

DETERMINANTS OF EXPORT PERFORMANCE AT SEAFOOD FIRMS IN VIETNAM

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Abstract

The paper defines and measures key factors regarding to export performance of seafood firms in Viet Nam. This study has used qualitative and quantitative researches: (i) qualitative carried out through focus group discussions with 10 firms, and (ii) quantitative research conducted through direct interviews with 278 firms. The results show that: (i) Export performance has been influenced directly by export marketing strategy, industry's specialization, firm's categories and competencies, foreign markets' distinctive, key management trends, domestic market attributes; (ii) Export marketing strategy has been influenced directly by corporations' tendencies and capability.

Keywords: export performances in Viet Nam, statistics export seafood, seafood emerging market in Asian.

Introduction

In recent years, Vietnam's exports have been played important roles to economic growth along with consumption, investment and import. Export growth is shown increasing and relatively stable over years (*General Statistics Office of Vietnam, 2017*). It has contributed to macroeconomic stability such as cutting down trade deficit, maintain trading balance and other international trade agreements. Seafoods are one of the main export commodities in Vietnam. Its turnover in 2016 has been reached about \$ 7.05 billion that proportion 4.0% of Vietnam's total export turnover (*General Statistics Office of Vietnam, 2017*).

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Table No.1 Seafood's export statistics annually

Year	Seafood (Billion USD)	Total (Billion USD)	Percentage (%)
2001	1.82	15.03	12.1
2002	2.02	16.71	12.1
2003	2.20	20.15	10.9
2004	2.41	26.49	9.1
2005	2.74	32.45	8.4
2006	3.36	39.83	8.4
2007	3.76	48.56	7.7
2008	4.51	62.91	7.2
2009	4.26	56.60	7.5
2010	5.02	72.24	6.9
2011	6.11	96.91	6.3
2012	6.09	114.53	5.3
2013	6.69	132.03	5.1
2014	7.83	150.22	5.2
2105	6.57	162.02	4.1
2016	7.05	175.94	4.0

(Source: General Statistics Office of Vietnam, 2017)

Currently, Vietnam is in the top three countries in the world (after China and India) in aquaculture production (*Ministry of Commerce and Industry of Viet Nam, 2017*). However, the plague of drought, salinity intrusion from Southern Central to Delta Mekong provinces and tragic marine polluted (Formosa massive issues) against fishermen in the four central provinces have been concerning by environmentalists. It will be affecting to seafood farming directly in raw materials and indirectly in the labor sources. Most fishermen can't easily switch to another occupation as the only skill they know is fishing. In addition, technical barriers and trading protection from importers' countries have been built up. It seems likely there may be less suitable export marketing strategies for exporters from Vietnam. Seafood exporters may have to suffer from those factors very much. They may have to look for a niche market for survival. Therefore, the current issue is to understand and quantify those factors how theirs might be affected the exporters from Viet Nam. On this basis, a number of research implications are proposed to promote fisheries.

Literature review

When companies are planning to get exporting any products to foreign countries, they may have to carry out very detail market researches such as evaluation of firms' export capability, key products, customers behaviour in the target markets, supply chain as well as distributors' systems accordingly. After a certain period of time, there are probably some international transactions dealing between buyers and sellers, there will be able to be reflected from clients' feedback as well as exporters' management. It can be said that the export operations is the multi-dimensional aspect of its achievement or disqualification in their businesses. Thus, export performance is considered as companies' achievement, the success of exporting goods and services to other national markets (Shoham, 1996, Zou & Stan, 1998).

Method of measurement of export performance: When studying the export performance, Zou & Stan (1998) divided the criteria for evaluating export performances into two groups: Financial Measures and Non-Financial Measures.

(I) Financial indicators used to measure export performance: (i) Sales measures; (ii) Profit measures, and (iii) Growth rate measures.

(II) Non-financial indicators measure export performance: (i) Perceived success, (ii) Satisfaction, and (iii) Objectives goal achievement.

In this study, the authors conducted a study on the export performance of non-financial exports based on three indicators: (i) pursue of success, satisfaction of business and achieving goals (Zou & Stan, 1998).

Model export performance: Madsen (1987) conducted a review of 17 studies of export results published between 1964 and 1985, suggesting that export performance is influenced by three factors: (i) external environmental factors, (ii) organizational elements of the business, and (iii) strategic elements of the business.

On the basis of an overview of 55 exporters studies from 1978 to 1988, Aaby & Slater (1989) has argued that export performance is influenced by five factors: (i) external environmental factors; (ii) enterprise capacity, (iii) corporation characteristics, (iv) marketing orientation, (v) corporation strategy.

Gemünden (1991) conducted a review of 50 studies on export performance from 1964 to 1987, suggesting that export performance is influenced by five factors: (i) company characteristics, (ii) Domestic market, (iii) corporation governance capacity, (iv) exporters' activities, and (v) type of foreign markets.

Base on the model of Aaby & Slater (1989), Zou and Stan (1998) conducted a study of 50 published export articles from 1987 to 1997, suggesting that export performance is affected by 08 factors: (i) Export marketing strategy, (ii) attitudes and perceptions of the exporters; (iii) management specification; (iv) type of business; (v) characteristics of the export industry; (vi) categories of the foreign market and (viii) domestic market's typical.

Leonidou & associates (2002) conducted a review of 36 published export studies from 1960 to 2002, suggesting that export performance is affected by five factors: (i) management characteristics (ii) organizational factors, (iii) environmental factors, (iv) enterprise's export performance, and (v) type of industry.

In this study, the authors have based on theoretical model of Zou and Stan (1998) to study the case of seafood's enterprises in Vietnam. Thus, export performance is directly affected by seven factors: export marketing strategy, specialization and capabilities of the company, type of industry, management specific, tendency and perceptions management, type of foreign markets, domestic market's attribute.

Marketing Strategy: The marketing strategy is one of factors that is of great interest to researchers (Zou & Stan, 1998). The research results of Madsen (1987), Aaby & Slater (1989), Zou & Stan (1998), Tuba & Selcuk (2005), Beleska-Spasova 4P strategy: (i) product strategy; (ii) price strategy; (iii) strategy on trade promotion and sales support; and (iv) distribution strategy. In addition, the research by Madsen (1987), Aaby & Slater (1989), Zou & Stan (1998), Tuba & Selcuk (2005), Beleska-Spasova (2014) with export results of the business. Therefore, the authors have hypothesized H_1 as follows:

H_1 : *Export Marketing Strategies of Enterprises affect the export performance (expectation +)*

Characteristics and capabilities of the company: the characteristics and management capacity of the company is a very important factor affecting the export performance of the enterprise (Madsen, 1987, Gemünden, 1991, Aaby & Slater, 1989, Zou & Stan, 1998). The characteristics and capabilities are assessed by enterprise's size. The company's experiences, international competition, technological advantages, and characteristics of the business (Zou & Stan, 1998) and the authors have hypothesized H₂ as follows:

H₂: Characteristics and management capacity affect the export performance (expectation +)

Industrial characteristics: Industrial characteristics are one of direct factors influencing the export firm's performance (Zou & Stan, 1998). Industry characteristics are reflected in the level of market stability, the level of competition among firms in the industry and the level of technological development of enterprises (Zou & Stan, 1998). Therefore, the authors have proposed H₃ as follows:

H₃: Industrial characteristics affect the export performance (expectation +)

Management characteristics: Management characteristics are assessed through the experience and qualifications of its company's management board in export activities. Their authority is to handle enterprises' capital in export operations. Their proficiency is to analyze and forecast market volatility (Zou & Stan, 1998; Leonidou et al., 2002; Beleska-Spasova, 2014). Once, the study by Zou & Stan (1998), Leonidou et al. (2002), Beleska-Spasova (2014) also have showed that management characteristics have an impact on the export performance. Therefore, the authors have proposed H₄ as follows:

H₄: Management characteristics affect the export performance (expectation +)

Management orientation and perceptions: These are assessed through engagement in export prospects, recognize its advantages and challenges for export activities. The research in export barriers, and motive force for export activity (Zou & Stan, 1998). The study by Zou & Stan (1998) have showed that: Key perspective and management perceptions in the company are one of factor affecting the exporters' results. Hence, the authors have proposed the H₅ hypothesis as follows:

H₅: Orientation and management recognition affect the export performance (expectation +)

Foreign market characteristics: These are assessed through the assessment of winning awards in seafood from international markets. The share market compares with competitors of the fishery industry. The barriers to export fishery products, and the grade of stability of foreign markets for fishery products (Zou & Stan, 1998), the study by Gemünden, (1991), Zou & Stan (1998), Beleska-Spasova (2014) has showed that the characteristics of foreign markets have an impact on export performance. Thus, the authors have hypothesized H₆ as follows:

H₆: Characteristics of foreign markets affect the export performance (expectation +)

Characteristics of the domestic market: The characteristics of the domestic market are assessed through analysis of the fluctuation in the market; State supports for export activities according to international's policy, trade promotion activities, and access to information on foreign fishery markets (Zou & Stan, 1998; Craig, 2003; Beleska-Spasova, 2014). Research by Zou & Stan (1998) has showed that the domestic market has an impact on the export performance. So, the authors hypothesize H₇ as follows:

H₇: Domestic market characteristics affect the export performance (expectation +)

Moreover, the study by Aaby & Slater (1989) has showed that the characteristics and management proficiency have an impact on the marketing strategy. Therefore, the authors have hypothesized H₈ as follows:

H₈: Management specifics and proficiency affect marketing strategy (expectation +)

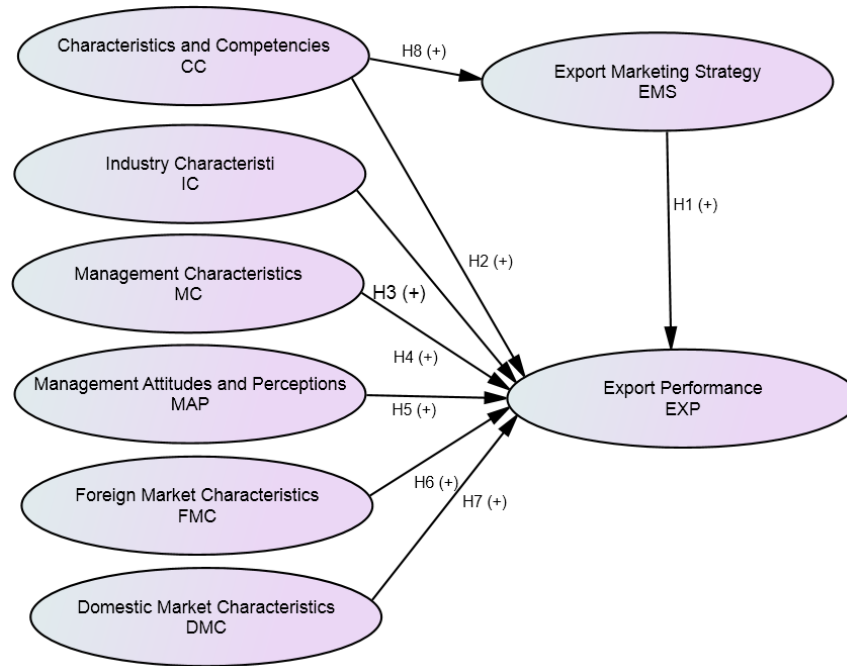


Figure 1. Models and hypotheses proposed by authors

Methodology of the Research

Research process: This study has been combined qualitative and quantitative research methods. Qualitative research method has been conducted by interviewing 10 exporters in November 2016 to modify observational variables that have been used to measure research concepts. Quantitative research has been conducted through direct interviews with 300 exporters in the Mekong Delta region from 01/2017 to 04/2017 by convenient sampling using a detailed questionnaire to test model and research hypotheses.

Data processing techniques:

Collected data was evaluated by means of Cronbach's Alpha reliability analysis, EFA, CFA, and SEM to test and verify suggested models and hypotheses.

Result and discussion

Description of research sample

Among 520 respondents, there are 307 (59%) females, 213 (41%) males among 520 respondents; and 32 respondents earning less than 3 million VND per month (6.2%), 179 earning from 3 to less than 5 million VND (34.4%), 170 earning from 5 to below VND 8 million (32.7%), 139 earning above VND 8 million (26.7%).

Among 300 respondents, 22 people were declined because of too many inappropriate respondents. Data is used by SPSS software 20.0 with 278 validity respondents (included 92.7% in all questionnaires), there were 143 private enterprises (51.4%), 75 joint stock (27%), 60 other types (21.6%); 118 enterprises in the Mekong Delta (42.2%), 27 in Southeast (9.7%), 92 in North Central Coast and Central Coast (33.1%) and 41 in the Hong River Delta (14.7%).

Results analysis of scales' reliability

The results presented in Table No. 2 shows that in the 34 observation variables has been used to measure research concepts, only the ESM5, ESM6 (Promotion and Distribution) observational variables had a correlation coefficient less than 0.3 should be eliminated, while the remaining 32 variables satisfy the conditions in the reliability analysis of the scale via the Cronbach's Alpha coefficient (Cronbach's Alpha coefficient > 0.6 and correlation coefficient – total > 0.3, Nunnally & Burnstein, 1994).

Table No.2 Results of the reliability analysis of research concepts

Concepts	Cronbach's alpha	Source
Export Performance EXP		
EXP1: Perceived success	0.827	Zou & Stan (1998)
EXP2: Satisfaction		
EXP3: Goal achievement		
Export Marketing Strategy EMS		
EMS1: General export strategy	0.842	Zou & Stan (1998)
EMS2: Export planning and Market research utilization		
EMS3: Product strategy		
EMS4: Price strategy		
Characteristics and Competencies CC		
CC1: Firm's size	0.865	Zou & Stan (1998)
CC2: Firm's age		
CC3: Firm's international competence		
CC4: Firm's characteristics		
CC5: Firms technology and Firm's capabilities/competencies		
Industry Characteristi IC		
IC1: Industry's level of instability	0.811	Zou & Stan (1998)
IC2: Industry's technological intensity		
IC3: The level of competition among seafood enterprises		
IC4: There are incentive policies for exporting seafood		
Management Characteristics MC		
MC1: International experience	0.842	Zou & Stan (1998); Beleska-Spasova (2014)
MC2: Education/experience		
MC3: The ability to analysis and forecast the seafood market		
MC4: The ability to attract and manage capital for export activities		
Foreign Market Characteristics FMC		
FMC1: Export market attractiveness	0.842	Zou & Stan (1998); Beleska-Spasova (2014)
FMC2: Export market competitiveness		
FMC3: Export market barriers		
FMC4: Environmental hostility/turbulence		
Domestic Market Characteristics DMC		
DMC1: Domestic market conditions	0.803	Beleska-Spasova (2014)
DMC2: Export assistance		
DMC3: Environmental hostility		
Management Attitudes and Perceptions MAP		
MAP1: Export commitment and support	0.865	Zou & Stan (1998)
MAP2: International orientation		
MAP3: Proactive export motivation		
MAP4: Perceived export advantages		
MAP5: Perceived export barriers		

(Source: author's survey data, 2017)

The results of EFA

The results of EFA presented in Table No.3 and Table No.4 show suggested scales have been satisfied the standard. EFA factors affecting the export performance are respectively extracted into 07 factors corresponding to observe variables from 07 concepts with a total obtained variance of 67.558% at the Eigenvalue of 2.436. EFA export results have been extracted into 1 factor with an extracted variance of 73.056% at the Eigenvalue of 2.922. The EFA results are analyzed by Varimax rotation method.

Table No.3 EFA results of factors affecting export performance

	Component						
	1	2	3	4	5	6	7
CC3	.807						
CC2	.807						
CC5	.797						
CC1	.758						
CC4	.721						
MAP4		.827					
MAP3		.805					
MAP1		.801					
MAP2		.774					
MAP5		.766					
FMC3			.829				
FMC4			.801				
FMC2			.789				
FMC1			.787				
MC2				.813			
MC3				.804			
MC4				.798			
MC1				.744			
IC4					.824		
IC2					.785		
IC3					.775		
IC1					.714		
EMS1						.731	
EMS2						.720	
EMS3						.713	
EMS4						.659	
DMC3							.830
DMC2							.811
DMC1							.799
Eigenvalue	3.388	3.211	2.831	2.789	2.653	2.482	2.237
% of variance	11.683	10.074	9.762	9.617	9.150	8.557	7.715
Cumulative %	11.683	22.757	32.519	42.136	51.286	59.843	67.558
KMO	.863						
Bartlett's Test	Chi square			3616.911			
	df			406			
	Sig.			.000			

(Source: Authors' survey data, 2017)

Table No.4 EFA results of export performance

	Component	
	1	
EXP3	0.866	
EXP1	0.866	
EXP2	0.853	
Eigenvalue	2.228	
% of variance	74.273	
KMO	.722	
Bartlett's Test	Chi square	304.192
	df	3
	Sig.	.000

(Source: Authors' survey data, 2017)

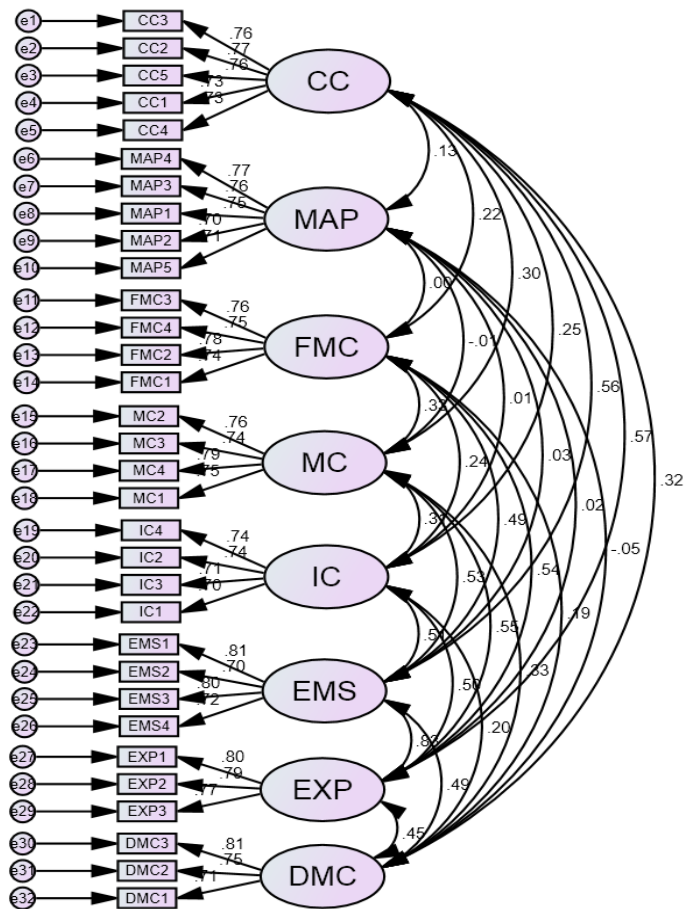
Results of CFA

The CFA results presented in Table No.5 and Figure No.2 show that all scales meet the requirements for reliability, average variance extracted, convergent validity, discriminant validity and unidirectional.

Table No.5 CFA results of factors

Concept	Abbreviation	Observed variables	P _c	P _{vc}	Convergence validity, discriminant validity and unidimensionality
Export Performance	EXP	3	0.6138	0.8267	Acceptable
Domestic Market Characteristics	DMC	3	0.5778	0.8036	
Export Marketing Strategy	EMS	4	0.5779	0.8451	
Industry Characteristic	IC	4	0.5176	0.8109	
Management Characteristics	MC	4	0.5730	0.8429	
Foreign Market Characteristics	FMC	4	0.5725	0.8426	
Characteristics and Competencies	CC	5	0.5634	0.8657	
Management Attitudes and Perceptions	MAP	5	0.5357	0.8565	

(Source: Authors' survey data,



Chi-square=468.914;df=436;CMIN/df=1.075;p=.133;
TLI=.990;CFI=.992; RMSEA=.017

2016)

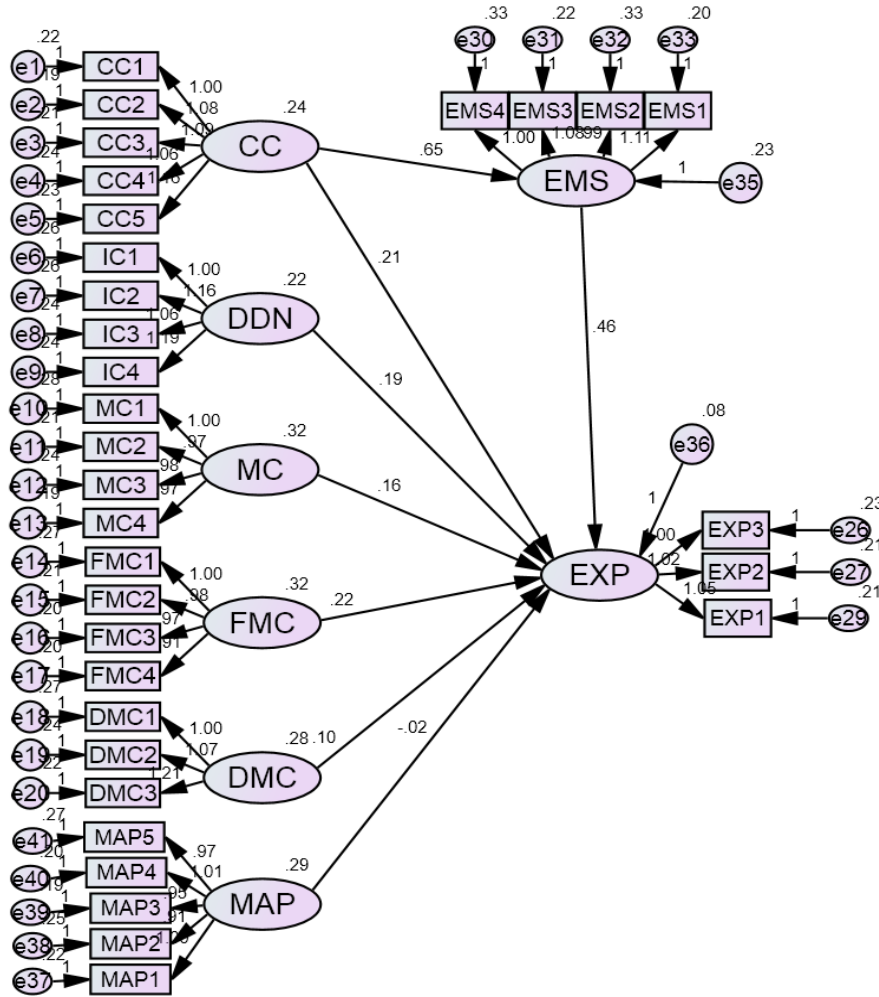
Figure No.2- Results of study test

(Source: Authors' survey data, 2017)

Note. Coefficients measure figures is χ^2/df ratio < 5 (Schumacker & Lomax, 2004), TLI > 0.90 (Hair et. al, 2006), CFI > 0.95 (Hu & Bentler, 1999), RMSEA < 0.07 (Hair et. al, 2006), p - value > 0.05 (Hair et. al, 2006).

The results of the testing model

The results of the testing model presented in Figure No.3 show that the model has Chi squared value as 704,886; Df at 456; Cmin / df at 1.546 with p-value at 0.000 (<0.05) was not appropriate due to the size of the sample (only 278 seafood exporters surveyed). However, other appropriate measures such as TLI = 0.930; CFI = 0.936 and RMSEA = 0.044 are consistent. Thus, it is still possible to conclude that this model is consistent with data collected from the market.



Chi-square=704.886;df=456;CMIN/df=1.546;p=.000;
 TLI=.930;CFI=.936; RMSEA=.044

Figure No.3- Results of study test

(Source: Authors' survey data, 2017)

The results of the test hypotheses:

The results of the test hypotheses presented in Table No.6 show that all hypotheses are acceptable at significance (alpha) level of 0.05, the corresponding confidence level of 95% as following.

Table No.6 Test hypothesis test results

	Estimate	S.E.	C.R.	P	Hypothesis Test Results
EMS <--- CC	.650	.090	7.199	***	Supported H ₈
EXP <--- EMS	.465	.071	6.523	***	Supported H ₁
EXP <--- CC	.209	.071	2.944	.003	Supported H ₂
EXP <--- IC	.194	.061	3.200	.001	Supported H ₃
EXP <--- MC	.163	.049	3.313	***	Supported H ₄
EXP <--- DMC	.104	.052	1.987	.047	Supported H ₇
EXP <--- FMC	.219	.051	4.308	***	Supported H ₆
EXP <--- MAP	-.017	.049	-.347	.728	Rejected H ₅

(Source: Author's survey data, 2017)

Discussion and conclusion of the research

Discussion

Firstly, exporters results are affected by export marketing strategy (EMS); characteristics and competencies (CC); industry characteristic (IC); management characteristics (MC); domestic market characteristics (DMC); foreign market characteristics (FMC) as following

$$\text{EXP} = 0.465*\text{EMS} + 0.209*\text{CC} + 0.194*\text{IC} + 0.163*\text{MC} + 0.104*\text{DMC} + 0.219*\text{FMC}$$

This means that:

- (i) When enterprise has reasonable export marketing strategies through having a plan to study export markets, the products have competitive advantages and are accepted by the market. Having competitive pricing strategies and distribution chains in the export markets, it will be increased the company's export performance (businesses will increase cognizance of success, enlarge business satisfaction, and grow their reach). These factors have the strongest impact on the export result with coefficient β as 0.465;
- (ii) As the attractiveness of foreign markets expand: The rate of competition of the seafood market is substandard. Export barriers for fishery products in foreign markets are going to be lifted up. Having less fluctuating foreign fishery markets will probably be supplement the export performance and this is the second most powerful factor to export results with coefficient β as 0.219;
- (iii) When the size and experiences of the enterprise are met certain standards the characteristics of the business may be fitting for exports. Business people may expand investment to qualify their export activities. It will be widened the export results and this is the third factor impact to the export results with coefficient β as 0.209;
- (iv) When the fishery market is getting steady; seafood exporters may put more investment in technological development; the level of competition of the low-grade enterprises and the state-oriented fisheries development will obviously be grown to the export performance with the impact coefficient β as 0.194;
- (v) When the enterprise gets experiences in exporting seafood, board management may gain solid experience in seafood operations. Business people may have enough clients' networks, whose are ready to have commitments their orders annually, are to plan resources and forecast the volatility of the fishery market. The ability to mobilize and organize capital for export activities will be heightened the export performance of joint ventures. Karma with coefficient of action $\beta = 0.163$;
- (vi) Finally, when the subsidiary from government for the export of fisheries in terms of policy, trade promotion activities for export; access to information on foreign fisheries markets;

domestic market is less volatile, which will be increased the export performance and this is the weakest factor affecting the export result with coefficient $\beta = 0.104$.

Secondly, the marketing strategy of the business is directly affected by the characteristics and capabilities of the business. The results of research show that EMS as $0.650 * CC$.

This means that companies' experiences are met export standard requirements; international competitiveness; the characteristics of the enterprise are suitable for export and the technology development will make it smoothly for enterprises to have sufficient plans to study the export market. The specific products may have gain market share against competitors and get accepted by the market. There is a competitive price strategy with a coefficient of β as 0.650.

Conclusion

The research has identified and measured factors affecting the export performance of seafood enterprises in Vietnam. The method has been used quantitative research methodology through the survey of 278 enterprises. These results show that exporters are affected by many issues such as its marketing strategy, characteristics of the fishery, food and safety regulations in international markets barriers, companies' capabilities, customers' behavior, management strategies, domestic market attributes. However, the research subject has certain limitations: (i), due to limited resources in conducting research, the sampling in regarding only 278 exporters. Thus, the results might not be able to be represented for a large scale nationwide. (ii) This study has been conducted a convenient sampling technique using direct interview methods from the respondents. Therefore, the reliability of the research scale may be higher if random sampling would be chosen./.

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