The effects of entrepreneurial orientation and innovativeness on export performance of small and medium enterprises in Thailand

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Abstract

The purpose of this paper is to observe the effects of entrepreneurial orientation and innovativeness on export performance of Thai small and medium enterprises (SMEs) based on the literature review. It was possible to describe the characteristics of International entrepreneurship into two aspects: entrepreneurial orientation and innovativeness. Therefore, this led to the research questions: Is there any causal relationship between entrepreneurial orientation and innovativeness, and export performance of Thai SMEs?. The subjects of this quantitative research were SMEs engaged in export business and registered with the Ministry of Commerce. For data collection, 238 self-administered questionnaires were distributed via emails and in persons. The data analysis were descriptive and structural model analysis. It is found that the entrepreneurial orientation (EO: $\beta = 0.274$, $p < 0.01$) and innovativeness (INNO: $\beta = 0.449$, $p < 0.001$) had direct effect on the export performances. The results showed that the entrepreneurial orientation and innovativeness had direct relationship with the variance of the export performance.

Keywords: entrepreneurial orientation, innovativeness, export performance

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Introduction

ASEAN Economic Community (AEC) is the key factor for Internationalization of Thai business. The objectives are to cooperate and integrate regionally, as well as increase negotiation power in international trading. Launching of AEC would create the single market and production base which leads to the free trade area for many businesses such as, products, services, investments, capitals and skill labors, etc. The free trade was done continuously according to the agreement and negotiation which planned to be completed in Year 2015. In order to become international standard or internationalization for market competition and long-term growth in business, government and private sectors, especially SMEs, must improve their performance effectively. AEC is the new context for Thai SMEs in the coming future which will extend the trading territory and investment of Thailand to ASEAN and vice versa. In contrast, this is a threat factor that brings Thai businesses down as well. Thus, this could be pros and cons to business. Thai SMEs need to study, understand, adopt and apply the benefits of AEC wisely. Then of study this issue is essential for Thai SMEs, to let the entrepreneurs and concerned parties understand the process of SMEs Internationalization. In this paper, the author focuses on the factor that may effect the operation of SMEs internationally, which were the entrepreneurship orientation and innovativeness. Entrepreneurial orientation is a critical factor for business success under conditions of changing business environment (Wang, 2008). Uncertainty of future earnings and the pursuit of new business opportunities can be very effective and accessible (Zhou, Wu, and Luo, 2007). Based on literature review in this study, researcher focused on entrepreneurship. Entrepreneurial orientation consists of 3 aspects, risk taking orientation, proactive orientation, and human capital. In terms of innovativeness, it is considered an important tool for entrepreneurship and important strategy for gaining competitive advantage, marketing opportunities and success in business. It comes from the fact that entrepreneurs use change as an opportunity to make a difference in their business. It is generally understood that being an entrepreneur and innovation, is a relationship (Drucker, 1994; Kanungo, Duda and Srinivas, 1999; Zhao, 2001). This paper divides innovation into three categories: technological innovation, product innovation, and process innovation.

Table 1 The trends of the export, import and the growth rate of the SMEs, 2012-2016.

	2012	2013	2014	2015	2016
total export (million baht)	7,082,490.96	6,909,741.17	7,313,066.40	7,227,927.43	7,550,704.07
SMEs export (million baht)	2,036,264.98	1,772,747.79	1,923,198.60	1,980,434.58	2,190,550.40
GDP at year prices (million baht)	12,349,026.00	12,901,498.00	13,132,234.00	13,533,596.00	14,366,557.00
GDP SMEs at year prices (million baht)	4,891,139.00	5,097,975.00	5,097,975.00	5,559,534.00	6,061,143.00
export proportion of SMEs per export nation (%)	29%	26%	26%	27%	29%
export proportion of nation per GDP (%)	57%	54%	56%	53%	53%
export proportion of SMEs per GDP of SMEs (%)	42%	35%	38%	36%	36%

Reference: office of national economic and social development board.

Summarized office of small & medium enterprises promotion (OSMEP, 2018).

Hypotheses and research model

Research of the effects of entrepreneurial orientation and innovativeness on export performance of SMEs in Thailand was the study of the influence of entrepreneurship to export performance of SMEs in Thailand (Figure 1). The purpose of this study was to help entrepreneurs in trading sectors improving their performance under the changing circumstance of the markets. This research leads to the following questions: 1) Is there any causal relationship between entrepreneurial orientation and export performance of Thai SMEs? 2) Is there any causal relationship between innovativeness and export performance of Thai SMEs?

From the concerned concepts, theories and researches together with other variable factors, these following assumptions are set according to research objectives with the research hypotheses as the followings:

H1: There is a positive relationship between entrepreneurial orientation and export performance of Thai SMEs.

H2: There is a positive relationship between innovativeness and export performance of Thai SMEs.

Methodology

Population and sampling

The scope of the population used in this research is the SMEs business to exporting of Thailand (Department of International Trade

Promotion) with a registered capital of no more than 100 million baht for retail, wholesale and service or production respective. The SMEs business to exporting throughout the country at the end of the year 2016 (registered with Department of International Trade Promotion, 2013-2016) based on the manufacturing sectors, can be classified into 10 groups as follows: 1) agricultural 2) products, minerals/fuels 3) food 4) automotive/auto parts and accessories 5) machinery/equipment 6) chemicals/plastic /raisin 7) cosmetics/toiletries/medical supplies/ optical goods 8) household products 9) building materials/hardware items 10) electronics/ electrical products and parts.

The sample number of SMEs who are exporter was 454. The data collection is done by face-to-face inquiry, or sending the questionnaire to the target audience by mail, with a reply envelope. The data collection used by the facilitator of the data provider is important. However, when the questionnaire was returned, only 238 samples can be used for the research. The questionnaire will be identified by unit of analysis. The required sample size for this study based on calculation according to the rules of SEM (Costello and Osborne, 2005). A simplified guideline for the lowest ratio of sample size to number of observed variable (p), is 10-20. In this study 6 was observed. Therefore, 238 samples were considered sufficient for statistical analysis.

Reliability and validity

Cronbach's alpha is the mean to measure internal consistency and to analyze how closely a set of items used in the model are related (Cronbach, 1951). The alpha coefficient of 0.7 or higher is considered acceptable Carman (2000) with the total reliability statistics at 0.805 for 8 items. The alpha coefficients were well above 0.7, indicated reliability of the model (Table 2).

To determine the normality of the data distribution (Hair, Black, Babin, Anderson, and Tatham, 2006), skewness and kurtosis were calculated. It is found that the skewness was not exceed 3.00, and kurtosis was not exceed 7.00 (Curran, West, and Finch, 1996; Kline, 2011), and this can be concluded that the data distribution is normal (Table 3).

Analysis of measurement models

Confirmatory factor analysis (CFA) is used to measure latent variable and to confirm each observation variable. Structural equation model analysis (SEM) is used to analyze the structural relationships of entrepreneurship orientation, innovativeness and export performance.

The CFA of the measurement model did not meet the criteria of model fit as some of the indicator were still unfavorable to the acceptable level. Thus it is necessary to adjust the model

using data reduction method. EO_Human variables, as the factor loading, should be greater than 0.6, as shown in (Figure 2). The results showed that relative Chi-square (χ^2/df) was 1.658, which was less than 2, the acceptable criteria. The specific group indexes at the level of 0.90 or higher were GFI=0.978, CFI=0.988, while RMSEA is 0.053, which was less then 0.08, also acceptable (Figure 3).

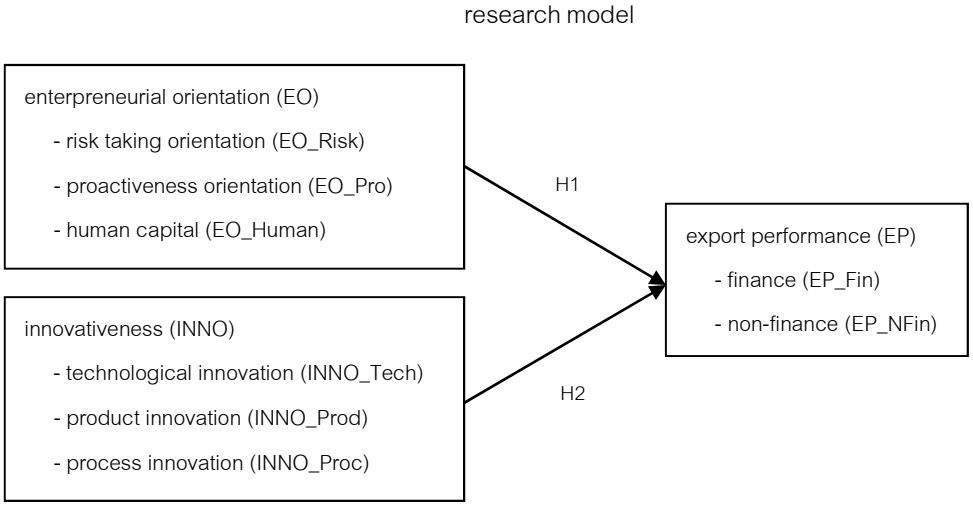


Figure 1 Conceptual model of the effect of entrepreneurial orientation and innovativeness on export performance (by author).

Table 2 Results of Cronbach's alpha coefficient analysis.

construct	item	Cronbach's alpha coefficient	$\bar{x}$	S.D.
EO	EO_Risk	0.947	3.3796	1.1223
	EO_Pro	0.946	4.6345	1.0588
	EO_Human	0.943	5.0588	0.9621
INNO	INNO_Tech	0.944	5.4916	0.9621
	INNO_Prod	0.943	5.3459	0.9524
EP	EP_Fin	0.944	4.7815	1.0739
	EP_NFin	0.943	5.0602	0.8675

Table 3 Normal distribution testing of the data.

variables	skewness	kurtosis	normal distribution
EO_Risk	0.411	-0.121	✓
EO_Pro	0.625	0.204	✓
EO_Human	-0.189	0.005	✓
INNO_Tech	-0.116	-0.106	✓
INNO_Prod	-0.531	0.503	✓
INNO_Proc	-0.318	0.241	✓
EP_Fin	0.150	-0.214	✓
EP_NFin	0.220	0.500	✓

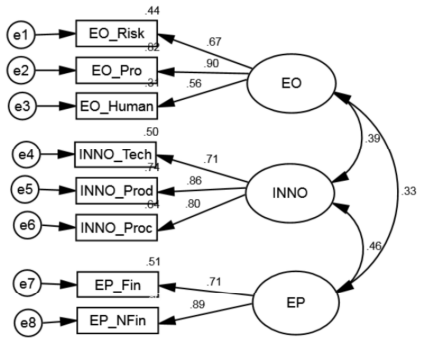


Figure 2 Factor loading of observation variable in CFA observation.

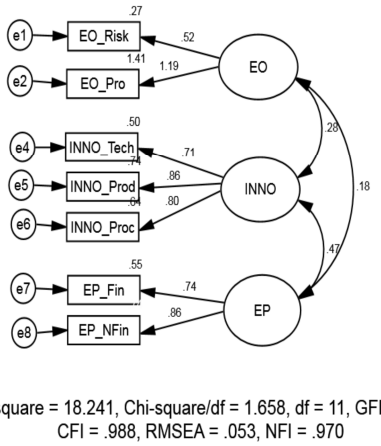


Figure 3 Factor loading (with modification indices).

Results

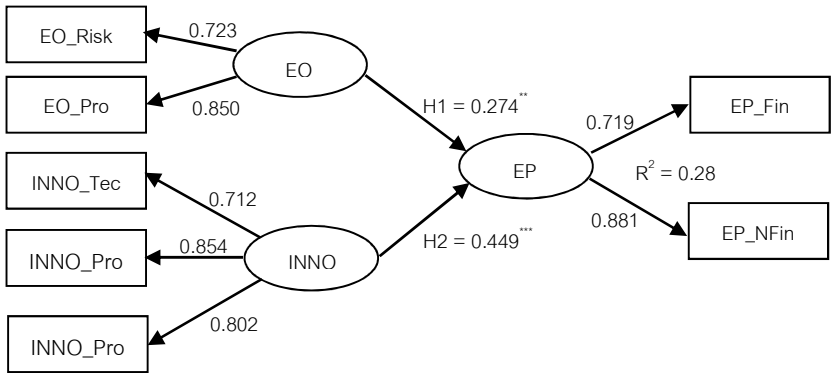
H1: There is a positive relationship between entrepreneurial orientation and export performance of Thai SMEs.

The model of the analysis of the relationship between entrepreneurial orientation (EO) and export performance (EP) indicated that there was positive relationship between EO and EP. The results indicated that the path coefficient between EO and EP was 0.274, standard error was 0.105, critical ratio was 3.089 and the *p*-value was lower than 0.01. The factor loading values for each item of the observed variables, which were risk taking orientation and proactiveness orientation were

0.723 and 0.850 respectively. The *p*-value for this relationship was lower than 0.01, this suggested that the result was statistically significance and supported hypothesis H1.

H2: There is a positive relationship between innovativeness and export performance of Thai SMEs.

The model of the analysis of the relationship between innovativeness (INNO) and export performance (EP) indicated that there was positive relationship between INNO and EP. The results indicated that the path coefficient between INNO and EP was 0.449, standard error was 0.095, critical ratio was 4.762 and the *p*-value was lower than 0.001. The factor loading values for each item of the observed variables, which were innovativeness based for technological innovation, product innovation and process innovation and were 0.712, 0.854, and 0.802, respectively. The *p*-value for this relationship was lower than 0.001, this suggested that there was direct relationship between INNO and EP, which indicated that hypothesis H2 was supported (Figure 4).



Chi-square = 12.613, CHi-Square/df = 1.401, df = 9, GFI = 0.986,
CFI = 0.994, RMSEA = 0.41, NFI = 0.979

Figure 4 Research model result of the entrepreneurial orientation and innovativeness; analysis of structural equation model (SEM).

Discussion

To discuss the results of the following research questions: 1) Is there any causal relationship between entrepreneurial orientation and export performance of Thai SMEs? 2) Is there any causal relationship between innovativeness and export performance of Thai SMEs?

The authors will present the results as the followings:

H1: There is a positive relationship between entrepreneurial orientation and export performance of Thai SMEs.

The relationship between EO with EP were statistical significant. For entrepreneurial orientation, the findings are consistent with previous researches. For example, Miller and Bromiley (1990) found the impact on the overall business performance, such as returns to shareholders, assets and sales, etc. Zahra (1991) found a positive correlation between entrepreneurial orientation, profitability and business growth. Wiklund (1999) study also stated that there is a positive correlation between entrepreneurial orientation and business performance. In the previous studies, there were also reports of significant positive correlations between entrepreneurial orientation and business performance (Zahra and Covin, 1995; Al-Swidi and Mahmood, 2011) including Krauss, Frese, Friedrich, and Unger (2005). What affect entrepreneurial orientation the most were risk taking orientation and proactiveness orientation, respectively. It may be explained that in the operation of SMEs, entrepreneurs should carry out various activities in the organization with risk taking orientation. Such organizations should seek opportunities in new export markets, where there is a potential to reduce the dependence on key markets and should focus more on research and development, leadership in technology and innovation, to create a competitive advantage in entering foreign markets. Entrepreneurs should have the courage to bring in existing resources to invest in foreign markets that have never been done before. SMEs should be courageous to implement changes in resource allocation with limited availability, and change of management approach to achieve the purpose of marketing for export.

H2: There is a positive relationship between innovativeness and export performance of Thai SMEs.

The relationship between INNO with EP were statistical significant. The most direct variables influencing the export performance were Innovativeness (INNO), which is consistent with Sher and Yang (2005) where innovativeness is most positively correlated to performance when assessed by asset yield. Guan and Ma (2003) found that the growth of exports was related to the potential for innovation, learning, research and development, marketing, corporate management, human resources and strategy. What affect the most to innovativeness are process innovation, technological innovation and production innovation, respectively. Thus, it can be stated that the organization should focus on innovativeness, such as distribution of new products or service,

and new products to respond to market needs and changed. SMEs need to focus on responding to niche markets where large enterprises are not able to meet their needs because SMEs have the advantage of being more flexible in responding to the changing environments than large enterprises. This will enable SMEs to accelerate their organization development with a concrete adjustments to create value for themselves, and to equip with the ability to develop innovative capabilities, as well as to develop new products to meet the needs of niche markets.

Conclusion

Based on the results of this paper, it can be concluded that what most affect the export performance of most SMEs were innovativeness (INNO) and entrepreneurial orientation (EO). INNO comprises of technological innovation, products innovation and process innovation. entrepreneurial orientation (EO) comprises of risk taking orientation and proactiveness. The findings of this research contribute to the export entrepreneurs which they can use to examine entrepreneurial orientation (EO) and innovativeness (INNO) in order to monitor and enhance the ability of a business between International entrepreneurship of small and medium enterprises that export. If there any organizations examining the factors of the two variables, have found weaknesses, can bring the results of the survey to improve and develop their ability to export in the future.

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