agnieszka Hajdukiewicz et al (2021) was assessed as having a relatively small impact on the choice of delivery terms under Incoterms in related research.

"Staff characteristics" includes knowledge and experience of employees in choice of delivery terms under Incoterms. First, according to the Institute of Development Strategy's forecast about the knowledge and educational level of employees in Ho Chi Minh City from 2015 to 2020, the demand for labor in the import-export sector is still short of 80% of trained human resources, estimated at 25,000 jobs/year. Currently, the main human resources for this industry are taken from forwarding agents, companies and used according to a limited capacity. Meanwhile, this is an area that requires experts to understand the legal system, the practices of the host country, indepth industry knowledge, foreign language skills, information technology application, communication and negotiation skills, etc. as well as understand international law and have relationships all over the world. This situation leads to a shortage of human resources for businesses (Ministry of Industry and Commerce, 2021a).

Secondly, in terms of employee experience, employees who have in-depth knowledge and experience will help businesses make better choices. They know the strengths and weaknesses in each term that is suitable for each transaction. Not only that, they also have experience in negotiating with other businesses to get the most profitable contract for the company. As for employees who do not have much experience, they tend to choose popular and customary terms of the company, so they are somewhat limited. As an example of qualifications and experiences of staff, when exporting agricultural products to the Chinese market, enterprises exporting Vietnamese agricultural products to China have not really high quality of human resources (72% of enterprises have less than 5 Chinese-speaking employees) (Thanh Ha, 2021).

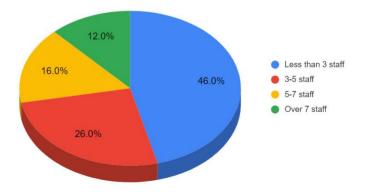


Chart 4.5: Number of Chinese-speaking employees in enterprises exporting Vietnamese agricultural products to China (Source: Research by Dr. Lam Thanh Ha)

Enterprises that export agricultural products with high quality labor and a large number of Chinesespeaking employees often have many advantages. They have a lot of potential and opportunities to choose Incoterms rules with many obligations such as group C and D. Currently, most exporters in Vietnam only choose Incoterms terms with the obligation to arrive at the border gate or port of departure.

With experienced and skilled staff, choosing delivery terms under Incoterms is easier, they know how to negotiate to get the best deal and they know how to choose which terms match the necessary criteria for the type of goods with their business. For employees without knowledge and experience, they will passively follow the company's conditions according to the habit of using common terms, they will not be able to fully promote the benefits for the business when choosing delivery terms under Incoterms.

RA3: Relations with Customers/Suppliers

According to the data gathered, the variable "Relations with Customers/Suppliers" has 74.52% of respondents strongly agree and agree, 3.04% disagree and strongly disagree. In other research, this element was assessed having influences on the choice of delivery terms under Incoterms such as in the research of Unal and Metin (2021), Suraraksa et al. (2020) and Hajdukiewicz, Pera (2021).

Having a good relationship with customers and suppliers will help the export businesses themselves be more proactive, quickly contact and find a solution if there is a problem such as delay in delivery, damage, loss of goods with the goods or the transportation process and the specific regulations and standards of each country. Take Vietnamese agricultural product exporters as an example, when exporting to China/US/EU markets, these businesses will face many challenges because these are all difficult markets, possessing specific technical standards, especially the barriers to food products are very strict. That requires exporters to have a good relationship with intermediate importers through associations, industries.

When the exporter and the importer sign the commercial contract for the first time, trust has not been built yet, the delivery of goods to an unqualified buyer under Incoterms group C, D will easily cause trouble to the exporter. For example, as mentioned in a The Laborer Newspaper in 2021, a Vietnamese company had trouble selling 2 containers of Buffalo Jungle energy drink to Hi-Profile Company (based in Dubai). When carrying cargo to the port of Cotonou of Benin, Vietnamese exporters cannot contact Mr. Khalifa - who directly negotiates, signs the contract, transfers the deposit from Dubai. This man does not reply nor receive the goods and pay the money. In this case, the exporter will have to bear not only the risk of the goods being bombed, but also the risk of costs, due to the signed Incoterms rules (The Laborer Newspaper, 2021).

With an intermediary exporter, that is, the relationship with the supplier is considered as a vital relationship, affecting the supply, price, quality, quantity, time of goods and competitiveness on the international trading floor (Thanh Ha, 2021). However, in Vietnam, this relationship is not favorable because of both subjective and objective factors. Specifically, objective factors may come from the context of the epidemic, affecting traffic disruptions, delay, increasing costs, etc. The subjective factor comes from the exporting enterprises themselves, who are not really

interested in linking production, not building a solid relationship, so that the supplier may be willing to break the contract signed earlier for the immediate benefit.

If customers and suppliers sign contracts with each other many times and become reputable, the exporter can freely choose delivery terms under Incoterms without worrying much about the risk of each delivery, flexible when unexpected problems occur. The relationship becomes better, the seller and the buyer can choose the terms of group C and group D for delivery. On the contrary, with the first shipment of goods, the two parties are not solid relationship, the two parties will still be worried about risks, then the choice of EXW/FOB term is suitable for the exporter because the seller only needs to prepare the goods, needless to worry much about the cost and risk of delivery to the buyer.

RA4: Relations with Forwarding Agents

The variable "Relations with Forwarding Agents" gather high proportion of agreement (78.71% strongly agree and agree). The results obtained in this study are quite high compared with the original work of Unal and Metin (2021) and Agnieszka Hajdukiewicz, Bożena Pera (2021).

For small-scale import and export enterprises, they are incapable of transporting themselves so hiring forwarding agents is the first choice because of their good prices and professional experience, thus reducing the risk of wrong documents, tracking goods and customs declaration. The relationship with forwarding agents becomes better through the times when you choose a unit to transport goods across countries, exporters will not be dependent on another carrier, and can easily benefit in terms of costs and risks of transportation, congestion on its freight routes to other countries. If exporters have a solid relationship with forwarding agents, they will always receive advice on good trading conditions and services, reduce the risk of shipping surcharges and the quality of the goods will be safe and not worry about the loss or damage of the goods in transit.

According to research by the Ministry of Industry and Trade in 2021, Vietnam's logistics industry has a high growth rate of 12% to 14% per year, the proportion of enterprises outsourcing logistics services also increased sharply reaching 60% to 70%. The logistics report for the year 2021 states that there are more than 4,000 professional logistics enterprises in Vietnam providing international logistics services, including: transportation, forwarding, warehousing, customs declaration, goods inspection, seaport services,... Thanks to increasing the application of digital transformation, improving business processes, especially when providing services to the European, American and Chinese markets, the service quality of logistics enterprises is increasingly improved. However, in reality, exporters in Vietnam still have to rely heavily on overseas carriers appointed by customers because according to Logistic report statistics 2021, although logistics service businesses account for a large proportion, about 95% but most of them are small and micro enterprises, providing services without high added value. Since then it is not reputable and competitive enough compared to foreign logistics enterprises.

Because of the risks mentioned above, the issue of "relationship with Forwarding Agents" is also considered as a factor influencing the choice of delivery terms under Incoterms. If this relationship is good, enterprises can consider using group C, group D to avoid risks, save time to learn as well as avoid additional fees incurred during transportation instead of using E and F groups. On the

contrary, if the exporting enterprise itself does not have a close relationship with any forwarding agent, the seller should choose Incoterms group E and group F, shifting the right to choose forwarding agents to the importer.

4.2.2.2 EC factor

On the basis of the obtained results, it can be concluded that the most influencing factor in Incoterms choice is EC factor with a regression coefficient of 0.455. Findings show consistency with the results of Unal & Metin (2021) or Suraraksa et al. (2020) and Bozena Pera (2021). However, there is a slight disturbance in the order of influence of sub-factors belonging to the EC group of factors, which are analyzed below.

EC1: Mode of Transportations

Based on the analysis of the survey data above, 68.44% of respondents agree or strongly agree with the variable "mode of transportations" in EC factor. In other related studies, Unal & Metin (2021) concluded that "mode of transportations" is considered as a rule, not a criterion. In contrast, some other studies such as Malfliet (2011), Yaakub and Szu (2017) and the latest study by Bozena Pera (2021) also confirmed its influence.

Since Incoterms 2010 and now the version of Incoterms 2020, the ICC has divided Incoterms into two groups, whereby FAS, FOB, CFR, CIF are only used for sea transport while the rest of the rules are used for all modes of transport. Therefore, it is essential for exporters in Vietnam to pay attention to the mode of transport chosen to affect the delivery terms under Incoterms 2020. According to data compiled from the survey, the group of Incoterms for sea transport including FAS, FOB, CFR and CIF are the terms most favored by Vietnamese exporters.

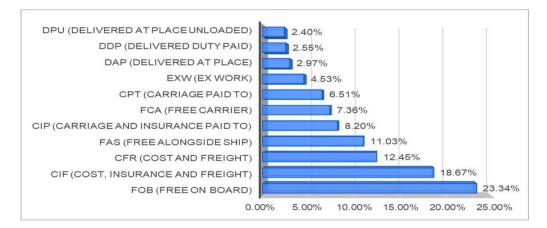


Chart 4.6: Frequency of Incoterms rules used by exporters in Vietnam (Source: Data compiled from survey results)

Based on the data presented in Table 4.11 below, it can be seen that more than 90% of goods, especially Vietnam's import and export goods, are transported through seaports and inland waterways ports (General Statistics Office, 2020). Cargo throughput through seaports maintains a growth state in 2020 (increase 3.68% compared to 2019) even though the world economy suffers from certain impacts from the Covid-19 epidemic (Vietcombank Securities, 2021). Compared with

road or air transport, import and export activities using sea transport are relatively less interrupted because of the social distancing and disease control measures.

Year	2017	2018	2019	Prel.2020
By kinds of goods				
Export goods	125,294	144,587	161,051	178,015
Import goods	150,928	175,759	207,962	226,433
Domestic goods	269,599	359,523	459,877	473,599
Goods in transit	77,778	77,312	1,954	1,465
By types of ports				
Sea ports	5 1 9,297	606,617	664,611	692,291
Inland waterway ports	102,935	149,072	164,718	185,963
Air ports	1,366	1,492	1,515	1,258
Total	623,598	757,181	830,844	879,512

 Table 4.11: Volume of cargos across ports 2020 (by thousand tons)
 (Source: General Statistics Office)

It can be seen that businesses in Vietnam are usually considerate about the "mode of transportation" factor quite carefully in order to choose the appropriate delivery terms under Incoterms 2020. Theoretically, FCA, CPT, and CIP can still be applied in marine transport, however, exporters in Vietnam are still encouraged to choose Incoterms rules specific for sea transport (FAS, FOB, CFR, CIF). According to VIAC, in those particular transport rules, the use of specific terms such as "port", "vessel", "sea freight"... will clearly bring about more appropriate and more efficient in the implementation process. However, in another case, when goods are transported by container via sea, the carrier uses a combination of road or rail transport to transport the container from the point of consolidation to the port or vice versa. At that time, the mode of transport will be multimodal transport, not just sea transportation, the choice of FAS, FOB, CFR, CIF will no longer be appropriate, but should be replaced by FCA, CPT, CIP.

EC2: Mode of Payment

The survey results show that "mode of payment" have highest rate, accounting for 82.51% of strongly agree and agree respondents. This result is considered match with most previous studies including domestic and foreign. However, in Bozena Pera's study of companies operating in Poland published in 2021, "mode of payment" is in the group of a relatively weak impact.

Currently, there are four popular modes of payment in international commercial transactions, which are: cash in advance, letter of credit, documentary collection and open account. At some big banks in Vietnam, such as VCB, Vietinbank and BIDV, the proportion of payment methods is slightly different. However, basically, international remittance accounts for the highest proportion, followed by L/C, Collection and Border payment respectively. In more detail, according to the data from BIDV's 2018 and 2019 report in Chart 4.7 below, International Remittance accounts for a fairly high proportion, about over 50%. Meanwhile, L/C and Collection also accounted for a significant proportion, ranking second only to international remittance, with the rate of 42% and 37% respectively in 2018 and 2019.

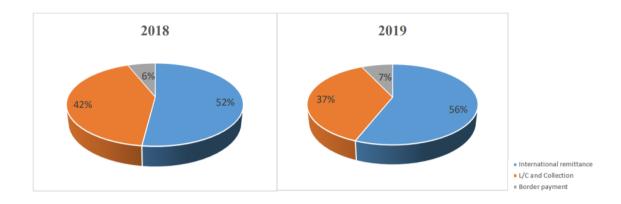


Chart 4.7: BIDV's proportion of payment methods in 2018-2019 (Source: BIDV Trade Finance and International Remittance report)

If the parties have agreed on the mode of payments ahead of choosing delivery terms under Incoterms, then it is necessary to choose terms in accordance with the characteristics and requirements of the payment. When using an L/C, depending on the commercial contract, the terms and conditions of the L/C must also correspond accordingly to the Incoterms. It can be said that the document requirements of an L/C are affected by the choice of Incoterms rules and vice versa. The more complex the delivery terms, the more documents will be required and the greater the risk of relatedness (Roberto et al, 2006). For example, if export goods use the EXW term, the delivery document specified in the L/C is minimal (commercial invoice only, no requirements for external documents). On the other hand, if exporters use the CIF/CIP term, there are quite onerous documentary obligations for the exporter (transport document, insurance document and evidence of insurance), leading to the ability to provide appropriate documents to claim the settlement will also be more complicated for exporters (Bergami, 2006).

Since different Incoterms require different documentary supplements, it is recommended for exporters to minimize the risk of discrepancy by negotiating the EXW as delivery terms of choice. However, with the nature of the L/C payment method in particular, the issuing bank will have to represent the importer to commit to paying the beneficiary (exporter) as soon as the documents are presented properly, the bank will often want to strengthen their control by requiring documents to present a Bill of Lading prepared by bank order. In essence, the owner of the actual shipment until the importer comes to get the documents and pay is Issuing bank, requesting a bill of lading as above is the way to control the buyer. Only when the buyer has paid the bank in full (in case the importer has not made a 100% deposit), the bank will endorse the back of the bill of lading and deliver the documents set to the buyer, then the buyer just went to the shipping board to pick up the goods. In such cases, delivery at EXW, FAS, FCA... will no longer be appropriate, exporters should choose to deliver at CFR or CIF prices (depending on whether the insurance document requirements in the contract) to meet the document requirements in that transaction.

EC3: Type of Goods

The variable "type of goods" which has over 66.9% of respondents agree and strongly agree. This variable is evaluated very differently according to the type of goods that companies export. This

result also was confirmed in the seafood trade study of Shangina (2007) and Bożena Pera's recent study (2021).

As analyzed above, the structure of Vietnam's exports is quite diverse, including the processing and manufacturing industries; textile industry; agro-forestry-fishery industry... Technological products in the processing and manufacturing industries are easily damaged if they are not carefully preserved when they are bumped or met with water. This makes this type of item have certain requirements for safe storage and packaging such as moisture resistance or shock resistance. However, if the packaging requirements are met, the exporters can flexibly choose the delivery terms under Incoterms according to their preferences.

Vietnam's strong traditional export products such as rice, coffee and seafood, the product value per weight is low, so each export order has a large volume, average of about 486.5 USD/ton of rice (Ministry of Industry and Commerce, 2021b). For this type of goods, businesses cannot choose to deliver by road due to the limited load capacity as well as the narrow operating hours of the trucks compared to the transportation demand. Also, it is not possible to choose an air route because Vietnam has no airline that has a cargo plane, most of the goods are placed under the belly of the passenger plane, making the volume of goods transported is limited according to Mr. Do Xuan Quang, Standing Vice President of Vietnam Logistics Service Business Association (Baochinhphu.vn, 2021b). Therefore, the group of Incoterms for sea freight including FAS, FOB, CIF, CFR is a reasonable, popular and least expensive choice for this category of export goods.

Next, wood and wooden products are an important and indispensable part of Vietnam's export market. This item ranks 6th in export value. In 2018, the total export value of the wood industry reached \$8.47 billion, of which USD 6.54 billion FOB, while CIF and CFR only accounted for 5.1% and 12.2% respectively (Vietnamese Wood Magazine, 2021). Vietnam's export turnover of wood and wood products (W&WP) in 2020 reached 12.01 billion USD, FOB method accounts for 81.4% of the total export value, while exports under CFR, CIF and other methods decrease (Chart 4.8).

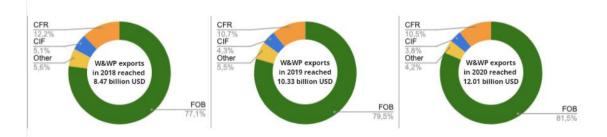


Chart 4.8: The export share of wood and wooden products (W&WP) at FOB prices compared with other modes (Source: Vietnam Timber and Forest Products Association)

However, according to the analysis of the Vietnam Timber and Forest Products Association (VIFOREST) in 2021 based on customs data, the choice of export method according to FOB, although it helps businesses to reduce risks, also reflects limitations in terms of capacity, strength of enterprises in Vietnam. Because with wood products, exporters can probably use CIF or CFR

to maximize business benefits as well as support and promote the development of supporting service industries such as logistics or insurance.

EC4: Cost of Goods

The survey data shows that almost 85% of respondents agree and strongly agree, 11.79% rate it normally, and 3.42% disagree and strongly disagree considering the 'cost of goods' variable. This affection is also confirmed in the conclusions of previous studies, specifically ranked second in the study by Utan and Metin (2021), and third in the study on automotive parts manufacturers in Thailand (Suraraksa et al, 2020). However, in particular with the case study of companies operating in Poland, this variable is only assessed to have an average influence on the choice of Incoterms.

As mentioned above, by 2021, according to the General Department of Vietnam Customs, despite the situation of the Covid-19 epidemic, with the export value increased by 19 percent to \$336.31 billion in 2021, export businesses in Vietnam have exported a large quantity and variety of products with different values, including high-value goods (electronics, components) and lowervalue goods (fruits, textiles, etc.). Each item will have a different value of goods, affecting costs and risks during transportation, considering the value of goods when choosing delivery terms under Incoterms is necessary for every exporter.

Notably, based on the data of the export commodities in Chart 4.2, the electronics, computer and components industries reached 41% of the total export turnover in 2021, recording a breakthrough when surpassing textiles and garments. From 2019 to now, it has gradually become a key export product of Vietnam. In other words, Vietnam's production-export ratio shows a change in the orientation of the industry, gradually moving from low value-added items such as clothing and textile to high-value products such as electronics and components. At that time, the choosing delivery terms under Incoterms 2020 based on the value of goods needs more attention.

In fact, in the transportation process, it is quite difficult to avoid damage or loss of goods. Different from other goods, to minimize loss and damage, high value goods need to be packed into containers and transported according to a separate process to ensure safety during the journey from the seller to the buyer. In the case of exporting such large-value goods, if the seller does not wish to bear the risks and costs associated with the goods, the seller will use Incoterms groups E or F. Otherwise, if the seller wants to have complete control over the carriage, the seller will use group D. In cases where the seller accepts to bear the costs but does not want to bear the risks associated with the goods in transit, choosing group C will be appropriate.

EC5: Cost of Transportation

Based on the analysis of survey data, "cost of transportation" is considered to be an interested and noticed element when choosing delivery terms under Incoterms 2020 of export enterprise in Vietnam, accounting for 85.17% of people who strongly agree and agree. Similar to the consensus on the necessity of this cost consideration, the results of the study by Utan, Metin and Hajdukiewicz all attest to its primary importance in 2021. In 2020, Suraraksa concluded shipping cost ranks 2nd (only after the total annual cost of enterprises).

The nature of Incoterms stipulates the costs, duties and responsibilities of both parties in the matter of delivery. This is also the reason why shipping costs are the biggest concern, because it directly affects the difference of each form of Incoterms and the estimated annual budget of the exporting business. If shipping costs are too high, the company will lose profits or will have to increase product prices. Both negatively affect the business performance as well as the competitive position of the exporter.

Sharing at the Vietnam Logistics Forum 2021 on 14/12/2021, Mr. Than Duc Viet, General Director of Garment 10 Corporation, said that in the past 2 years (2020, 2021), the "big brother" enterprise of Vietnam's textile and garment industry is still being heavily affected by the sudden increase in logistics costs. He also affirmed that "Every year, May 10 imports and exports about 2,000 containers and 120,000 m3 of goods and loses about 12,000 declarations. Each time the declaration is the cost again team up. On average, in 2021, transportation costs increased by 19% compared to 2020 and compared to 2019, transportation costs have increased by 38%. He also shared that transportation costs increase greatly affecting product prices, when the price is too high it will affect the competitiveness of Vietnamese products in the international market (Baochinhphu.vn, 2021a).

On the side of sea freight, Mr. Le Quang Trung, Deputy General Director of Vietnam National Shipping Lines, said that at this time in 2020, the container freight rate to the east coast of the US is only about 3,500-4,000 USD/TEU. But now, still on the same route, the freight rate has reached 15,000 USD, even 18,000 USD/TEU. Representatives of many seafood export enterprises shared that they were having a "headache" because of many export orders, but the freight rates continuously set new peaks. Specifically, sea freight to the US from 3,000 USD/TEU before the COVID-19 epidemic has now increased from 13,000-14,000 USD/TEU to the West coast, and to the East coast is 17,000 USD/TEU. Freight to Europe ranges from 12,000-14,000 USD/TEU. Similarly, freight rates to the Middle East are currently between 10,000-11,000 USD/TEU (VietnamPlus, 2022a).

In addition, businesses also have to bear a series of surcharges such as loading and unloading fees, storage, clean fuel, container balance... For that reason, in order to bring the greatest benefits to their side, the higher the transportation cost, the less often the exporter chooses Incoterms C, D group. Besides, in sea transport, if goods are transported along market routes, loading and unloading costs are already included in the freight, so using FAS is more suitable than FOB, using DPU is more suitable than DAP.

EC6: Cost of Insurance

With the new changes in insurance requirements of the two terms CIF and CIP in Incoterms 2020 compared to Incoterms 2010, the variable "Cost of Insurance" is necessary to consider when choosing delivery terms under Incoterms, accounting for over 71% agree and strongly agree. Although it is a new sub-factor, it has been researched and included by the authors compared to the original model based on the results of expert interviews and quantitative research, this is still an important variable to pay attention to.

Specifically in Incoterms 2020, levels of insurance coverage between CIF and CIP were cleared, in CIP insurance coverage must comply with "Institute Cargo Clause A" or similar and CIF insurance coverage must comply with "Institute Cargo Clause C" or similar. In addition, the insurance shall cover, at a minimum, the price provided in the contract plus 10% (i.e. 110%). Each level of insurance will cover different types of risks and the cost for each type of insurance will also be different. Therefore, in order to balance the cost of insurance to match the expected budget, the exporter and importer need to agree on the choice of delivery terms that comply with the appropriate level of insurance.

In Vietnam, insurance costs of insurance companies are calculated according to the formula CIF = (C+F)/(1-R); I = CIF x R (in which, I: Insurance fee, C: Cost of goods, F: Freight costs, R: Rate of insurance) (Bao Viet Insurance). In particular, the insurance premium rate R will vary according to the classification of goods, with insurance "A" being the highest and insurance "C" being the lowest, specifically, for example, according to the list of PJICO import and export goods insurance premium rates, the premium rate of "A" ranges from 0.15% to 0.4%; "B" rates range from 0.08% to 0.15% and the lowest "C" rates are around 0.05% (PG Insurance, 2021). In general, with the above formula for calculating, the rates between different insurance companies do not fluctuate strongly.

However, the reality of using insurance by enterprises in Vietnam, in the research of Associate Professor - Dr. Hoang Manh Cu of the Academy of Finance, shows that businesses are implementing export insurance in the form of "skimming" but not going into depth (Finvest, 2020). According to data from the Vietnam Insurance Association, Vietnamese insurers can only exploit 6 - 7%, the rest is left open to foreign businesses. The first reason is that exporters often apply FOB delivery terms (delivery on board). Therefore, the right to purchase insurance will belong to the overseas importer. The second reason is that the capacity of insurance enterprises is still limited, the competitiveness is low, it is difficult to convince foreign importers to give them the right to buy insurance in the country.

Moreover, exporters can consider choosing Incoterms rules whether or not to have the right to "surfing" on the insurance market. In other words, if the cost of insurance in the insurance market tends to decrease, the export enterprise should use the delivery terms under which they buy insurance in order to profit from fluctuations in premiums between the time of signing the sale contract and the time of purchasing the insurance. On the contrary, if the insurance market is expected to increase, the exporters should use the terms under which the other party buys insurance to avoid losses on fluctuations in insurance premiums between the time of signing the sale contract and the time of insurance purchase.

In case the insurance premium on the market is stable, exporters still have advantages when they win the right to buy insurance, and can even make more profits if they take advantage of the principle of "buying wholesale and retail". The use of commercial terms with the right to buy insurance will create many benefits for both the country and the business.

4.2.2.3 LE factor

On the basis of the obtained results, the authors determined that the LE factor had the lowest affecting among the three factors RA, EC, and LE (with a regression coefficient of 0.172). This result is similar to that of Unal and Metin (2021) in Thailand, but according to Hajdukiewicz, Bożena Pera (2021) in Poland and Hien (2009) in Vietnam, there are 2 observed variables in LE that have not been rated highly, specifically analyzed below.

LE1: Complexity of Transportation

The complexity of transportation collected 58.94% of surveyors agree and 10.65% disagree to consider when choosing delivery terms under Incoterms 2020 of exporter in Vietnam. In comparison with related study, the findings of Pera (2021) on companies operating in Poland is considering this variable at a relative level with respect to external factors affecting the choice of Incoterms. However, in the research work of Unal, Metin (2021) in Thailand, the authors assessed that complexity of transportation has the most affecting level in the LE criteria when choosing Incoterms.

Transport infrastructure plays an important role in the choice of mode and terms of delivery facilities of businesses. Compared with countries without sea routes such as Mongolia and Laos, Vietnam possesses advantages in terms of geographical position bordering the sea with a coastline stretching 3,444km (CIA World Factbook), which creates favorable conditions for foreign trade partners. Enterprises can flexibly choose groups of delivery terms under Incoterms 2020 depending on the convenience compared to the place of delivery.

For goods delivered at the border such as the Mong Cai border gate, Lang Son border gate, Lao Bao border gate..., the main methods of delivery are FCA and DAP. At that time, the border was the area where the party transferred goods. For goods delivered at seaports such as Hai Phong port, Da Nang port, Saigon port... FOB, CIF terms are usually applied. However, due to Vietnam's topographical characteristics, ports in Vietnam are mainly shallow water ports, so it directly affects the ability of ships to enter and exit ports, especially ships with large tonnage. Therefore, in order to overcome this shortcoming, the FAS term should be used to place the goods along the side of the ship.

In addition, the complexity of transportation also comes from multimodal transport. Not every transaction can be smoothly transported from the exporting country to the importing country through a single shipment, depending on the destination and the two parties' agreement, the exporter will deliver the goods by multimodal or use a transshipment port. This will create complications in freight transport, stemming from unintended risks that often occur when handling goods to the serial vehicle such as loss or damage of goods due to many times of loading and unloading or stemming from the problem of arranging temporary storage locations for goods. With the increasing volume of export goods, it is increasingly difficult to keep seats at shipping lines and airlines. Therefore, while negotiating and choosing delivery terms under Incoterms, exporters need to consider carefully to avoid receiving unnecessary damages.

LE2: Risks

In a contract for the sale of goods, depending on many different aspects in each case, the time of risk transfer is not the same. As mentioned in the description of variables, there are many risks that exporters can face, of which two main groups of risks are country risk and delivery risk. The research work of Unal and Metin (2021) found the similarity in the perspective of risk sub-factors that have influence in the choice of delivery terms under Incoterms 2020. Matching with the result of the survey, 82.51% of respondents who agree or strongly agree. However, this determination is in contrast with the study of Hajdukiewicz, Bożena Pera (2021) and the study of Tuan Anh (2014) when these authors assessed risk as the least important in choosing the delivery terms under Incoterms of exporting enterprises in Vietnam.

Firstly, in terms of country risk, exporters in Vietnam can face significant political risks when doing business in different countries. Some risks such as new elections, sanctions or pressure from other governments, etc can rapidly change the political situation. In general, the more stable a country's business, financial, and social systems are, the less political risk that country has. For example, in the face of recent political and diplomatic developments between the United States, Western countries-Russia-Ukraine, exporters in Vietnam are likely to bear many risks (VietnamPlus, 2022b). According to the Ministry of Industry and Trade sent associations and businesses warn them about the possibility of delayed delivery of goods due to waiting for customs clearance for many days, leading to risks of goods and risks in the payment process, thus affecting select delivery terms under Incoterms. In addition, according to the Ministry of Industry and Trade, the current political tension between the Russian Federation and Ukraine is one of the main reasons for the increase in market prices of some raw materials for production and consumption such as oil, wheat, aluminum, nickel, corn... because the production and export market shares of these countries are very large.

This problem causes great damage to exporters when choosing delivery terms needed to pay shipping costs. In this case, when using group D provisions, the exporter will have to bear the risk of loss of or damage to the goods in transit to the final destination, must compensate the buyer for damage caused by delayed delivery, and at the same time bear the risk of paying shipping costs in advance. Therefore, facing this situation, exporters should monitor and evaluate to choose favorable terms for the enterprises themselves, preferring to use the Incoterms group with few obligations, only need to bear the costs and risks during transportation in the exporting country such as groups E and F.

Secondly, delivery risks can come from subjective human error or due to the impact of external circumstances, objective factors (due to weather, unexpected accidents, nature of goods, etc). The natural conditions that are most likely to affect an import-export business are natural disasters, floods, epidemics, earthquakes, tsunamis, etc. Especially, for businesses that export goods that carry seasonality and are greatly influenced by natural conditions such as agricultural products, seafood, etc when natural disasters occur or storage conditions are not guaranteed, the use value and commercial value of goods will decrease rapidly.

In these cases, enterprises in Vietnam should choose to export under CIF term instead of FOB; because when delivering goods under CIF term, exporters in Vietnam will be very proactive in delivering goods, not having to depend on the ship (or container) designated by the importer. When

the goods are gathered at the port of delivery or in the warehouse, the risk still belongs to the seller, so in the case of dependence on foreign customers, the slow arrival of the ship causes damage to the goods (especially goods that need to be stored in the right conditions), the seller is still liable for damages and compensation.

As example to clarify how the delivery risk factor affects the choice of delivery terms under Incoterms, the authors have studied and analyzed based on the trend of adjusting Incoterms choice before and after the Covid-19 pandemic in Vietnam's agro-forestry-fishery export industry. In the past, agricultural, forestry, and fishery exports were mainly exported by delivery method at Vietnamese ports (FOB). But since Covid-19 occurred globally, agro-forestry-fishery exports have seen great changes in choosing delivery terms, most of the purchasing partners requested to switch to delivery at the port of the country import (CIF) (VnEconomy, 2021).

According to the Vietnam Coffee and Cocoa Association, the reason for this trend of shifting from FOB to CIF is that from 2020 to now, freight rates for shipping routes from Asia to Europe and North America have continuously increased high, has increased by 5-6 times compared to the same period last year. Therefore, coffee importers do not want to sign FOB contracts anymore but require sellers in Vietnam to switch to CIF delivery. In 2020 and in the first half of 2021, about 35% of coffee exporters accept to switch to CIF delivery.

LE3: Customs/ Bureaucracy

In international business, the legal environment is much more complicated, because the legal standards and regulations of different countries are different. With 77.95% of respondents agreeing and 4.94% disagreeing, the Customs / Bureaucracy in the LE factor is a considered element. In the study of Hien (2009), the author evaluates the factor of tariffs ranked last and least important. This is also the opinion of Hajdukiewicz and Pera in a research paper in Poland in 2021, according to them, the element of Legal regulations on foreign markets is ranked 7th out of 9 factors affecting the choice of delivery terms under Incoterms 2020.

The issue of customs and bureaucracy will affect the process of choosing Incoterms in two directions, firstly, the exporter's customs in Vietnam will affect the process of border clearance in his country and secondly, the customs procedures of the exporter in Vietnam customs when exporting must be responsible for the customs clearance process of other countries.

Firstly, the issue of customs/ bureaucracy in Vietnam in recent years has been improved and there have been positive changes. Accordingly, information on import-export administrative policies and procedures is easier to access, information quality, support, and answers of agencies when businesses have problems in accessing information are also significantly improved. Positive changes have been recorded by businesses, from the declaration of documents, physical inspection of goods, tax payment, tax refund/no tax collection, to complaint settlement, specifically, reducing overlap, duplicate in the post-clearance inspection. Enterprises also appreciate the service quality of customs officers and employees more highly than in previous years.

In the process of development, Vietnam Customs has continuously and persistently implemented reforms and modernized, achieved many remarkable achievements in order to simplify customs

procedures and support enterprises to carry out customs procedures import and export customs (Portal of Binh Phuoc province, 2021). Specifically, the Customs sector has built a complete and complete system of customs laws and policies in a modern and synchronous direction. Customs procedures are simplified; the method of carrying out customs procedures has been fundamentally changed, from manual method to electronic method, electronic customs procedure. In particular, the application of information technology has made a leap forward.

All the development efforts of the customs sector and the improvements in bureaucracy procedures in Vietnam have increased the satisfaction level of enterprises with the implementation of bureaucracy procedures in the customs field. Therefore, exporters in Vietnam that provide customs clearance procedures will be more convenient and time-saving, and it will not cause difficulties in the process of choosing delivery terms under Incoterms. Up to 10/11 terms stipulate that sellers carry out an export clearance in their own countries, so when customs clearance and bureaucracy procedures are not a big obstacle, exporters can flexibly accept all delivery terms, thereby promoting export trade.

Secondly, with the issue of customs clearance and bureaucracy procedures at foreign ports, Vietnam still faces many difficulties. For example, from the beginning of 2019 onwards, China continuously tightened the quality management standards and the origin of agricultural products, fruits, and vegetables imported from Vietnam into China (Thanh Ha, 2021). Recently, China asked Vietnam to suspend the export of fresh chili peppers to China due to detecting many illegal shipments or stopping the mango export status of some Vietnamese agricultural product exporters due to violations of regulations on quality standards. This greatly negatively affected international trade transactions, causing damage and delay in the transportation process, especially dangerous for exporters if they are choosing group C and group D, they may lose the entire cost of the carriage.

In order to minimize the risks related to different customs laws and regulations between countries as in the example above, exporters in Vietnam can read and understand the administrative procedures and customs clearance regulations in different countries through regulatory documents and information on the official websites of each country. However, in reality, not all businesses can take care of all regulations and policies when importing customs clearance, especially in large, fastidious markets such as the US and Japan. Only when the exporting enterprise must have sufficient knowledge, qualifications of the staff, financial ability, and the scale should choose the DDP terms, in charge of the import clearance. Conversely, for businesses that cannot afford to handle these formalities themselves, the seller may have to use a customs broker or let the buyer clear the import clearance to avoid such risks.

LE4: Distance

The distance between the two parties has a relatively good rate - 68.44% of export enterprises who agree or strongly agree with it, and just 7.22% of interviewees disagree. Compared with finding of Unal and Metin (2021), distance is found to be influential for exporters. However, the study about the case of companies operating in Poland (Hajdukiewicz & Pera, 2021) reveals that geographical distance has the strongest influence on companies' decision-making on Incoterms.

According to the General Department of Vietnam customs, Vietnam's largest export market in 2021 is Asia with a value of 161.94 billion USD, equivalent to approximately 48.2% of the total export value of the year. In particular, the prominent exporting countries are China, Japan, Korea and countries in ASEAN - all of these countries are geographically close to Vietnam.

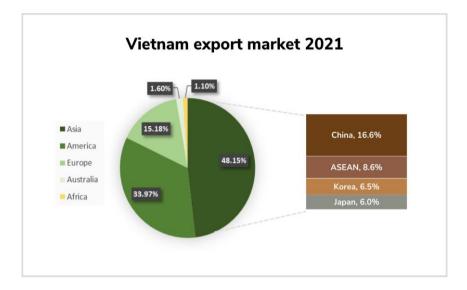


Chart 4.9: Vietnam export market 2021 (Source: General Department of Vietnam Customs)

In addition, according to the survey data of the group, 62.36% of enterprises export to Asia - the market with close geographical distance.

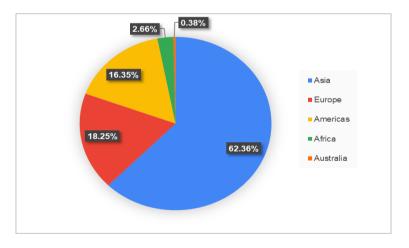


Chart 4.10: Popular export market of exporters in Vietnam (Source: Data compiled from survey results)

Exporting to ASEAN, China, and other nations that are physically close to Vietnam helps firms save on freight and warehousing expenses, as well as choosing transportation options more freely. Furthermore, because these countries have obvious similarities in weather, culture, lifestyle, as well as commodities and use demands (particularly for ASEAN countries), Vietnamese goods that match the quality and price standards would easily dominate the market. According to Nguyen Phuc Nam, Deputy Director General of the Asia-Africa Market Department (Ministry of Industry

and Trade), Thailand market favors Vietnamese dried fruits and textile products; Indonesia and the Philippines demand many generators, water pumps, telecommunications equipment (Hanoimoi, 2020). With the above advantages, trade with countries with a close distance will help exporters in Vietnam more flexibility in accepting all delivery terms under Incoterms, because exporters will have to fulfill significantly less obligations, costs and risks than when exporting to a long-distance country.

The longer the geographical distance, the more problems in transporting goods between two countries such as risks in transportation and cargo insurance, thereby increasing costs. When transporting goods over long distances (exporting to the US, Europe), the sea freight rate for each container from the loading port to the unloading port will increase due to the cost of raw materials and longer transportation time. In addition, when transporting heavy goods over long distances, the transportation of goods requires insurance, which also increases the cost of trade transactions. If the goods are perishable, the shelf life is short, and the preservation during long-distance transportation is also difficult, which can lead to many risks of the goods. Therefore, when dealing with customers who are more geographically distant, exporters must consider choosing groups of delivery terms under Incoterms that carry less risk and incur lower costs, for example group E, F. And conversely, for transactions with a close distance, the exporter will not need to consider too much the factors of risk and cost, thereby can flexibly accept any delivery terms requested by the importer.

LE5: Country negotiating position

"Country's negotiating position" gathered 53.23% agree of respondents when surveying about factors affecting the choice of delivery terms under Incoterms 2020 of exporters in Vietnam. In other findings, specifically the study of Diem 2019 about the current situation of using Incoterms in Vietnam, she found that the country's negotiating position has a moderate influence on the choice of delivery terms.

Becoming a partner of large and developed countries such as the US and China, when the reputation and goods of Vietnamese firms can be disseminated in huge markets, is a very positive indicator. There are several advantages for both the country and the enterprise. In truth, many organizations, particularly small and medium-sized enterprises (SMEs), are constantly forced to lower their position in order to accept customer-specified delivery terms while negotiating sales contracts with large corporations, worldwide manufacturing (like Europe, America, Japan, Korea...). The reason for this is that Vietnam's import-export enterprises are mostly small and medium-sized, and their reputation and position in the international arena are not strong enough; the quantity of exported goods is insignificant in comparison to the size of the partners; and export experience, as well as the ability to handle risks during transportation, are still lacking. As a result, it is generally preferable to allow an experienced importer contract transportation and be liable for any difficulties that arise during shipping. It is also exceedingly easy for partners with a greater role and position in the transaction to influence the decision to choose delivery terms under Incoterms that are advantageous to them. Large-scale partners have more experience, and they will often only import FOB since they are hired and insured. When importers use their own shipping

lines, they will rapidly get the appropriate documentation for fast settlement, reducing time and enhancing delivery and payment efficiency.

In many situations, domestic firms have not adequately studied their partners before entering into commercial ties, frequently searching for partners on the Internet without any exploration or inspection. And, knowing that this is a large market like the US, enterprises in Vietnam would frequently go to any length to send their products to the US. Even so, because they want to sell goods, some organizations frequently create advantages for their partners in contract terms by adopting terms with a very lengthy point of risk transfer and the requirement to pay costs in advance (such as group C and D clauses). However, because the partners are not reliable importers, many importers delayed payment, were defrauded, or went bankrupt when the items came.

LE6: Competitive level of commodity market

As mentioned in the variable description, sale offers with a higher level of seller obligations will create more competition than competitors. This variable was received 65.78% of respondents who agree or strongly agree. According to VIAC, Mr. To Binh Minh concluded that competitive level of commodity market is an element that should be balanced when choosing delivery terms under Incoterms of export enterprises in Vietnam.

Vietnam's export goods are often competitive in the international market by many factors such as quality, brand name, and price. Moreover, for the markets of ASEAN countries, Vietnam's export goods also face a lot of trade remedies and investigations such as anti-dumping, self-defense investigation and so on. The Department of Trade Remedies (Ministry of Industry and Trade) said that by 2020 the Philippines had investigated 13 trade remedy cases against Vietnamese exports, Malaysia had investigated 10 and Indonesia alone investigated 11 cases (Vietnam News Agency, 2021). All these investigations not only reduce Vietnam's competitiveness and reputation in the international arena, but products will also be restricted when exporting to these countries. Currently, products are limited not only to base metals such as iron and steel, but also to many new products such as ceramic tiles, plastic, cigarette paper, etc. For other major markets such as the United States and Japan, although these countries have high demand and great consumption, they are the most fastidious markets in the world. The United States has very high requirements on food safety and hygiene, technical barriers in terms of labor and environment. Besides, Vietnamese goods have to compete with other groups of goods manufactured in the host country or from other competitors from Asia, South America, and even Africa.

Facing the difficult market situation from many sides, the Government and the Ministry of Industry and Trade of Vietnam have also issued and advocated the implementation of many measures to increase the competitiveness of Vietnam's exports such as the signing FTAs, negotiating and promoting the opening of exports, guiding industry associations and businesses in the implementation and compliance with procedures and regulations for quality management in each country. Besides the government's efforts, businesses are also very active in taking measures to increase their competitive advantage in the international arena. In bidding, where there is competition between suppliers to sell, sellers compete with each other not only in terms of price but also in terms of trade. According to VIAC, when exporting to highly competitive markets, using group C or group D to offer will create more competition compared to group E or F. In contrast, when importing goods from markets with fierce competition, using group E or group F to order will create more competition than group C or group D. In other words, sales orders represent higher obligations of the seller, and purchase orders represent higher obligations of buyers, which will create more competition than competitors. Therefore, the choice of delivery terms under Incoterms should be carefully considered so that exporters in Vietnam can easily receive commercial contracts.

4.3 Conclusion

In this chapter, an overview of Vietnam's export activities from 2017 up to now and the general use of Incoterms of export enterprises in Vietnam are illustrated. After that, the data is collected and analyzed by both qualitative and quantitative techniques to find out what the achievements are. By using SPSS, proposed models conducted in Chapter 3 were tested and all the hypotheses are confirmed.



RECOMMENDATIONS & CONCLUSION

In this chapter, the result of the research is described further by stating solutions and recommendations for several limitations. This chapter also answers three research questions in chapter one. In addition, be clarifies the limitations and recommendations for further research and thesis conclusion.

CHAPTER 5: RECOMMENDATIONS AND CONCLUSION

5.1 Summary of findings & answer the research questions

5.1.1 Summary of findings

The above study is based on the original model in the 2021 research paper by Unal and Metin on the factors affecting the choice of Incoterms 2020. After the research process, including both qualitative and quantitative research, the authors found some new points in findings when compared with the original study.

First, regarding the research model, thanks to the qualitative analysis method, through in-depth interviews with 11 experts in the field of international trade, the authors decided to add three more observed variables to make the scale for quantitative research more accurately with the situation of Vietnam, namely "cost of insurance", "competitive level of commodity market" and "country negotiating position".

Second, related to research methods and data analysis, in the original study, Unal and Metin chose qualitative research using the FAHP (Fuzzy Analytical Hierarchy Process) method, thereby determining not only the influencing degree of three factors RA - EC - LE but also each observed variable within them. However, in this study, the authors add a qualitative research method combined with SPSS quantitative analysis to determine the influence of three main factors, giving an overview and analysis of choosing delivery terms under Incoterms 2020 of export firms in Vietnam.

Last but not least, the results of this study suggest that the effect on the choice of delivery terms under Incoterms 2020 of export firms in Vietnam of Efficiency - Cost (EC) factor is the strongest. This is consistent with the results in the original study. However, the authors found that the regression coefficient of the Resources - Advantage (RA) factor was higher than the Legitimacy - Environment (LE), proving that the LE factor had the weakest influence on the choice of delivery terms under Incoterms 2020 in Vietnam, in contrast to the results of Unal and Metin in 2021.

5.1.2 Answer the research questions

(1) What is the role and meaning of the choice of delivery terms under this rule in export activities?

General theories of Incoterms 2020 have been presented by the authors in chapter 2, section 2.2, including definition; history of Incoterms; roles of Incoterms in export activities and the characteristics of each Incoterms 2020 rule. In addition, the importance, difficulties and advantages of choosing appropriate delivery terms under Incoterms in export have been mentioned in section 2.2.2 of chapter 2.

(2) Which factors influence the choice of delivery terms under Incoterms 2020 and extent of their influence?

Through research and data analysis results of Chapter 4, the correlation of each quantitative factor to the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam in the table below:

Factor	Sig.	Beta Standardized Coefficient
Resources - Advantages	.000	0.204
Efficiency - Cost	.000	0.455
Legitimacy - Environment	.003	0.172

Based on the magnitude of the normalized regression coefficient Beta, the order of influence from large to small is EC (0.455) > RA (0.204) > LE (0.172). Equivalent to:

- Efficiency Cost is the factor that has the greatest effect on the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.
- Resources Advantages is the factor with the second strongest effect on the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.
- Legitimacy Environment is the factor that has the least effect on the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam.

(3) What is the recommendation for the choosing process of delivery terms under Incoterms 2020 for export firms in Vietnam?

The answer of this question is provided in the following part of chapter five.

5.2. Vietnam's export development orientation in the period 2021 - 2030

5.2.1 The context of Vietnam and the world in the period 2021 - 2030

According to the Draft Strategy for Import and Export of goods 2021 - 2030 issued by the Ministry of Industry and Trade of Vietnam, due to the impact of the Covid-19 pandemic and world trade wars, world economic growth continues to decline in the short term, recover in the medium term at a slow speed. In the period from now to 2030, Vietnam's international trade market will face certain opportunities and challenges. Vietnam can take advantage of opportunities in developing, expanding markets by joining bilateral and multilateral free trade agreements (FTA) with countries around the world. As a developing country, the influence of the Fourth Industrial Revolution will help Vietnam attract more foreign investment and have more opportunity to absorb and apply advanced science-technology, from which enhances competitiveness in import and export (Ministry of Industry and Commerce, 2021c).

However, Vietnam's participation in extensive international integration makes competition increasingly fierce, export goods must meet increasingly high and strict regulations, standards of import markets, especially trade protection measures such as technical barriers, quarantine standards, environmental sanitation and regulations on trade remedies, anti-dumping... Moreover,

the Covid-19 pandemic has made the consumption market of exported goods face many difficulties and cannot recover in the short term, putting Vietnamese exporters at risk of losing market share in many major markets in the world.

5.2.2 Forecast of Vietnam's export products and markets by 2030

Based on the forecast of Vietnam's import-export turnover growth in the period 2021-2030, according to the three scenarios of the Ministry of Industry and Trade, in the coming period, Vietnam will orient to shift the export structure towards reducing exports of raw products, fuels and minerals; increase exports of processed and manufactured products, therefore raise the export values. Regarding the quality of exported goods, the government advocates improving the quality and content of processing and manufacturing; increasing the added value and competitiveness of exported goods; and actively participating in the global production network and value chains; building and developing a number of strong Vietnamese exports brands.

Regarding export markets, Vietnam advocates effectively implementing commitments, exploiting opportunities from FTA to expand and diversify export markets, especially strategic key areas (the United States, Japan, China, the European Union - EU, ASEAN), but not to rely heavily on a few major markets, seeking to exploit potential markets such as Russia, Eastern Europe, India, Africa... In more detailed, Vietnam's export-oriented goal in the 2021 - 2030 period is to increase the share of the EU's export market to about 17 - 18% of total export turnover by 2030; the Americas (mainly the United States) region to about 28 - 29%; maintaining the proportion of export markets in Asia around 49 - 50% by 2030, of which China 17 - 18%, ASEAN 9 - 10%, Japan 7 - 8%, South Korea 7 - 7.5 % (according to the Commodity Import and Export Strategy Report, Ministry of Industry and Trade, 2021).

With clear orientations for both key export products and markets, the Vietnamese government is ready to promote sustainable export development, recovering the economy quickly after the impact of the Covid-19 pandemic in recent years. This creates opportunities along with challenges for exporters in Vietnam when entering into international transactions. It is necessary to be careful in researching the situation to choose delivery terms under Incoterms 2020 that are appropriate and beneficial to both country and export business.

5.3 Recommendations to choosing appropriate delivery terms under Incoterms 2020 for export enterprises in Vietnam

5.3.1. Improve knowledge and experience of export staffs about Incoterms 2020

In the period of industrialization - modernization and international integration, human resources are an important element determining the development of the country and the competitive advantages of exporting enterprises. In fact, the training of human resources in the import-export industry in Vietnam currently has three basic forms: formal university training; spontaneous training at associations and centers and practical training at enterprises. Although there are 54 colleges and 11 intermediate schools and a number of faculties and departments at some universities, that are systematic and systematic training of human resources in this field across the country, human resources for the import-export industry in Vietnam are assessed as not only

lacking in quantity but also weak in quality. Because of limited professional knowledge and practical experience, staffs often choose delivery terms under Incoterms based on habits or the company's past transactions instead of carefully considering the favorable conditions in each specific case.

Exporting enterprises in Vietnam need to implement new training programs, and re-train and renovate the quality of their human resources in the direction of equipping them with new knowledge and skills in import-export business for existing human resources in the company. Especially when the percentage of export transactions using Incoterms 2020 delivery terms increases, businesses have to actively open classes or allow employees to participate in professional training courses, improve knowledge of staffs about Incoterms 2020: the new points to note in the new version of Incoterms such as the delivery process (loading and unloading goods, working with the carrier), customs procedures and insurance. Business courses can be referred to as "Import-Export Specialist" developed and implemented by the Institute of Human Resource Development - University of Economics, Ho Chi Minh City, or "Incoterms 2020-Specialization Training Course-An analysis from typical disputes and some notes for businesses when applying" by VCCI, Vietnam Chamber of Commerce and Industry.

The government also makes a significant contribution to training and supplementing knowledge for Vietnamese export workers. According to a seminar with the theme "Training and improving the quality of human resources on Import-Export (OdClick, 2020), Government agencies need to coordinate with import-export enterprises in Vietnam to implement solutions to improve and build high-quality human resources. Besides, the Ministry of Industry and Trade should develop strategies and projects on human resource development, especially high-quality human resources for the import-export logistics industry in the coming time. As in the draft Import-Export strategy 2021-2030, the Ministry should emphasize accelerating the implementation of fundamental and comprehensive innovation and improving the quality of training, focusing on modernizing and changing education methods, especially higher education, vocational education; and improving the level and ability to apply digital technology in accordance with the context of the Fourth Industrial Revolution. The models of training cooperation, especially the model of linkage between schools (or training centers) - enterprises with the state playing a leading role, should be widely applied, so that the choice of delivery terms under Incoterms 2020 would no longer cause difficulties and problems for exporters in Vietnam.

5.3.2. Be careful when transacting with new importers

Currently, many new and attractive markets with large consumption capacity have become the target of approaching and offering products of Vietnamese exporters. According to the Logistics Business Association (VLA), the impact of the COVID-19 pandemic caused all import and export trade to be delayed for a long time, even losing customers, therefore when receiving new and large export orders, exporters in Vietnam are easily subjective, caught off guard, and hastily negotiated commercial contracts without carefully understanding the new importer's information. This can make Vietnamese exporters fall into the trap of large-scale fraudulent organizations with very sophisticated tricks. Therefore, businesses need to be cautious, minimizing the choice of Incoterms

delivery terms of groups C and D with new partners doing transactions for the first time to avoid risks of fraud.

The case of loss of control, suspected of being scammed for 100 containers of cashew nuts worth more than 20 million USD exported to Italy in early 2022 is causing Vietnamese businesses to face the risk of losing their exported goods (VietnamPlus, 2022c). Although, the bulletin board of the General Department of Customs also has announcements about suspected fraud cases to warn exporters in Vietnam. However, in reality, policies to support export, trade promotion, market development and branding of Vietnamese products also have many limitations, not protecting the interests of exporters. The Ministry of Industry and Trade should propose the establishment of official databases, providing timely information to support exporting enterprises, and building a quick response channel with importing countries to quickly solve problems, complaints of exporters; minimize the return of exported goods, or stay in storage for too long to wait for the procedures to be resolved according to regulations, if any.

In order to minimize fraud in business with new importers, the authors propose a number of measures that businesses can apply as follow. Accordingly, the first measure is to carefully research information about the partner, and verify the strength and reputation of the partner before performing the transaction (according to Mr. Ngo Khac Le, representative of VIAC). Information collection must become a mandatory task of enterprises in the process of approaching, negotiating and implementing special contracts with new partners. Exporters in Vietnam need to carefully check and authenticate their partners through different channels, including the channel of the Vietnam Trade Office in that country. In addition, exporters can also quickly check through exporting companies in the same industry in associations; or proactively send their business registration in advance to their partners to have a basis for requesting them to resend business registration information.

The second measure for exporters is to minimize damage and risks when dealing with a new partner, the exporter needs to take control and ownership of the shipment until it is paid. (delivery terms group E, F). In international commercial transactions, because of distance and geographical inconvenience, most of the stages of negotiation or signing of contracts are completed via the internet or email. This generally increases the risk of fraud and uncertainty in payment. According to VCCI, exporters in Vietnam can choose EXW delivery conditions when they cannot guarantee the reliability of their partner businesses in foreign countries because then, the seller is not obliged to clear the goods for export. Under the EXW delivery terms, selling goods to an importer in a foreign country is similar to selling goods to a domestic buyer (VIAC, 2020). As a result, exporters in Vietnam can reduce their concerns about fraud or payment problems.

5.3.3 Enhancing the competitive position and signing contracts of export enterprises

5.3.3.1. Strengthen and promote relationships with partners

As confirmed in Chapter 4, the relationship between related parties such as customers, suppliers and forwarding agents are the criteria that influence the choice of delivery terms under Incoterms 2020 of exporters in Vietnam. Therefore, in addition to carefully learning information about importers when cooperating for the first time to avoid being scammed (as mentioned in section

5.3.2); exporters also need to strengthen and promote relationships with old partners to ensure stable profits, minimize the cost of finding customers or taking on new risks. The same is true in the choice of Incoterms rules, specifically as follows:

In the relationship with customers: When exporting to regular customers, the seller can save contracting time by choosing delivery terms under Incoterms used before. To strengthen this relationship, export enterprises should provide special services that fit with their capacity, create the greatest benefit, increase certain incentives and satisfy the needs of the customer. Exporters also need to pay special attention to the quality of goods. In October 2021, Vietnam continuously received warnings from the Dutch, Italian and Spanish health authorities about the detection of banned chemicals in bitter melon, seafood, and crustaceans (VTV, 2021). These cases all reduce the reputation of Vietnamese-branded export products in general and the company's negotiating position about delivery terms under Incoterms in particular. Therefore, exporters in Vietnam need to be transparent in the production process to meet international standards and maintain prestige and confidence in fastidious markets.

In the relationship with suppliers: For an intermediary exporter, relationship with the supplier is considered vital. If they are not interested in building a solid relationship with the supplier, they can break the contract signed earlier for the immediate benefit. Exporters can cement these relationships by entering into long-term contracts, maintaining regular communication for long-term and mutual benefits. Besides, ensuring the payment on time or mutual agreement detailing terms such as item description, price, shipping, payment terms... are essential to avoid confusion and dispute. Exporters can learn and apply comprehensive and automatic supplier management software to improve relationship building efficiency such as SimERP, KiotViet, gAMSPro and so on. By maintaining a long-term relationship with suppliers, exporters receive more incentives; able to get the necessary clearance documents, flexible to choose Incoterms rules without fear of the complexity of customs clearance.

In the relationship with forwarding agents: For small and medium-sized companies, hiring a forwarder is essential to minimize the risks of wrong documents, tracking goods and customs declaration in international trade. Similar to supplier relationships, exporters should sign long-term contracts, ensure on-time payments and information sharing with forwarding agents. Besides, exporters should hold quarterly meetings to review performance metrics, new transportation services, resolve problems before renegotiation, thereby consolidating long-term cooperation. Sellers also need to maintain credibility and ensure compliance with commitments by providing accurate data about the goods. By building a long-term relationship with reputable forwarding agents partly helps exporters feel secure when choosing any Incoterms delivery terms, opens up cooperating opportunities with many customers who require Incoterms groups C or D. In addition, if the two parties cooperate for a long time, the exporter can also ask forwarding agents for advice on choosing suitable Incoterms rules for some complex transactions; provide delivery notes; update freight rate trends to "surf" in the shipping market. For example, when freight rates tend to increase, exporters will choose the delivery terms which they provide transportation services to benefit from the price fluctuation between the time of signing the contract and hiring transportation (groups C, D).

5.3.3.2. Enhancing the country's export position in the international arena

One of the reasons affecting the competitive position of exporters in Vietnam is that the reputation and export position of the country is not strong enough (mentioned in LE5 - Chap 4). Currently, Vietnam's economy is still low compared to major partners like the US and Japan, therefore when negotiating delivery terms under Incoterms, exporters in Vietnam will often have to follow the terms specified by the buyer. This leaves the seller in a passive position, for example, large partners often appoint sellers to deliver goods under FOB, at this time the seller will lose the initiative to choose the means of transport and will not benefit from chartering.

In order to build up and expand the reputation of exports in Vietnam to countries around the world, the Government needs to seriously review the implementation of export regulations by enterprises, to avoid lawsuits and scandals that reduce reputation. Accordingly, the government needs to guide, manage the implementation of export tax laws, export anti-dumping laws, copyright laws... and strictly check qualified certificates during customs clearance. Businesses that violate these laws need to have strict punishments, carry out regular inspections and monitoring so that they do not re-offend. By doing that, Vietnamese export goods will avoid violations of regulations and laws in the importing country, increasing the country's export reputation, helping businesses improve their bargaining position when choosing Incoterms rules in their favor. Moreover, the import clearance for transactions using DDP terms will be easier and save more time for sellers. Besides, to create a sustainable export brand, the government also needs to encourage businesses to apply and certify international quality certificates. A number of international standards to ensure quality, safe and environmentally friendly products that exporters in Vietnam need to pay attention to speeding up certification such as ISO standards, IEC standards for electrical engineering; ITU standards for telecommunications and so on.

5.3.3.3. Implement policies to support enterprises in financial capital

When exporting goods, Vietnamese goods must compete with both goods produced in the host country and other global competitors. Therefore, to increase competitive advantage and sign contracts with major partners, exporters often have to accept offers and choose Incoterms rules that stipulate many obligations and risks such as groups C, D. However, affording these offers requires exporters to have good financial ability to meet regulations on payment of transportation costs and tariffs. To make it easier for businesses to access credit sources, the Government has advocated implementing direct capital support measures. Specifically, the Government issued Decree No. 39/2019/ND-CP on the organization and operation of the Small and Medium Enterprise Development Fund, providing opportunities for Southern businesses to access development capital (Dangcongsan.vn, 2021). Accordingly, this Fund partially financed the costs of investment items in building factories, purchasing machinery and equipment of the project, production and business plans of enterprises that meet the conditions prescribed by the Ministry of Planning and Investment. The capital support needs to harmonize the interests of three factors: credit institutions, enterprises and the country's mechanisms and policies. Therefore, the government needs to urge the bank to renew credit mechanisms and policies according to market principles; improving and shortening loan approval procedures for businesses.

5.3.4. Find out and choose appropriate, cost-effective modes of transport that are in line with the realities of transport infrastructure in Vietnam.

As a country with a favorable and strategic geographical position in the international trade map, possessing the east coast of the Southeast Asian peninsula and other transportation advantages, Vietnam attracts investment and has the advantage of comprehensive development of three modes of transport (marine, road, air). Enterprises in Vietnam also have the opportunity to have easier access to various means of transport such as trains, ships, trucks, etc. This creates a great challenge, requiring export businesses to learn and select appropriate, cost-effective modes of transport that are in line with the realities of transport infrastructure in Vietnam.

5.3.4.1. Reduce transportation costs

As mentioned in the findings and discussions in Chapter 4, many Vietnamese exporters have problems causing serious damage to the export process when transportation costs are high, specifically, Mr. Than Duc Viet, General Director of Garment 10 Corporation claims that costs have increased by 19% in 2021 on the same road as before, not only that, but businesses also have to bear countless other surcharges. This will limit Vietnamese exporters in choosing delivery terms, making it difficult to flexibly create competitive advantages for products. From there, the authors propose some feasible recommendations to reduce shipping costs, and assist exporters in choosing appropriate delivery terms under Incoterms 2020.

According to the Vietnam Logistics Business Association, most road transport units are small and fragmented, the rate of empty vehicles is still above 45%, plus the instability in gasoline prices and tightening regulations on vehicle weight lead to transportation costs being extremely high. One possible direction for this problem is to increase connectivity, encourage large transport enterprises to actively associate with small transport enterprises, actively work with transport operators and shippers to have reasonable transportation plans from the place of production to the place of consumption in order to reduce transportation costs. In addition, for rudimentary goods, raw materials such as coal, wood, chemicals and low-value but high-volume consumer goods, businesses can consider promoting multimodal transport connections, not only limit congestion at seaports, but also reduce the rate of empty cars on the road and save costs. Specifically, Mr. Hans Kerstens - Deputy Head of the Transport and Logistics Subcommittee of the European Chamber of Commerce in Vietnam (Eurocham) emphasized that the transportation of goods from Vietnam to Europe needs adjustment, not only depending on sea transport (VietnamPlus, 2021). Exporters should diversify modes of transport to combine the advantages of other modes of transport to ensure delivery schedules, cost-effectively, and avoid unexpected risks. This affects the choice of delivery terms under Incoterms 2020 of exporters in Vietnam, flexibly choose Incoterms for multimodal (FCA, CPT, CIP) instead of the group of terms that only apply for ocean transport (FOB, CIF, CFR, FAS)

In fact, many Vietnamese exporters often suffer "double losses" when choosing to apply and maintain export FOB (VnEconomy, 2021). Although with FOB, the main freight is borne by importers, exporters in Vietnam still have to pay the shipping company all kinds of surcharges such as warehousing, loading and unloading costs, shipping costs. balancing containers... Up to

now, there is no Government party managing these surcharges, because these surcharges are not registered with a competent authority in Vietnam but set by ship owners. With this situation, in the opinion of Mr. Phan Thong, General Secretary of the Viet Nam Shippers' Council (VNSC), exporters in Vietnam should change exporting at CIF prices, thereby having the opportunity to directly negotiate and sign shipping contracts freight with shipping lines or agents. During the negotiation process, the exporter has the right to put these issues in discussion and delivery contract, which can be stated: the shipping company is not allowed to collect any additional surcharges than the payment terms clause in the contract. In this way, it will be possible to avoid unreasonable charges when delivering goods to the ship. Enterprises also need to strengthen a long-term relationship with a reputable carrier, which will both benefit from stable prices and help minimize unreasonable costs in exporting goods.

Finally, depending on the Incoterms delivery terms chosen, the party with the right to choose the specific time and place of delivery will be either the buyer or the seller. For example, under group F the buyer will own the right to choose the time and place of delivery, but with Incoterms group E, C, D, the party with this right is the seller. However, according to VIAC, there will be situations where sellers have not yet prepared the goods before the delivery time selected by the buyer, and they have to pay additional fines for late delivery and waiting costs of the means of transport. Conversely, when the seller is ready to deliver the goods but has not yet arrived at the delivery time selected by the importer, the cost of storage and the risk of goods waiting will be borne by the seller. Similar to the place of delivery, if the contract stipulates place of delivery in a general way and the importer chooses a specific place of delivery quite far from the warehouse, the seller bears greater costs and risks of inland transportation (VIAC, 2020). In order to avoid being dependent on the process of transporting goods, the authors suggest that Vietnamese exporters need to actively choose delivery terms in accordance with the delivery time and place of receipt in the contract based on the situation of goods being prepared in order to avoid warehousing costs or capital stagnation.

5.3.4.2 Select delivery terms in accordance with Vietnam's transport infrastructure

In fact, the transportation system in Vietnam has not met all the needs and growth rates of the economy, still asynchronized, hindering businesses when choosing delivery terms under Incoterms 2020. For example, when exporting at FOB, the buyer specifies that a ship with too large tonnage will not be able to dock at the port of loading because Vietnam's seaport is shallow, and must be anchored at the buoy at the port. At that time, the seller must incur additional costs and risks to carry the goods from the wharf to the ship, this is also an uncompensated risk in insurance on the grounds that the validity of the insurance has ended when the goods are unloaded from the ship to the barge where the goods are stored outside of the transport journey. Therefore, exporters need to understand the actual infrastructure of the place of delivery in Vietnam to reduce costs and risks of goods in the process of delivery.

In some cases, the vehicle of the specified buyer is not suitable for Vietnam infrastructure, enterprises should actively negotiate and win the right to transport with Incoterms group C and D. Thus, businesses can be more proactive in choosing the right vehicle and loading place based on the quantity of goods, the maximum load of transportation means and the responsiveness of the

train station/port/airport infrastructure, creating convenience for businesses in loading and unloading, minimizing costs incurred.

Unfavorable transportation systems can make it difficult for businesses to use delivery terms as desired. This requires the government to have solutions to upgrade and strengthen transport infrastructure to support export businesses. Firstly, gradually improve, upgrade and modernize the North-South railway line; connecting railways with industrial parks and seaports, especially with Hai Phong international port. Besides, maximizing the advantage of the location of international gateway ports, from which businesses can choose groups of FOB and CIF terms without worrying about restricting the entry and exit of ships, especially ships of large tonnage. Second, the government should speed up and simplify the process to eliminate port bottlenecks, reduce storage time and costs for faster delivery. Finally, the government should also have incentives to reduce taxes on goods by road to encourage businesses to apply multimodal transportation when exporting light items to neighboring countries such as China, help exporters to choose more economical and cost-effective delivery terms.

5.3.5 Understanding the nature of export commodities

In fact, many businesses currently do not understand the nature of the goods they transport, they often choose delivery terms under Incoterms based on habits or imitate the choices of other exporting companies. However, because each type of goods has its own characteristics, if only using Incoterms based on habits, the lack of flexibility can lead to unnecessary risks for Vietnamese exporters.

Understanding the nature of goods helps businesses easily choose the delivery terms under Incoterms 2020 suitable for each type of goods. For example, with perishable goods such as fresh fruit and food with small quantities, exporting enterprises can choose to use air freight for transportation to save shipping time, but the transportation costs are quite high. For sea freight, with low cost and large payload capacity, however shipping time lasts from weeks to months, this method will be suitable for non-perishable goods, finished goods such as clothing, textiles. Exporting enterprises need to understand the nature of goods, perishable or precious nature of the goods in the transaction to choose the right shipping method and delivery terms, create a competitive advantage over global competitors.

To have more suitable choices, businesses must invest in researching and improving preservation for a long time but ensure quality, one of which is the use of cold storage. According to the assessment of the authorities, two years ago, the service cold storage system in the country was having a very high exploitation rate at 90%, showing that the demand for cold storage is increasing. According to statistics of the Ministry of Agriculture and Rural Development, Vietnam currently has 48 cold storages for preserving agricultural and aquatic products, but not enough to meet the needs of enterprises, especially in the context of difficult export, the lack of cold storage puts businesses under a lot of pressure on costs and the backlog of goods with no place to store, causing significant damage. To overcome that situation, according to Mr.Truong Dinh Hoe, businesses need to actively invest in cold storage systems. In addition, VASEP has also proposed that the Government should give support to enterprises investing in this field, such as reduce interest rates from 50% to 100% for investment loans to build cold storage with a minimum capacity of 5,000 pallets or reduce 50% of corporate income tax for the first 2 years since cold storage is put into operation (State Audit Vietnam, 2021).

Currently, in order to meet the export orientation to distant and potential markets, enterprises should invest more in preservation technology, keeping quality for a longer time. With some goods, businesses can choose and research deep-process methods such as drying or produce canned agricultural products but still ensure that it meets the prestigious global certification and testing standards, for example exporting to the EU market needs a certificate of assurance of no harmful alien organisms and no residue according to EU standards. Therefore, the exporter will minimize the risk of goods being damaged due to overdue when transporting to the importing country far away for a long time. As a result, sellers can be more flexible in choosing delivery terms under Incoterms that bear more costs and risks to create certain advantages for businesses.

Furthermore, to have a better understanding of the export commodities' nature, as well as the standard provisions for each, Vietnamese export enterprises need to strengthen their participation in industry associations and forums related to this type of export products, learn delivery experience about the transportation and packaging of each particular item, choose Incoterms more suitable for export commodities.

5.3.6. Strengthening measures to minimize risks of goods in the transportation process

Before deciding to choose delivery terms under Incoterms 2020, the exporter needs to consider the risk factor in the transportation of goods. If they find it too risky, Vietnamese exporters can choose to export goods in groups E, F or C. Besides, if the risk is likely to occur only in a certain route of transportation, exporters may not necessarily need to change Incoterms from one rule to another, but simply change the place of regulation accompanying the rule. For example, instead of using a DAP associated with importer's destination, a seller can simply convert to an airport or port-linked DAP to avoid the risk of inland transportation.

To reduce the risk of goods from long-distance transportation, improper loading, sudden weather changes (natural disasters, storms, floods...), the packing of goods, especially precious, bulky, heavy goods or fragile goods need to comply with international standards. According to VIAC, Incoterms rules do not address the seller's packaging obligations, exporting enterprises are only obliged to pack packages and sign codes according to the provisions of the contract or in a manner suitable for the transportation if the contract does not specify. However, both parties should have negotiations, clearly mentioned in the contract, to easily divide risks, because if the goods are lost due to improper packaging, the insurance company will not be responsible for the loss of the goods. Furthermore, to ensure that the goods are not damaged in the event of a collision or weather influence, the packaging material should be carefully selected such as using air bags, bubble wrap or protective foam molds, as well as corrugated materials. Besides, with air freight, use damage indicators to assess and decide shipping method/ delivery terms according to Incoterms 2020 to keep the goods safe.

Last but not least, predicting and monitoring regional weather information, then assessing the level of the "Force Majeure" risks is necessary for exporters when choosing delivery methods,

shipping time or whether to purchase insurance. For example, with the news about an upcoming storm in the East Sea, exporting with delivery terms under Incoterms by sea at this time will not be a smart choice, exporters need to actively negotiate with partner about changing the time or mode of transport, thereby select the appropriate delivery terms under Incoterms.

5.3.7. Be careful and take advantage of the right to buy insurance when exporting

Unlike Incoterms 2010, Incoterms 2020 retains the minimum coverage level (C) in CIF term but has changed the coverage level of CIP term to the maximum, equivalent to insurance level (A). This requires exporters in Vietnam to be careful in choosing Incoterms, avoiding the case of choosing terms where the insurance does not cover all the risks that may arise. For example, according to VIAC, while buying and selling raw materials such as raw wood, exporters can choose CIF term with minimum insurance coverage level (C) but for finished products, especially high-value goods, easy to steal or damage, the insurance level (C) will not be enough to cover risks such as seawater infiltrating the ship's compartment. In that case, exporters should actively change to exporting CIP price or negotiate for level (A) insurance in sales contracts. Export enterprises should also clearly note that the insurance coverage level A, B, C all exclude the risk of war as well as strike and some other exceptions. If the enterprise predicts that the goods will face such risks, it is necessary to negotiate additional provisions on insurance obligations in the contract (VIAC, 2020).

Another problem about insurance mentioned in the discussion chapter 4 is that currently, Vietnamese businesses have not taken advantage of and exploited domestic insurers, leaving almost foreign parties in charge (93-94%) because of the habit of using FOB and the weak competitive position of domestic insurers. Export enterprises need to realize the important meaning of the right to buy insurance, gradually changing from the habit of exporting FOB to exporting CIF, especially with large value and high-risk transactions, thereby taking the initiative in shipping tracking and choosing to buy insurance at domestic enterprises. At the same time, choosing to buy insurance at a domestic company will both help save foreign currency, facilitate transactions and contribute to the development of Vietnam's insurance industry. Not only that, when choosing to export at CIF, the exporter can take advantage of the opportunity to build a relationship with an insurance company in Vietnam, thereby getting information about insurance market prices, then based on that information predicting market signals, "surfing" to gain the highest benefits for businesses. Not only that, the Government should encourage export companies to sign contracts under CIF, for example reduce tax for exporters participating in insurance in Vietnam, reduce customs procedures or increase quotas for insured goods owners compared to others. Those incentives will promote enterprises to be more proactive in negotiating, signing and implementing export methods under CIF term, increase the proportion of exported goods participating in domestic insurance and develop the Vietnam insurance industry.

In fact, although the seller is obliged to buy insurance in the CIF and CIP, the party who claims and receives the benefits is the buyer or the person assigned by the buyer. Whether it is easy to claim or not depends on the reputation and financial capacity of the insurance company. This is the reason why Vietnam has not yet exploited the domestic insurance market, often leaving importers in charge because the competitiveness and reputation of domestic insurance enterprises are not high. To overcome this situation, the Government needs to have appropriate reforms to improve the competitiveness of domestic insurers, such as organizing training to improve the qualifications of the management team in the field of insurance. Moreover, the inspection and certification of quality assurance will help the reputation of insurance companies improve on the international market. On the insurance business side, without self-improvement and capacity building, it will be difficult for domestic insurance companies to stand firm and succeed in today's increasingly fierce competition. Only then, export enterprises can choose and negotiate with their partners about reputable insurance brands in Vietnam, such as Bao Viet insurance in the Top 20 most valuable brands in Vietnam, Military Insurance Corporation (MIC) with international-class contracts, talented personnel, thereby being trusted by importers to agree to choose Incoterms CIF, CIP in delivery.

5.3.8 Learn the politics, regulations and laws of the importing country

When exporting to countries with unstable political situations (for example, political war between US, Russia and Ukraine), there is a possibility that the goods will be delayed, damaged in delivery due to waiting for customs clearance for many days; increased storage costs at the port of import; even the buyer no longer needs to receive the goods and is returned. In these cases, if the exporter chooses delivery terms of group D, they will bear all the risks mentioned above. Exporters in Vietnam can monitor the political situation of the importer country through the mass media, the internet or through consulates and embassies to receive timely information updates. When the importing country has an unstable political situation, exporters may also prefer to use Incoterms with less obligations, less risks and costs, such as Incoterms group E and F. In addition, for export under DDP term, the seller needs to find out about the import bans of the buyer's country, because according to Incoterms, it is part of the risk of the seller.

The next issue is the regulations and laws of the importing country. Only the DDP term requires the seller to clear the import and bear all taxes and fees related to the import. The seller should not use the DDP term if the seller is not able, directly or indirectly, to carry out the necessary formalities for importation and does not wish to pay any taxes and fees associated with the import. In such situations DAP or DPU terms should be used. Before deciding to sell under DDP, the seller needs to find out if the buyer's country has regulations that prevent foreign parties from clearing imports. If there are such provisions, the seller may have to use a forwarder or customs broker in the buyer's country to clear the import customs to avoid such impediments.

Besides, the seller also needs to find out the taxes related to import in the buyer's country. For Vietnam, participating in the same association of countries, or free trade bloc (such as ASEAN, FTA, CPTPP...) will also affect the import and export tariff. For example, CPTPP countries commit to completely eliminate from 97% to 100% of goods originating from Vietnam, depending on each country's regulations such as completely eliminating tariffs (Singapore), and decreasing 95.1% of tariff lines (Chile) as soon as the Agreement comes into effect (CPTPP, n.d). On the other hand, there are countries, where VAT can be up to 80% of the value of imported goods, there are also countries that stipulate that taxes and fees related to imports must be paid within that country and will be deducted from expenses or enjoy incentives when paying other taxes. In such

cases, the parties should clearly state in the sales contract what taxes or charges the DDP seller is exempt from.

5.3.9. Thoroughly understand export clearance procedures of Vietnam

There is no denying the positive and progressive reforms of administrative procedures on importexport, however, there are still many difficulties and pressing difficulties that enterprises have to endure. Specifically, in the Report on "The level of satisfaction of enterprises in the implementation of import-export administrative procedures" of the Vietnam Chamber of Commerce and Industry (VCCI), still up to 38% of enterprises face difficulties when learning about administrative procedures for import and export, especially FDI enterprises, large enterprises. The reason comes from asynchronous coordination between the customs authorities and other agencies, enterprises are required to provide documents outside the regulations without adequate guidance from customs officers (Vietnamnet, 2021). That makes clearance procedures still lengthy and overlapping. Recently, during the impact of the Covid-19 pandemic, customs required to submit paper procedures by post instead of in person, but the post office is overloaded while goods need to be exported. This prompted the authors to seek solutions to speed up the export clearance process and procedures to reduce time, costs and unnecessary troubles for Vietnamese exporters.

From the exporter's side, the first thing to note to improve the above situation is thoroughly understand the customs clearance procedures not only at the border gate of the home country but also in the foreign country. By mastering the above contents, exporters will have full and thorough preparation of customs clearance documents, detailed clearance process, avoiding omissions, subjectivity or disturbance process and lengthen the clearance time. Besides, when learning about import clearance in partner countries, depending on the company's ability and experience, Vietnamese exporters can consider choosing delivery by DDP terms to increase the level of control of goods with large shipments, high value, and also increase competitive advantage in offers with large-scale partners.

In addition, businesses need to pay attention to awareness and understanding of e-customs - a newly applied method that helps to reduce the time and process of customs clearance. Especially with the influence of the Fourth Industrial Revolution, Vietnamese businesses need to invest in learning and applying advanced technology, thereby improving their competitiveness in the import-export market. Enterprises need to enthusiastically learn and understand the features and process of e-customs declaration at home and foreign countries through the e-database of the Customs Department or many reference channels such as newspapers, television. To promote the successful implementation of digital transformation, the Customs needs to continue to improve the legal environment; improve the quality of digital infrastructure; develop IT platforms, and at the same time strengthen coordination with management agencies, inspect and evaluate relevant organizations to effectively implement IT application deployment. From there, exporters can easily learn and grasp the necessary information about the steps to carry out customs clearance, the cost of export procedures or the ban or tax refund.

5.4 Limitations and suggestions for further research

During the implementation period, the authors cannot avoid certain limitations that still exist in the study. The first limitation that the authors encountered was the limited duration of the study, lasting only 4 months from the beginning of January 2022 to April 2022. This limited-time period makes data collection through surveys and observations incomplete in detail, affecting the quantity and quality of data obtained, and the sampling method is the non-probability method therefore the data are not fully representative of observed variables. Not only that, social distancing during Covid-19 makes it difficult to approach and have an interview with businesses directly to conduct the survey. However, the export businesses are very enthusiastic and willing to help, making the research finish quite smoothly.

The second shortcoming of this research relates to experiences and findings absorbed from previous studies. Most of the literature collected and consulted is done by qualitative research method, there are not yet many quantitative research studies that consider the factor influencing the choice of delivery terms under Incoterms, especially with the latest version 2020. Third, the questionnaires answered by employees from exporting enterprises in Vietnam are mostly based on subjective assessment of each factor. That leads to some of the analysis and conclusions in this research which are subjective and could be improved in the future.

With the above recommendations, the authors hope that further research would have more developments in research, leading to more practical usefulness with more objective analysis and conclusions.

5.5 Conclusion

In general, this research examines the factors influencing the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam. Then, the authors provide some recommendations for businesses to minimize the hardship in choosing appropriate delivery terms under Incoterms 2020 in international transactions. Accordingly, this research conducts both quantitative and qualitative methods to ensure the most accurate results. In terms of the quantitative and qualitative method, the theoretical model developed is based on the findings of Unal and Metin's study and expert recommendations, which included 16 observed variables classified into 3 independent factors: Resource-Advantage (RA), Efficiency-Cost (EC) and Legitimacy-Environment (LE). With 263 valid responses, the collected data were used for reliability analysis, exploratory factor analysis, correlation and regression analysis. Specific results and explanations for each factor have been shown in Chapter 4. In which, the regression analysis expresses that "Choosing appropriate delivery terms under Incoterms 2020 has positive relationship with independent variables" in form of following equation:

Although this research still has some limitations due to its time and scale, it has provided an overview, which is relatively complete of the factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam. Finally, this study also gives some

recommendations for businesses to improve their ability and choose more appropriate delivery terms under Incoterms 2020; as well as avoid unnecessary risks, losses and disputes in the process of international trade. Hopefully, this study could contribute to the development of Vietnam's import-export industry and help exporters in Vietnam easily integrate into the world economic market with proficient use of Incoterms 2020, especially in the context of globalization happening more and more intensely in recent years.

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APPENDICES

LIST OF EXPERTS

No	Full name	Company	Position	Seniority
1	Nguyen Quang Tuyen	Gia Phu Fashion Garment Company Limited	Import - Export Specialist	7 years
2	Doan Thi Thuy Linh	VINAP Export Garment Company Limited	Accounting Manager	10 years
3	Doan Ba Dam	TMD-Gia Loc Agricultural- Forest Product Processing and Import-Export Joint Stock Company	Chairman of The Board	> 15 years
4	Le Thi Anh	IRB Import Export Investment Joint Stock Company IRB Holdings	Import - Export Business Specialist	10 years
5	Le Van Manh	ANSLOG Advice and Solution Logistics Joint Stock Company	Hanoi Branch Manager	8 years
6	Nguyen Thi Ngoc Anh	CMC Bac Ninh Transport Joint Stock Company	Import-Export Specialist	8 years
7	Nguyen Thi Phuong Thanh	Bank for Investment and Development of Vietnam JSC	Supervisor, Trade Finance Center	17 years
8	Nguyen Thi Thu Huong	Bank for Investment and Development of Vietnam JSC	Senior Officer, Trade Finance Center	18 years
9	Nguyen Thi Thu Hang	TP Bank	Trade Finance Manager	15 years
10	Nguyen Thanh Tung	Medcomtech Joint Stock Company	Director	10 years
11	Tran Thi Thanh Thuy	Medcomtech Joint Stock Company	Chief Accountant	8 years

QUESTIONNAIRE FOR INTERVIEWING EXPERT (QUALITATIVE ANALYSIS)

Part 1: Identify specialist and company information

- Say hello, ask for information confirmation
- Introduce about the purpose of contact
- Ask the expert to be interviewed and recorded

Example: Hello, is this Mr/Mrs... of ... (company) right? I would like to introduce myself a little I am.... I am a final year student majoring in International Business at FPT University. Currently, we are in the process of doing our graduation thesis and need to consult many experts in the field of import and export on the topic. Can you give me 3-5 minutes to exchange?

Part 2: General question

- Ask about expert's current job position
- How long they have been worked in the field of Import-Export (seniority)?
- Ask about whether they use Incoterms 2020 when exporting or not

Part 3: Interview questions

- Question 1: What do you usually consider when choosing Incoterms terms? How does that factor affect it?
- Question 2: What do you think is the most important factor?
- Question 3: How do you rate the variable... influencing the actual selection of Incoterms? (Elements in the model that are not mentioned in answer 1 + explanation)
- Question 4: Do you suggest any other variable besides the ones above? Why?
- Question 5: During your work, what difficulties have you encountered in choosing Incoterms and how did you solve them then?

Part 4: The end/Thank you

- Thank you for taking the time to share with us
- Ask for contact information to conduct the following research steps

SURVEY ON FACTORS AFFECTING THE CHOICE OF DELIVERY TERMS UNDER INCOTERMS 2020 OF EXPORT ENTERPRISES IN VIETNAM (QUANTITATIVE ANALYSIS)

PART 1. GENERAL INFORMATION

Dear Mr./Ms., we are a group of FPT University International Business final-year students. Our team is now doing research on the factors affecting the choice of delivery terms under Incoterms 2020 of export enterprises in Vietnam. This research is the result of FPT University's International Business graduation project.

We hope you will take a few moments to respond to the following questions. For the sake of scientific inquiry, there is no such thing as a good or incorrect perspective; all of your points of view will benefit my research. We assure you that any information you provide will be kept totally private.

The international trade activities of your company are usually:

- o Import
- Export
- Both

(If export or both)

What is your position in the Import-Export Department?

Seniority in Import-Export field:

- Less than 5 years
- \circ 5-10 years
- 10-20 years
- More than 20 years

Company:

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)

Which region is your organization located in Vietnam?

- \circ The North
- The Central region
- The South

Type of goods usually exported:

Import/Export's markets that your business regularly cooperation with:

- o North America
- o Latin America
- o Africa
- o Asia
- o Europe

- Southeast Asian
- o Australia

How often are exporting transactions with these partners?

- Less than 5 exporting transactions/month
- 5-10 exporting transactions/month
- More than 10 exporting transactions/month

Does your company use Incoterms 2020 when exporting?

- o Yes
- o No

(If yes) Which Incoterms rules do your business use the most?

0	EXW	0	CFR
0	FCA	0	CIF
0	FAS	0	DAP
0	FOB	0	DPU
0	CPT	0	DDP
0	CIP		

(If No) Why does your company not use Incoterms in international transactions?

.....

PART 2. ASSESSMENT QUESTIONS

Please indicate your level of agreement with the statements below

Please put an "X" in the number that matches the following convention:

1. S	1. Strongly disagree2. Disagree3. Normal4. Agree5.		. Strongly agree				
No.	Encodo	Encode Description		Degree			
190.	Encoue			2	3	4	5
		1. Resources - Advantages (RA)					
1	RA1	Small and inexperienced exporters often have less advantage so the Incoterms rules in which the buyer is responsible for the main shipping cost and risk are often chosen.					
2	RA2	If exporter's employees do not have much knowledge and experience in using Incoterms for international trade, exporter should choose Incoterms rules where the seller bears less responsibility, risks and costs (e.g. E group and F group)					
3	RA3	If importers have a good and reputable relationship with exporters, exporters can choose delivery terms with risks, costs, and great responsibility (groups C and D).					

		1			
4	RA4	Export enterprises which have solid relationships with forwarding agents will lower the risk of extra charges and transportation quality, tend to choose which terms the seller is responsible for the main shipping route.			
	2. Efficiency - Cost (EC)				
1	EC1	When the main transport route is by sea, the exporter often chooses one of the four Incoterms for sea freight (FAS, FOB, CFR, CIF).			
2	EC2	Depending on each payment method used in the sales contract between importer and exporter, the Incoterms must be chosen in line with the such payment method's features and requirements.			
3	EC3	For perishable, fragile, bulky items, exporters often want to choose terms with less risk, responsibility for loading and unloading during transportation (e.g. EXW, FAS).			
4	EC4	Because a higher product cost equates to a higher transportation value, which means a larger risk, the exporter will often choose terms with fewer obligations and risks			
5	EC5	The higher the transportation cost, the less often the exporter chooses Incoterms C, D group			
6	EC6	When choosing delivery terms under Incoterms with insurance included, exporters often rely on each type of insurance's cost and the trend of the insurance market to choose more favorable delivery terms.			
	3. Legitimacy - Environment (LE)				
1	LE1	The transportation route has several transit stops or the usage of multiple modes of transportation, which will make the exporter hesitate to accept responsibility for transportation (Incoterms groups C, D)			
2	LE2	If the partner's country is located in a geographical location with frequent natural disasters, or is experiencing political and economic instability, exporters should eliminate the Incoterms rules where the seller will take on a larger portion of the risk in the transaction (group C, D)			
3	LE3	The more complicated the import and export customs clearance procedures, the more exporters should negotiate to give the buyer the responsibility for customs clearance.			
4	LE4	If the distance between the two parties is close, the seller can be more proactive in choosing terms in all groups because of the lower risks and costs associated with.			

5	LE5	When dealing with a country with a higher bargaining position, exporters are often inclined to make concessions on terms that bear greater risks and costs (group C & D) to win a sales contract compared to other competitors.
6	LE6	For products with fierce competition in the market, using the conditions of group C or D to make an offer may create a higher advantage for exporters than other competitors.
	4	. The choice of appropriate delivery terms under Incoterms 2020 (CH)
1	CH1	The appropriate choice when choosing the suitable delivery terms under Incoterms 2020 requires export enterprises to consider and evaluate factors both inside and outside the business.
2	CH2	Consideration of the above factors when choosing appropriate delivery terms under Incoterms 2020 helps export enterprises to minimize time to negotiate transactions and limit disputes arising between the two parties.
3	CH3	Considering the above factors when choosing appropriate delivery terms under Incoterms 2020 helps export enterprises increase their competitiveness, expand cooperation and opportunities with partners in the international market.

Can you share about one or more situations where your company had difficulty when choosing appropriate delivery terms under Incoterms 2020? (Cannot name the partner's information) Please give a brief description of the situation: What kind of goods are traded? What country is your partner in? What made it difficult to choose? How did your company handle that problem?

.....

Do you have any suggestions to make choosing delivery terms under Incoterms 2020 more favorable, convenient and efficient?

.....

THE END Thanks and Best Regards