


FACTORS AFFECTING COOPERATION IN THE INTERNATIONAL SUPPLY CHAIN OF SEAFOOD ENTERPRISES: THE CASE OF VIETNAMESE

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 21 February 2023</p> <p>Accepted 28 April 2023</p>	<p>Purpose: The purpose of this research is to analyze and evaluate factors affecting cooperation in the international supply chain of Vietnamese seafood enterprises.</p> <p>Theoretical framework: Operations in international business context are associated with high risks, so cooperation in supply chain helps to improve management flexibility. On the other hand, according to the theory of resource dependency, resource sharing and information sharing strategies can affect the quality and the level of cooperation among supply chain partners.</p> <p>Design/methodology/approach: To achieve the aim of this study, a literature survey related to supply chain and supply chain cooperation is carried out, and empirical analysis is conducted among 327 partners in seafood industry with the results analyzed using Cronbach's Alpha analysis, exploratory factor analysis (EFA), and linear regression analysis (RA).</p> <p>Findings: Research results have confirmed that there are six main factors directly affecting the international supply chain cooperation of Vietnamese seafood enterprises including: (1) Trust; (2) Power; (3) Distance; (4) Government policy; (5) Cooperation strategies and (6) Information sharing.</p> <p>Research/Practical & Social implication: The encouraging policies and simplified export regulations are to be implemented by the government, VASEP and enterprises so the knowledge about international supply chain cooperation will be promoted with the help of comprehensive future research directions.</p>
<p>Keywords:</p> <p>Cooperation; Supply Chain; International; Seafood; Vietnam.</p> <div data-bbox="172 1016 480 1263" style="text-align: center;">  </div>	

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Originality/value: This is literally one of the first research works in Vietnam to incorporate the information sharing component into the model of affecting factors for international supply chain cooperation. Regardless of business uncertainties, the study shed new light on supply chain cooperation and promote firms to gain an edge in the global marketplace.

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FATORES QUE AFETAM A COOPERAÇÃO NA CADEIA DE FORNECIMENTO INTERNACIONAL DAS EMPRESAS DE FRUTOS DO MAR: O CASO DA VIETNAMIA

RESUMO

Objetivo: O objetivo desta pesquisa é analisar e avaliar os fatores que afetam a cooperação na cadeia de abastecimento internacional das empresas vietnamitas de frutos do mar.

Referencial teórico: As operações no contexto de negócios internacionais estão associadas a altos riscos, portanto, a cooperação na cadeia de suprimentos ajuda a melhorar a flexibilidade de gerenciamento. Por outro lado, de acordo com a teoria da dependência de recursos, as estratégias de compartilhamento de recursos e compartilhamento de informações podem afetar a qualidade e o nível de cooperação entre os parceiros da cadeia de suprimentos.

Design/metodologia/abordagem: Para atingir o objetivo deste estudo, é realizada uma pesquisa bibliográfica relacionada à cadeia de suprimentos e à cooperação na cadeia de suprimentos, e uma análise empírica é realizada entre 327 parceiros da indústria de frutos do mar com os resultados analisados usando a análise Alpha de Cronbach, exploratória análise fatorial (EFA) e análise de regressão linear (RA).

Resultados: Os resultados da pesquisa confirmaram que existem seis fatores principais que afetam diretamente a cooperação internacional da cadeia de suprimentos das empresas vietnamitas de frutos do mar, incluindo: (1) Confiança; (2) Potência; (3) Distância; (4) política governamental; (5) Estratégias de cooperação e (6) Partilha de informação.

Pesquisa/Implicação prática e social: As políticas encorajadoras e os regulamentos de exportação simplificados devem ser implementados pelo governo, VASEP e empresas para que o conhecimento sobre a cooperação internacional na cadeia de suprimentos seja promovido com a ajuda de direções abrangentes de pesquisas futuras.

Originalidade/valor: Este é literalmente um dos primeiros trabalhos de pesquisa no Vietnã a incorporar o componente de compartilhamento de informações no modelo de fatores que afetam a cooperação da cadeia de suprimentos internacional. Independentemente das incertezas dos negócios, o estudo lança uma nova luz sobre a cooperação na cadeia de suprimentos e promove as empresas a ganhar vantagem no mercado global.

Palavras-chave: Cooperação, Cadeia de Suprimentos, Internacional, Frutos do Mar, Vietnã.

FACTORES QUE AFECTAN LA COOPERACIÓN EN LA CADENA INTERNACIONAL DE SUMINISTRO DE EMPRESAS DE MARISCOS: EL CASO DE VIETNAMITA

RESUMEN

Propósito: El propósito de esta investigación es analizar y evaluar los factores que afectan la cooperación en la cadena de suministro internacional de las empresas vietnamitas de productos del mar.

Marco teórico: Las operaciones en el contexto de los negocios internacionales están asociadas a altos riesgos, por lo que la cooperación en la cadena de suministro ayuda a mejorar la flexibilidad de la gestión. Por otro lado, según la teoría de la dependencia de los recursos, las estrategias de intercambio de recursos e información pueden afectar la calidad y el nivel de cooperación entre los socios de la cadena de suministro.

Diseño/metodología/enfoque: Para lograr el objetivo de este estudio, se lleva a cabo una encuesta de literatura relacionada con la cadena de suministro y la cooperación de la cadena de suministro, y se lleva a cabo un análisis empírico entre 327 socios en la industria pesquera y los resultados se analizan utilizando el análisis Alpha de Cronbach, exploratorio. análisis factorial (AFE) y análisis de regresión lineal (RA).

Hallazgos: Los resultados de la investigación han confirmado que hay seis factores principales que afectan directamente la cooperación de la cadena de suministro internacional de las empresas vietnamitas de productos del mar, que incluyen: (1) Confianza; (2) poder; (3) Distancia; (4) política gubernamental; (5) Estrategias de cooperación y (6) Intercambio de información.

Investigación/Implicación práctica y social: El gobierno, VASEP y las empresas implementarán las políticas alentadoras y las regulaciones de exportación simplificadas, de modo que se promueva el conocimiento sobre la

cooperación internacional en la cadena de suministro con la ayuda de direcciones de investigación futuras integrales.

Originalidad/valor: este es literalmente uno de los primeros trabajos de investigación en Vietnam que incorpora el componente de intercambio de información en el modelo de factores que afectan la cooperación internacional en la cadena de suministro. Independientemente de las incertidumbres comerciales, el estudio arroja nueva luz sobre la cooperación en la cadena de suministro y promueve que las empresas obtengan una ventaja en el mercado global.

Palabras clave: Cooperación, Cadena de Suministro, Internacional, Productos del Mar, Vietnam.

INTRODUCTION

Since there is a large sea area at our disposal, fisheries have become one of the five industries that yield the largest export value in the country. According to a report from the General Department of Fisheries, exports of this commodity group were estimated to reach 8.89 billion USD in 2021, up 5.6% compared to 2020, the growth rate of seafood production value reached 3.01% compared to 2020, the total output reached 8.73 million tons, up 1% compared to 2020 (8.64 million tons), in which the exploitation output reached 3.92 million tons, up 0.9% compared to 2020 (3.88 million tons), cultivating reached 4.8 million tons, up 1% compared to 2020 (4.76 million tons) (General Department of Fisheries, 2021).

In today's world, the supply chain plays an important role in the business cycle. Due to the asymmetry between supply and demand, there are always contradictions in supply chains. This is explained by the fact that each supply chain is made up of independent organizations involved in the flow of goods, services, and related information, as well as financial flows from the point of origin to the final customer (Huynh, 2013). In order to effectively plan, implement, and control flows to meet customer needs, organizational members typically become connected in supply chain (Togar and Sridharan, 2002). Conflicts in chains, according to Rosenberg and Stern (1970), are caused by the actions and decisions of one of the chain members who impede relations for their own ends. Etgar (1979) added that conflict is also fueled by disparities in institutions and attitudes. As for Gaski (1984), he argued that whether the origin of power is coercive or non-coercive still influences the degree of dissent among the chain's participants. From the above evidence, it is demonstrated that in-chain cooperation is crucial, because supply chain cooperation not only addresses how chain members share responsibilities and benefits derived from improving the common goal, but also addresses management inflexibility. Resolving conflicts and working together will result in a variety of advantages, such as decreased inventory, better customer service, more effective use of staff, better delivery by reducing the number of cycles, quicker acceleration of new product markets, a stronger focus

on core competencies, and an improved public image (Togar and Sridharan, 2002). Despite its important role and benefits, cooperation in the international supply chain, particularly in the fisheries industry, remains unpopular in Vietnam. This issue has become even more pressing as the Covid-19 epidemic continues to rage and the international situation changes, causing many fluctuations and even disruptions in the supply chain (Dat, 2013).

In order to determine the factors affecting this crucial cooperation, the authors conducted a study on "Factors affecting cooperation in the international supply chain of Vietnamese seafood enterprises". The study is divided into four sections: (i) Literature review; (ii) Material and methodology; (iii) Results and discussion; (iv) Conclusion.

LITERATURE REVIEW

International Supply Chain

The concept of "supply chain" has been defined by many scholars over the last 30 years, with different viewpoints or ways of expression. In the early days, research were limited to defining the supply chain as a sequence of processes involving the transforming raw materials, natural resources and ingredients into a finished product that is then delivered to consumers. In a broader sense, this can be defined as a transition from raw material to finished product through processing and distributing (Michael Porter, 1990). Christopher (1992) hold the belief that supply chain is a network of organizations that are involved in various processes and activities that create value in the form of products and services provided to the end consumer through upstream and downstream links. In other words, a supply chain is made up of multiple companies, both upstream (supply) and downstream (distribution) and end users. Meanwhile, Mentzer et al. (2001) defined a supply chain as a collection of three or more partners (organizations or individuals) directly involved in the pre- and post-flow of products, services, finance, and/or information from origin to customer.

Considering supply chain as a business activity, Lambert & Cooper (2000) defined supply chain as the interaction activity between many firms within the supply chain with the aim to increase the customer value, these firms may directly or indirectly take part in the work of creating surplus value for the customers. Chopra Sunil and Peter Meidl (2001), Klassen and Whybark (1994), Motwani et al. (2000) emphasized that the supply chain includes all stages involved, directly or indirectly, in meeting customer needs. In other words, the supply chain includes not only manufacturers and suppliers, but also carriers, warehouses, retailers and customers themselves.

Domestically, only a few industries have ceased supply chain studies for better comprehension and solutions.. Particularly, Nguyen (2019) emphasized the importance of supply chain components as ultimate customers are those to create value both directly and indirectly. Huynh (2013) found that the supply chain is an interconnected model with 3 basic activities: supply, production and distribution. In particular, the supplier of raw materials is the first factor and the beginning of the chain, the manufacturer is the second factor to buy raw materials from suppliers to convert into products, and the third factor is the system of distributors and agents distributing the manufacturer's products to customers.

As such, the antecedents all show that a common model of the supply chain is a journey of linkage between factors including physical flows of products, information, finance, through the chain to provide entities that are goods and services to end consumers who are customers. These factors can be found in three basic activities:

- + Supply: the purchase of raw materials, in quantity, quality, when to buy, where to buy to serve the production process.
- + Production: the process of converting input materials, semi-finished products from suppliers into final products.
- + Distribution: the journey of the product from the manufacturer through the distribution system to the consumer.

Michael Hugos (2010) in *“Essentials of Supply Chain Management”* outlined five key factors that govern the development of an international supply chain including: production, inventory, location, transportation and information. International supply chain management takes place in a complex political, economic, cultural and social environment. Therefore, it requires close coordination between the flows of goods, services, information and cash within and outside the borders of countries (Mentzer, 2001).

International Supply Chain Cooperation

Supply chain cooperation is one of the most discussed topics in business today (Mathuramaytha, 2011). In the study of Mentzer et al. (2000), cooperation is described as a set of joint activities of closely connected businesses to accomplish mutually beneficial goals. By working together and coordinating actions, supply chain participants become partners in an alliance (Monczka et al., 1998). Many companies seek to coordinate activities with other companies and work back and forth over time to produce superior performance (Anderson and Narus, 1990; Stern and Reeve, 1980). The underlying reason behind cooperation is that a

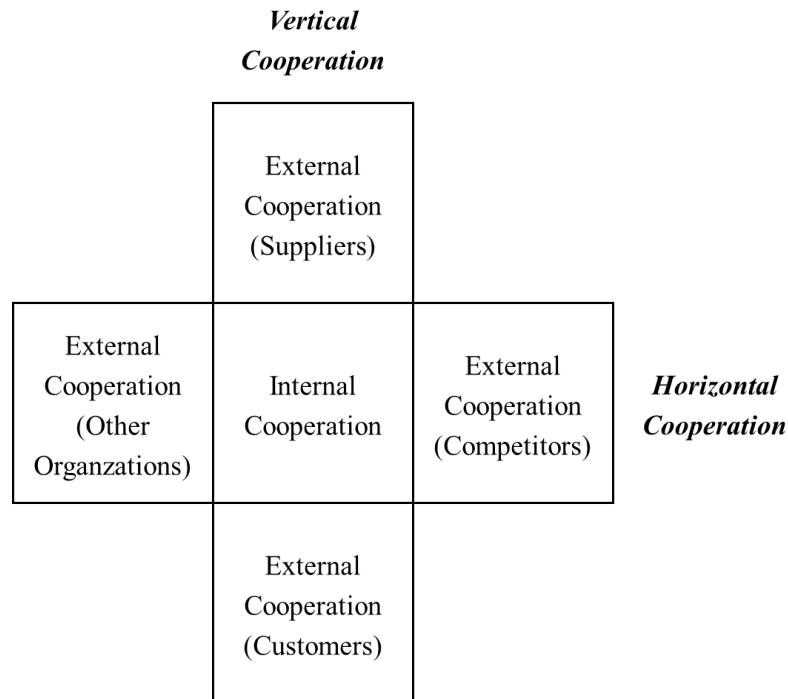
company cannot compete successfully on its own while demanding products and services become more stringent (Kotler, 1997). As a result, cooperation increases an organization's ability to work across boundaries to build and manage unique value-added processes that better meet customer needs (Fawcett et al., 2008).

Supply chain cooperation is frequently defined as two or more independent companies working together to create a competitive advantage and higher profits than if they operated separately (Lambert et al., 1999). According to this study, cooperation also refers to relationships between organizations in which participants agree to invest resources, share information, be accountable, and make decisions jointly in order to effectively solve problems. This can bring significant benefits and advantages to its partners (Mentzer et al., 2000). On the other hand, Kampstra et al. (2006) argued that cooperation develops when financially independent entities attempt to make the chain's dependencies "play" with one another, i.e., ensuring that the chain's members successfully interact in order to provide the required coordinated outputs.

Due to pressures from global competition or threats from environmental changes, such as changes in supply, demand, and technology, as well as opportunities from new markets, supply chain cooperation is necessary (Tate et al., 2010a; Chen et al., ; Hoi and Minh, 2022). Companies enter into multi-stakeholder partnership agree to share both risks and benefits while accessing additional resources, improving learning capacity, and rapid knowledge transfer, aiming to ensure greater performance than operating individually (Lambert et al., 1999). Supply chain cooperation has become an important focus of competitive advantage for organization business (Jap, 1999). Organizations have been working for years to improve the efficiency of their internal supply of chain operations, e.g., procurement, manufacturing, and logistics (Fawcett and Magnan, 2002). While these improvement initiatives have been very successful, the results of a broader view of a supply chain have been cost reallocation and inventory level changes (Ireland and Bruce, 2000).

As can be seen, there are many potential forms of cooperation in the supply chain, but they can be divided into two main categories, as shown in Figure 1. Vertical cooperation can include cooperation with customers, internal cooperation and cooperation with suppliers; while horizontal cooperation includes cooperation with competitors, internal cooperation and cooperation with other enterprises.

Figure 1: Scope of cooperation



Source: Barrat (2004)

MATERIAL AND METHODOLOGY

Research Methodology

In terms of qualitative research, the authors conducted in-depth interviews with experts and senior leaders such as directors, deputy directors, department heads, deputy managers, and supply chain cooperation officials. Participants in the interviews represented government agencies, economic experts, businesses, and seafood-related organizations in Vietnam, including the Vietnam Association of Seafood Exporters and Processors (VASEP). Interviewed subjects with various characteristics will provide multidimensional and comprehensive information for the research content, ensuring that the goal is met. The interview includes open-ended questions that allow participants to express their opinions under the guidance of the authors.

Qualitative research results show that all six factors affecting international supply chain cooperation of Vietnamese seafood enterprises are accepted and no new factors are proposed. The factors included in the quantitative study are: (1) The level of trust between partners (6 variables); (2) Power of partners (4 variables); (3) Distance between partners (3 variables); (4) Government policy (5 variables); (5) Cooperation strategies of partners (4 variables); (6) Information sharing (7 variables). The quantitative analysis includes a total of 29 observed

variables of 6 factors affecting the international supply chain cooperation of Vietnamese seafood enterprises.

In terms of the quantitative research, the study employs a direct survey form with a small sample (20 participants). The majority of the subjects approved the questionnaire, although some words needed to be adjusted and the questions needed to be more logically constructed. The authors initially envisaged the sample of 300 surveys. This number of observations meets both the sample size requirement of Hair et al. (2014) (167 observations) and the sample size requirement of Green's study (115 observations). The fact that the group's expected number of observations exceeded the minimum sample size made the study even more valuable.

Of the 327 enterprises participating in the survey, the majority were small and medium-sized enterprises, of which up to 35% were enterprises [200;500] employees. The survey results of the operating time of enterprises showed that the majority of enterprises operating [10;15] accounted for 32%, followed by enterprises operating [15;20] years accounting for 24%. Seafood enterprises are mainly concentrated in the Mekong Delta region, accounting for 48% of the total number of seafood enterprises in the country. The main seafood products of enterprises are shrimp and fish, especially pangasius and tuna. In which, shrimp accounted for 44%, pangasius 18%, tuna 8%, other fish 20%. Regarding the type of processing, up to 82% of frozen seafood processing enterprises, 11% of dry goods processing enterprises, 5% of fish sauce processing enterprises and the number of canned food processing enterprises account for only 2%.

Data are processed with the SPSS software, version 20.0. Data from independent variables are analyzed through steps: Cronbach Alpha scale reliability testing, exploratory factor analysis (EFA), correlation analysis, and linear regression analysis.

Proposed Research Model

Through selective and unified analysis and synthesis, the authors have based on a number of previous theoretical models as the basis for their research. First of all, game theory explains the motivations that encourage or discourage cooperation. Games such as Prisoner Dilemma, Stag Hunt, and Chicken... demonstrate the characteristics of international cooperation. The game's context determines the possibilities for cooperation and the game's outcome (Hong and Hiep, 2013).

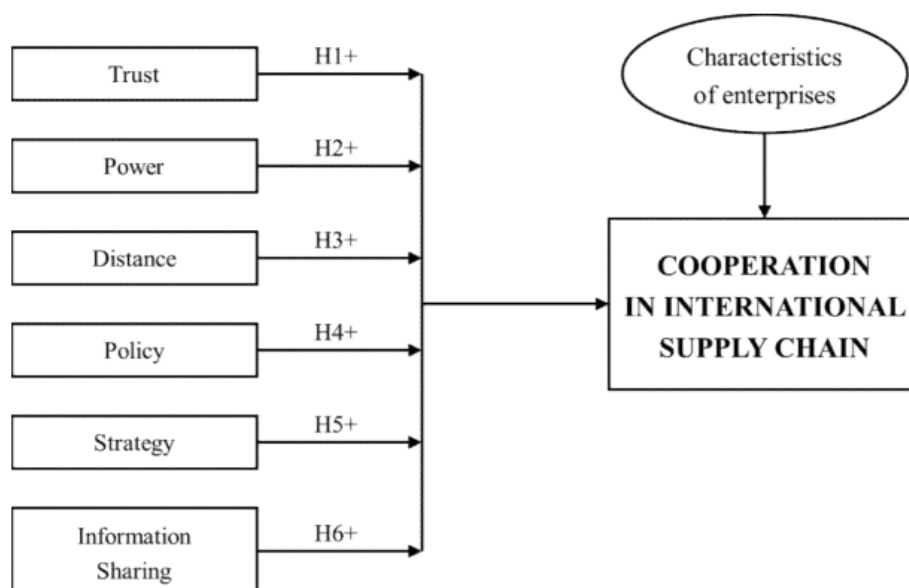
Additionally, social exchange theory (SET) also focuses on how to build relationships with supply chain partners (Kingshott, 2006) and indicators of mutual benefits, in which people act on the expected costs and benefits of relationships.

In addition, Collaborative Network Theory (CNT) is used as the foundation of reciprocal correlations in relationships between business relationships (Oliver, 1990). Businesses can improve their efficiency by establishing information sharing and communication cooperation and building relationships with supply chain partners through the process of social exchange.

The research team inherited the preceding research model, which included the following variables in the research process: The level of trust between partners (Huynh Thi Thu Suong, 2013); Power of partners (Kumar, 1996); Distance between partners (Van Donk, 2010); Government policy (Mentzer et al., 2001); Cooperation strategies (Muckstadt et al., 2001); Information sharing (Kim et al., 2006).

When comparing the research models of various studies, the authors conclude six factors relevant to the topic. However, several supply chain specialists have stressed the significance of information sharing in global supply chain cooperation by reviewing scholarly publications. The results of the authors' interviews with managers, which were based on business practices, were in line with the significance of the information sharing factor. Based on the above research model and theoretical frameworks, the authors propose the following research hypotheses:

Figure 2: Proposed research model



Source: Authors' compilation

On the basis of the above research model, the study proposes the following research hypotheses:

Some aspects of weakness and uncertainty in trusted partners are present in trust-based partners (Smith, 1997). Successful relationships are defined by mutual trust, and partners who trust each other consistently provide better customer service, adapt more easily, and increase profitability (Sin et al., 2002). Tangible assets can play an important role in fostering trust among the counterparties of intermediaries (Clark, 1999). While later studies suggested that trust is a function of citizen relational behavior and frequent interactions. Both above studies emphasize the trust between organizations to minimize the cost of administrative procedures (Lui, 2004).

H1: There is a positive relationship between partner trust and international supply chain cooperation.

Power is at the heart of any business-to-business relationship (Hingley, 2005). The extent to which a business or organization is dependent on specific and other resources determines its strength over a partner (Inkpen et al., 1997). If one party has more power in a relationship, it can put pressure on the less powerful party to make decisions in favor of the more powerful party (Kumar, 1996). In the supply chain, there is no close relationship between power and dependence. The greater the unilateral power, the greater the degree of clarity and detail in the terms of the buyer-seller contract.

H2: There is a positive relationship between partner power and international supply chain cooperation.

Distance between partners in a supply chain refers to the geographical, cultural, and organizational distances between the partners in that supply chain (Van Donk, 2010). Distance in general has a certain effect on cooperation in the supply chain. That is, the closer the distance between partners, the closer the partners have similarities in culture, language, and business practices. As a result, it makes it easier for partners to select and collaborate with one another.

H3: There is a positive relationship between the gap between partners and international supply chain cooperation.

Cooperation will be challenging for any company that wants to be a part of the industry's supply chain but does not adhere to local, national, and international rules and policies (Tate et al., 2010b). The ability of supply chain partners to cooperate is unquestionably influenced by the policy issued by the partner's government or by the partner himself. The policy is not permanent, it changes over time (Huynh Thi Thu Suong, 2013). To control and manage risks

in the international supply chain, enterprises must improve their cooperation with the government, both domestically and internationally, during the supply chain's operation.

H4: There is a positive relationship between government policy and international supply chain cooperation.

There are four basic contents in the cooperation strategy when studying the international supply chain: merger and acquisition strategy, capital streamlining strategy, production combination optimization strategy, and new product introduction strategy (Anderson, 2004). Cooperation strategies in the series include basic activities such as planning, forecasting and supplementing the content of cooperation in the supply chain (Stadtler, 2005). Cooperation in the supply chain between partners is increased when the strategies of the chain's suppliers, manufacturers, and distributors (collectively referred to as the partner's strategy) complement each other and vice versa (Huynh Thi Thu Suong, 2013). According to Doan Thi Hong Van (2008), the ability to strengthen cooperation in an enterprise's chain is when planning a reasonable management and cooperation strategy.

H5: There is a positive relationship between partner cooperation strategy and international supply chain cooperation.

Information sharing is the foundation of supply chain cooperation (Lee, 2000), which is directly related to decisions about how to share, and what information is shared is a decision about the level of supply chain participation. It not only determines which partners to work with, but it also determines what information the partner should have access to. Several supply chain management research in literature reviews have emphasized the importance of cooperation and information sharing among chain participants (Stank et al., 2011). Information sharing and supply chain cooperation are directly involved in supply chain development and formation. The positive impact of information sharing on supply chain cooperation has also been shown by several studies

H6: There is a positive relationship between information sharing and international supply chain cooperation.

RESULTS AND DISCUSSION

Analysis of the Cronbach's Alpha confidence factor showed that there were 6 scales used in the study where the Cronbach's Alpha coefficient greater than 0.7 satisfies the reliability and the total variable correlation coefficient was greater than 0.4. So it can be determined that the scales ensure reliability and are suitable for use for subsequent analysis.

Table 1: Cronbach's Alpha reliability test results

Scale	Number of variables	Coefficient Cronbach's Alpha	Total variable correlation coefficient smallest
Level of trust between partners	7	0,924	0.755
The power of partners	5	0,822	0.604
Distance between partners	4	0,860	0.716
Government policy	4	0,772	0.429
Cooperation strategy of partners	5	0,761	0.490
Information Sharing	3	0,917	0.723

Source: Authors' compilation

The scales consist of 29 observed variables, after testing the scale reliability using Cronbach's Alpha, which is included in the EFA factor analysis.

The EFA factor analysis resulted in 5 factors extracted at an Eigenvalue of 1.574 and a total quoted variance of 66.063% indicating that the model was consistent. $KMO = 0.803 > 0.5$, so the EFA factor is suitable for the study. Besides, the factor loading factor > 0.5 , so the observed variables have good statistical significance and are all important in the factors, and have practical significance. The Sig. (Bartlett's Test) statistic = $0.000 < 0.05$ proves that the observed variables are correlated with each other on the whole.

Table 2: KMO and Bartlett test results for independent variables

	Result	Compare
KMO	0.915	$0.5 < 0.915 < 1$
Sig. value in Bartlett test	0.000	$0.000 < 0.05$
Quoted variance	66.426%	$66,426\% > 50\%$
Eigenvalue	1.531	$1,531 > 1$
Approximately squared genus	4982.527	
Df	406	

Source: Authors' compilation

The authors used Pearson coefficients to analyze the correlation between quantitative variables. The Pearson correlation coefficients between variables run from 0.136 to 0.601. That proves the distinguishing value achieved, showing that the relationship between the dependent variable (Purchasing Decision) and the independent variables is statistically significant (Sig. < 0.05). Dependent Variables Procurement decisions are positively correlated with variables Trust between partners, Power of partners, Distance between partners, Government policy,

Partner cooperation strategy, and Information sharing. So other statistics can be used to find connections between independent variables and dependent variables.

Table 3: Correlation matrix between factors in the model

		TN	QL	KC	CS	CL	TT	HT
TN	Pearson Correlation	1	0.387**	0.136*	0.407**	0.310**	0.429**	0.601**
	Sig.		0.000	0.014	0.000	0.000	0.000	0.000
QL	Pearson Correlation	0.387**	1	0.284**	0.296**	0.298**	0.497**	0.680**
	Sig.	0.000		0.000	0.000	0.000	0.000	0.000
KC	Pearson Correlation	0.136*	0.284**	1	0.262**	0.227**	0.295**	0.388**
	Sig.	0.014	0.000		0.000	0.000	0.000	0.000
CS	Pearson Correlation	0.407**	0.296**	0.262**	1	0.324**	0.364**	0.513**
	Sig.	0.000	0.000	0.000		0.000	0.000	0.000
CL	Pearson Correlation	0.310**	0.298**	0.227**	0.324**	1	0.362**	0.517**
	Sig.	0.000	0.000	0.000	0.000		0.000	0.000
TT	Pearson Correlation	0.429**	0.497**	0.295**	0.364**	0.362**	1	0.610**
	Sig.	0.000	0.000	0.000	0.000	0.000		0.000
HT	Pearson Correlation	0.601**	0.680**	0.388**	0.513**	0.517**	0.610**	1
	Sig.	0.000	0.000	0.000	0.000	0.000	0.000	

Note: (**) correlation is significant at 0.01 (1%)

Source: Research Results of Survey Results

The linear regression equation with the dependent variable is international supply chain cooperation:

$$HT = 0.226TN + 0.413QL + 0.129KC + 0.145CS + 0.189CL + 0.158TT$$

Inside:

TN: The level of trust between partners

QL: The power of partners

KC: Distance between partners

CS: Government policy

CL: Cooperation strategy of partners

TT: Information sharing

HT: International Supply Chain Cooperation

The model consists of 6 independent variables TN, QL, KC, CS, CL, TT and one dependent variable HT (International Supply Chain Cooperation). Based on the standardized Beta coefficient, the authors found that the Power factor of partners has the strongest impact on the international supply chain cooperation of Vietnamese seafood enterprises (Beta = 0.413).

In contrast, the Distance factor between partners (Beta = 0.129). At the same time the Sig. value of the elements is less than 0.05, and all hypotheses are accepted.

Table 4: Analysis of factors affecting shopping decisions

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	Constant	0.767	0.171		4.474	0.000		
	TN	0.226	0.031	0.253	7.214	0.000	0.704	1.421
	QL	0.413	0.040	0.367	10.354	0.000	0.689	1.451
	KC	0.129	0.035	0.119	3.730	0.000	0.855	1.170
	CS	0.145	0.033	0.149	4.367	0.000	0.745	1.342
	CL	0.189	0.032	0.197	5.965	0.000	0.798	1.253
	TT	0.158	0.037	0.158	4.262	0.000	0.632	1.583

Source: Authors' compilation

The research results show that 6 factors affect the international supply chain cooperation of Vietnamese seafood enterprises, in which the power of partners has the strongest impact.

CONCLUSION AND SUGGESTIONS

Conclusion

This paper has provided some empirical evidences for a framework that identifies key factors affecting cooperation in the international supply chain of Vietnamese seafood enterprises. By using a comprehensive, valid and reliable tool (SPSS 20.0) to evaluate rigorous statistical tests including Cronbach Alpha scale reliability, correlation, linear regression and EFA, this paper has provided empirical evidence to support conceptual statements and it has shown that the cooperation in the international supply chain of seafood enterprises in Vietnam is directly affected by the factors of trust between partners, the power of partners, the distance between partners, government policies, cooperation strategies of partners, and information sharing. Particularly:

First, cooperation in the international supply chain is affected by trust levels. In accordance with earlier research by Corbett et al. (1999), cooperation in global supply chains is positively impacted by the level of trust between partners. As a result, the cooperation will be more fruitful and favorable with higher trust degree.

Second, cooperation in international supply chain and partner power are positively correlated. This result is in line with earlier studies by Hingley (2005); Joyce and Matthew (2002) and Kumar (1996) who found that individuals' behaviors and decisions to collaborate are more influenced by higher powers.

Third, supply chain cooperation is positively affected by the gap between partners. There are other factors at play in this partnership gap than merely distance, cultural variances, and supply chain organizational structure. In general, firms are generally more inclined to collaborate with partners who are nearby in terms of both geography and culture. This result was once demonstrated in Van Donk's (2010) study.

Fourth, there is a positive relationship between government policy and supply chain cooperation. The findings of earlier investigations by Tate et al. are supported by the authors (2010b). Depending on the type of business, where it originated, and its culture, government laws may be advantageous or detrimental to the operations of enterprises. This is crucial when rules and regulations are not permanent but rather evolve over time, requiring businesses to adapt for functional ability and successful cooperation.

Fifth, the cooperation strategy has a significant impact on international supply chain cooperation. The findings are consistent with those of Huynh (2013) and Doan (2008). The decision to cooperate and the success of cooperation are directly impacted by the business strategies of the partners and the techniques used in a cooperative relationship. Businesses are more likely to consent to supply chain cooperation as the partners' strategies are relevant and practical.

Sixth, information sharing has a favorable impact on relationships and decisions in international supply chain. The findings of Kim et al. (2006), Sundram et al. (2018), and Pamulety and Pillai (2011) are all in agreement with this conclusion. According to earlier studies, sharing information increases operational effectiveness. Information sharing between cooperating parties makes work get done more quickly and accurately, which boosts the effectiveness of global supply chains. . In addition, sharing information also builds mutual confidence between partners, however it must be properly managed when some sensitive materials remain private.

However, this research is not without limitations. First, only a few determinants of international supply chain cooperation were identified by the research model. Meanwhile, due to the swift change in the global market, cooperation among Vietnamese seafood enterprises still face a lot of additional issues. Second, this paper was primarily country-specific integrative insights of seafood firms while excluding other industries in other regions. Therefore, future research can be undertaken for multinational approaches to thoroughly assess this field. Third, a framework that could comprehensively explain moderating and mediating variables affecting cooperative relationships among enterprises in the international market still remains absent. In

order to resolve such inconsistencies, further research on interacted and nested relationships is required.

Some Suggestions

Recommendations to the government

In order to improve cooperation in the international supply chain of Vietnamese seafood enterprises, the authors make some recommendations to the government as follows:

Firstly, it is necessary to have a clear legal mechanism and reform administrative procedures such as reducing the burden on enterprises in complying with regulations related to fees, charges, accounting regimes, and simplifying financial statements. The authorities need to effectively implement the Law on Support for Small and Medium Enterprises, with the focus on building a program to assist small and medium-sized businesses in participating in the value chain between 2021 and 2025 by providing market support, production and business linkage support, brand development support, support for technical standards, quality measurement, financial and credit support, experimental production support...

Secondly, the government needs to promulgate support mechanisms and policies so that enterprises can easily cooperate in development with other enterprises, encourage cooperation, and trade promotion as well as create favorable conditions to make Vietnam's seafood industry truly become the economic spearhead of the whole country.

Thirdly, it is essential to further strengthen the advocacy and training for enterprises in the cooperation of seafood supply chain through seminars, forums, seminars, dialogues, training... to raise awareness and cooperation capacity for Vietnamese seafood enterprises.

Fourth, promote the role of industry associations such as the Vietnam Tuna Association, Vietnam Association of Seafood Exporters and Processors, and Vietnam Fisheries Association,... to create information channels on seafood supply chains for businesses, particularly by giving current information on legal mechanisms; counsel businesses in the process of cooperation and handling if dissatisfaction arises.

Recommendations to VASEP

In order to strengthen the cooperation capacity for our country's seafood enterprises, the authors make some recommendations for VASEP as follows:

Firstly, build up trade promotion programs that are carried out annually and publicly announced in the mass media, supporting enterprises and production establishments to participate.

Secondly, regularly organize workshops to exchange experiences on how to organize and operate effective agricultural cooperative models, access markets for aquatic product consumption, and build links between cooperatives, professional associations, and businesses.

Third, actively develop forecast capacity about the global seafood market from various angles.

Fourth, gradually build representative offices and distribution networks of Vietnamese seafood products. The association needs to focus trade promotion resources on major markets such as the EU, the US, and Japan... and emerging markets such as China, Hong Kong, Eastern Europe, South America.

Fifth, promote the key role of the Association in negotiating and negotiating international cooperation agreements to ensure the rights and legality of the fishery sector and seafood export products to improve the value of aquaculture and export products.

Recommendations to Vietnamese seafood enterprises

From the research results combined with the experience of cooperation in the supply chain of seafood enterprises around the world, the authors offer some recommendations for Vietnamese seafood enterprises as follows.

First, Vietnamese seafood enterprises must focus on building a corporate image to build trust for cooperation. Before cooperating, partners typically take into account several criteria, including brand, size, financial ability, payment method, payment method,... In particular, for small and medium enterprises, it is necessary to create a brand for themselves through the selection of qualified products and services.

Second, strengthen corporate power. Promoting business power will enhance their position with partners while creating an incentive for cooperation in a more solid way. Accordingly, enterprises need to have a clear specific business strategy, and increase investment in upgrading modern machinery and technology to add value to supply products and improve productivity.

Third, change the culture of cooperation. Businesses need to build and strengthen, and create a strong, customer-oriented culture. In order to do so, the partners in the chain must

ensure reliable operation, refrain from taking unfair advantage of one another, and have a shared vision and set of objectives.

Fourth, the supply chain's components should find appropriate method to share information. Information sharing is key to improving responsiveness to changes in customer demand and market uncertainty, as alignment helps reduce communication gaps between members, which can reduce supply chain performance.

Fifth, apply information technology in supply chain operations. With the support of information technology systems, the supply chain will operate more efficiently by ensuring the smooth flow of information, providing more accurate supply chain decisions and ensuring that the information posted is accurate and detailed. Vietnam's seafood supply chain can use Blockchain, , GIS technology to help improve the efficiency of supply chain management.

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