

The effects of entrepreneurial orientation on export performance of small and medium-sized enterprises (SMEs) in Thailand: Reconfiguration capability as mediating and competitive environment as moderator

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Abstract

The purpose of this paper is to analyze the causal relationship model of the effects of entrepreneurial orientation (EO) on export performance of small and medium-sized enterprises (SMEs) in Thailand with reconfiguration capability as mediating and competitive environment as moderator. A conceptual framework has been developed based on the literature reviews and research gaps of the earlier studies. The empirical study has been conducted with a population of entrepreneurs of SME exporters in Thailand who are the members of Department of International Trade Promotion with a registered capital of no more than 100 million Thai Baht. There are 238 SME exporters selected in this study. The research tool is a questionnaire collected by mail and completed face-to-face. The data is analyzed using descriptive and structural model analysis. The results show that the EO has no direct effect on the export performance ($\beta=0.06$, $p=0.43$). However, EO shows an indirect relationship between the variance of the export performance through reconfiguration capability as mediating variable. The results also show indirect path that mediating by reconfiguration capability from EO to export performance ($\beta=0.90$, $p<0.01$) and EO ($\beta=0.12$, $p<0.05$) has a direct effect on export performance which increases with favorable competitive environment as the moderator variable respectively.

Keywords: entrepreneurial orientation, reconfiguration capability, competitive environment, export performance

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Received: February 17, 2019; Revised: February 23, 2019; Accepted: March 21, 2019

Introduction

Each country develops its economic plan taking into account the promotion of small and medium-sized enterprises (SMEs) according to the prevailing circumstances and conditions, such as business, manufacturing, trading, services, and investment environments. Thai SMEs are becoming increasingly involved via communication or direct participation with international markets. Thus, Thai SMEs must be ready to become involved with international business. As part of ASEAN Economic Community (AEC) since 2015, country members including Thailand have been opening their trading, service, manufacturing and investment sectors to other member countries leading to the increased movement of production materials, investment capital, labor, trading, and investment support. In order to meet international standards and be competitive in the international market place as well as to continue long-term growth, the Thai government and private sector, especially SMEs, must improve their performance effectively. Performance is driven by entrepreneurial factors because entrepreneurship plays an essential role in the survival of business since entrepreneurs are directly responsible for the risks and uncertainties of the business and can lead the business to achieve its goals, success, and profitability (Kuratko, 2009). Moreover, the entrepreneur is responsible for the

internationalization of the business (Anderson, 2000). Also, the entrepreneur is the most important agent of change that is capable and willing to take the risk in making decisions, be innovative and take advantage of business opportunities in different market environments based on the internationalization theory (OECD, 2000). It is imperative that entrepreneurs have the knowledge and understanding of how to achieve internationalization by SMEs with a view to bringing the business into internationalization (Anderson, 2000). Thus, to understand the factors that affect the entrepreneur's performance of SMEs in establishing internationalization, it is necessary to study the issue of what entrepreneurial orientation (EO) is expected to affect.

From the above, it is crucial that SMEs entrepreneurs or the persons being responsible for that have the knowledge and understanding of entering into the international market. Accordingly, this research work emphasizes on the SMEs exporting only and measures the outcomes of the export performance because the export is the common method for being international, which has been used by Thailand and other countries to expand their business abroad (Kogut, & Chang, 1996) and to reduce the restrictions on certain things such as the limitations in resources (Dalli, 1995), and to increase marketing knowledge and in a foreign

country (Root, 1994). The research also explains that the export is the main business to grow and can create both competitive advantage and disadvantage. Thus, to find the answer about the factors, what the entrepreneurs are expected to influence the SMEs performance in entering into the internationalization, is necessary. Results from the research might be especially useful for entrepreneurs of SME businesses and can be used as information to help make decisions and implement internationalization. Moreover, the Thai government may use the various outcomes from the research as a guide in planning to promote the development of the capabilities of SMEs in exporting sustainability into the future.

Hypotheses and research model

A. Theories and related research on relationship between Entrepreneurial Orientation (EO) and Export Performance (EP)

Covin, & Slevin (1991) modeled the relationship between entrepreneurial and organizational performance and found that entrepreneurial focus was positively correlated with performance and entrepreneurship. Miller and Bromiley (1990) found that EO had a positive impact on overall business performance in terms of return on shareholders' equity assets, sales and so on. According to Zahra (1991), there is a positive correlation between EO and profitability as well as EO and business growth.

Wiklund (1999) confirmed that there are positive relationships between EO and business performance. Previous studies also report a significant positive relationship between EO and business performance (Zahra, & Covin, 1995; Al-Swidi, & Mahmood, 2011) and found that EO is both a valuable indicator of business and a critical component for organizational success and sustainability (Krauss, Frese, Friedrich, & Unger, 2005; Rauch, Wiklund, Lumpkin, & Frese, 2009; Kuhn, Sassmannshausen, & Zolin, 2010). Other researchers indicate that in order to enter the market and deliver high performance, the company should increase the strength of EO (Covin, & Slevin, 1991; Zahra, 1991). To analyze the effects of latent variables on EP, the following hypotheses have been set forth:

Therefore, it is proposed that:

H1: Entrepreneurial orientation has a positive impact on export performance of Thai SMEs.

B. Theories and related research on relationship between Entrepreneurial Orientation (EO) and Reconfiguration Capability (RC)

In general, EO can create new markets and result in competitive advantage (Miller, 1983; Prahalad, & Hamel, 1990). Ireland, Hitt, & Sirmon (2003) pointed out that in a changing environment, managers must be able to use resources to create new markets and respond to customer needs. Wiklund (1999) explained how

EO affects organizational culture by learning process and advanced capabilities. Similarly, Jantunen, Puumalainen, Saarenketo, & Kyläheiko (2005) found that EO has a positive impact on dynamic capabilities and entrepreneurs should pay attention to the details and support their organizations. Jiao, Wei, & Cui (2010) found that EO has a positive effect on other dynamic capabilities, and the most important factors for executives dealing with entrepreneurial thinking and dynamic capabilities are creativity, self-confidence, expertise, experience, tolerance and adaptability to dynamic change.

Therefore, it is proposed that:

H2: Entrepreneurial orientation has a positive impact on reconfiguration capability.

C. Theories and related research on relationship between Reconfiguration Capability (RC) and Export Performance (EP)

Reconfiguration capability in the relationship between enterprise resources and export performance are evidenced in the dynamic capabilities documentation that enables companies to create, develop and protect resources that help them achieve superior long-term performance (Ambrosini, Bowman, & Collier, 2009). Wu (2006) confirmed the importance of Reconfiguration capability in transforming resources into organizational performance. The researcher expect this effect

to occur in the international market. Therefore, it is proposed that:

H3: Reconfiguration capability has a positive impact on export performance of Thai SMEs.

D. Theories and related research on the relationship between Entrepreneurial Orientation (EO) and Competitive Environment (CE)

Entrepreneurial focus is an important resource and represents the ability of a business to deliver sustainable competitive advantage and superior performance over other businesses. Resource-based theory, which explains that competitive advantage can only arise from the use of scarce assets, intangible assets and limited assets. Bontis, Bart, Tovstiga, & Tulugurova (2009) argue that internal resource development is a factor of competitive advantage in SMEs. From other studies, relevance also confirms that businesses with competitive advantage and good performance are largely influenced by entrepreneurial behavior of the business (Zahra, & Covin, 1995; Wiklund, & Shepherd, 2003). EO can also refer to the strategic management process that business decision makers can use to set goals to achieve organizational objectives, to maintain a vision and to create competitive advantage (Lumpkin, & Dess, 1996; Frese, & de Kruif, 2000; Wiklund, & Shepherd, 2003). In terms of the analysis of competitive advantage (CA) at

the corporate level, there is also research that studies international CA at the industry level. According to Porter (1990), countries with a particular CA will also have an industry advantage, and these advantages are important for the country. The CA model of a country consists of four aspects, depending on the characteristics of the country, adapted to the environment of the country, which may promote or hinder the development of CA, including: demand conditions, related and supporting industries, firm strategy, and structure and rivalry. There are two additional factors that can affect the pattern: chance and government (Porter, 1990).

Therefore, it is proposed that:

H4: Entrepreneurial orientation has a positive impact on export performance increases with favorable competitive environment.

Methodology

Population and sampling

The population of SMEs who are units and members of the Department of International Trade and 534 units from the list of outbound traders, Standard Office of Commerce Ministry, total of 772 units, based on 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 Resin 7) Cosmetics/Toiletries/

Medical Supplies/Optical Goods 8) Household Products 9) Building Materials/Hardware Items and 10) Electronics/Electrical Products and Parts. However, considering the conditions for being a small and medium enterprise with a registered capital of not more than Baht 100 million, 454 exporter SMEs were selected in this study. The required sample size for this study is based on the calculation according to the rules of structural equation model (SEM) analysis which proposes a simplified guideline for the lowest ratio of "sample size" to "number of observed variable (p)" of 10-20: This paper has observed 18. Therefore, 238 samples are considered to be sufficient for statistical analysis.

The questionnaire is identified by unit of analysis and conducted through face-to-face interviews or the questionnaire is mailed to target respondents and returned via a postage-paid, return addressed envelope. A total of 454 companies are selected and contacted via mail, with the final number of respondents being 238.

Reliability and validity

The validation of the items used in the questionnaire is evaluated using Index of Item-Objective Congruence (IOC) method. The IOC's overall assessment score is 0.94 and is thus considered valid.

Cronbach's alpha is used to measure internal consistency of the variables used in the model.

The variables used have alpha values all higher than 0.8 (from 0.94 to 0.95) as showed in (Table 1). The data are found to be distributed within the Kurtosis value between -3 to +3, which is within normal distribution. The testing of multi-collinearity is an analysis for the non-relationship between

variables. The tolerance must be more than 0.1 and the value of variance inflation factor (VIF) must be lower than 10. The analyzed tolerance values range from 0.34-0.60 and VIF values range from 1.65-2.94 indicating that there is no multi-collinearity among variables.

Table 1 Results of Cronbach's alpha coefficient analysis.

construct	item	Cronbach's alpha coefficient	\bar{x}	S.D.
EO	EO_Risk	0.95	3.38	1.12
	EO_Pro	0.95	4.63	1.06
	EO_Human	0.94	5.06	0.96
RC	RC_Inc1	0.94	5.29	0.85
	RC_Inc2	0.94	5.11	0.90
	RC_Inc3	0.94	5.44	0.86
	RC_Adcl	0.94	5.45	0.82
	RC_Adc2	0.94	5.40	0.80
	RC_Adc3	0.94	5.56	0.77
	RC_Adc4	0.94	5.49	0.84
CE	CE_Fact	0.94	5.45	0.80
	CE_Deman	0.94	5.22	0.88
	CE_Relate	0.94	5.43	0.92
	CE_Firm	0.94	5.24	0.85
	CE_Gov	0.94	4.58	0.92
	CE_Chan	0.95	4.94	1.12
EP	EP_Fin	0.94	4.78	1.07
	EP_NFin	0.94	5.06	0.87

Convergent validity and discriminant validity

The convergent validity is measured using confirm factor analysis, if the factor loading values are greater than 0.60 and the average variance extracted (AVE) values are

higher than 0.50, the model is considered converged. The loading factors range from 0.53 to 1.17 while the result as showed in (Table 2) indicate the AVE values from the study range from 0.49 to 0.82.

The assessment of discriminant validity, conducted by comparing the AVE value with squared correlation between variables, suggests that the values of squared root AVE should be higher than squared correlation values to be valid. The results shown in (Table 1) indicate that all values support the discriminant validity. The AVE values from each latent variable are greater than the level of correlation involved.

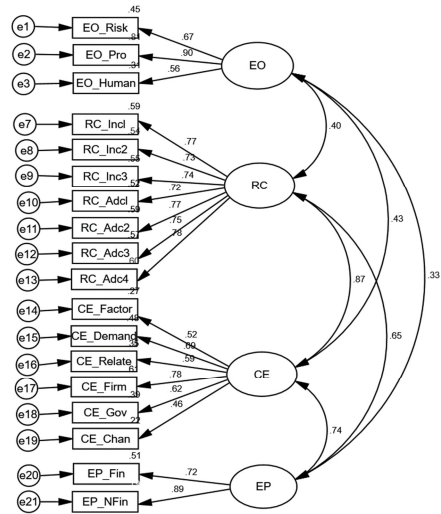
Table 2 Comparison of square root AVE with correlation between constructs.

	EO	RC	CE	EP
EO	0.91			
RC	0.07	0.75		
CE	0.08	0.72	0.70	
EP	0.04	0.43	0.41	0.81

Results

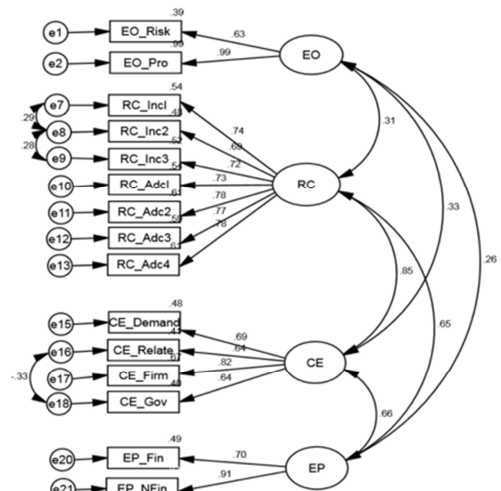
Measurement models

Confirmatory factor analysis (CFA) is used to measure latent variable and confirm each observation variable. SEM is used to analyze the structural relationships of Entrepreneurial Orientation (EO), Reconfiguration Capability (RC), Competitive Environment (CE) and Export Performance (EP) as showed in (Figure 1 and Figure 2).



Chi-square = 401.710, Chi-square/df = 3.114, df = 129, GFI = .841, CFI = .868, RMSEA = .094, NFI = .819

Figure1 Factor loading of observation variable in CFA.



Chi-square = 157.428, Chi-square/df = 1.920, df = 82, GFI = .917, CFI = .957, RMSEA = .062, NFI = .915

Figure 2 Factor loading of observation variable in CFA (with modification indices).

The CFA of the model meet the criteria of the model fit as the indicator is favorable to the acceptable level. The result showed in (Table 3) indicate that the relative Chi-square (χ^2/df) is at the

acceptable level of less than 3. In case of group indexes set as GFI, CFI and NFI at levels greater than or equal 0.90, RMSEA meet the criteria of lower than 0.08.

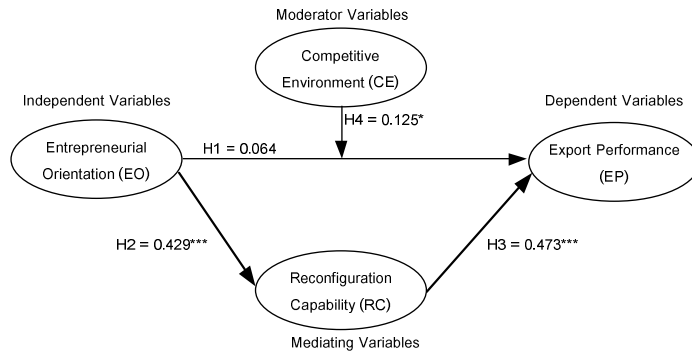


Figure 3 Research model result: Analysis of structural equation model (SEM).

SEM has been constructed for the test of the proposed hypotheses. To determine the presence of standardized direct effect, the hypotheses have been developed and find that there is no direct relationship between EO and EP (H1) ($\beta=0.06$, $p=0.43$), the indirect path mediating by RC from EO to EP (H2) is statistically significant with path coefficient $\beta=0.90$, ($p<0.00$). This suggests that mediating by RC, the relationship between EO

and EP is fully mediated by RC. The direct path shows that there is direct relationship between RC and EP (H3) which is statistically significant with path coefficient $\beta=0.47$, ($p<0.001$) and there is direct relationship effects on EP at $\beta(EO \times CE) = 0.12$, ($p<0.05$). The result as showed in (Figure 3) These indicate that EO positively affects EP which increases with favorable CE.

Table 3 Statistics of measurement models with empirical data.

index	criteria	value of statistics	
		before modification indices	with modification indices
χ^2/df	lower than 3.00	5.59	1.82
GFI	higher than 0.90	0.70	0.91
CFI	higher than 0.90	0.71	0.95
RMSEA	lower or equal to 0.05-0.08	0.14	0.06
conclusion		model not fit	model fit

Discussion

The results in the models showed that Entrepreneurial Orientation (EO) has no direct relationship with export performance. However, EO variable indirectly influences the export performance through the Reconfiguration Capability (RC). This is consistent with the study of Ambrosini, & Bowman (2009) that the relationship between enterprise resources and export performance are evidenced in the reconfiguration capability documentation that enables companies to create, develop and protect resources that help them achieve superior long-term performance. Also, Wu (2006) confirmed that entrepreneurs should underline the importance of reconfiguration capability in transforming resources into organizational performance. They should expect that the effect will occur in the international market. Additionally, the results show that EO has direct relationship with export performance which increases with favorable of CE. This is consistent with the relevant research. It is found that Entrepreneurial focus is an important resource and represents the ability of a business to deliver sustainable competitive advantage and superior performance over other businesses. This can be explained by Resource-based theory that competitive advantage can only arise from the use of scarce assets. Bontis, Bart, Tovstiga, & Tulugurova (2009) argued that internal

resource development is a factor of competitive advantage in small and medium-sized businesses. Other studies (Zahra, & Covin, 1995; Wiklund, & Shepherd, 2003) also confirmed that businesses with competitive advantage and good performance are largely influenced by entrepreneurial behavior of the businesses.

Conclusion

This study also discovered another important issue that entrepreneurial orientation will affect export performance more efficiently if it is implemented through mediating variables, Reconfiguration Capability. Particularly, it is found that there is a relationship between Entrepreneurial Orientation (EO) and Export Performance (EP) which positively increase with favorable of Competitive Environment (CE) as the moderator variables. This research results will be very useful for governmental organizations to bring the derived factors found in the research to consider whether there are any relevant factors that should promote or develop the Entrepreneurial Orientation (EO). In addition, the empirical findings from this study will be beneficial for international entrepreneurs who continue to focus on export activities to adopt the results of the studies to increase their ability to work more efficiently and ability to compete with foreign competitors. At the end, these qualities will be beneficial to Thai

SMEs' businesses in terms of profit and success as well as these could contribute to the nation's long-term economic development and growth.

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