

Factors influencing the development of competitive capabilities of border trade entrepreneurs

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Abstract: This study investigates the factors influencing export competitiveness in border trade by focusing on Thai entrepreneurs engaged in trade with Cambodia. This study employs structural equation Modeling (SEM) to examine the relationships between consumer culture and lifestyle, foreign environmental factors, and export competitiveness. The data were collected from 200 establishments across various industries, primarily in the food, beverage, and tobacco sectors. The results indicate that the foreign environment factor significantly influences export competitiveness ($\beta = 0.613$, $p < 0.001$), while consumer culture and lifestyle play a crucial role in shaping foreign environment perceptions ($\beta = 0.77$, $p < 0.001$). However, consumer culture and lifestyle do not directly affect export competitiveness, highlighting that entrepreneurs prioritize market expansion without altering product offerings to accommodate local preferences. This study confirms that Thai products are well-received in Cambodia because of their established reputation and consumer trust. Additionally, border trade presents opportunities for Thai businesses to capitalize on infrastructure development and economic growth in neighboring countries. These findings support the theory of planned behavior by emphasizing the importance of market analysis, motivational factors, and operational preparedness in trade decision-making. From a practical standpoint, this study offers key policy recommendations, including entrepreneurial knowledge development, cross-border collaboration through special economic zones (SEZs), customs system enhancement, and the adoption of electronic platforms to streamline trade processes. These measures aim to improve trade efficiency and economic cooperation between Thailand and Cambodia.

1 Introduction

Border and transit trades are forms of international trade involving the movement of goods over land through border provinces via three main types of border crossings: permanent, temporary, and relaxed. Thailand shares its borders with four neighboring countries. In the first seven months of 2024, Thailand recorded a border trade surplus, with the highest value of trade occurring between Thailand and Malaysia, followed by Lao PDR, Myanmar, and Cambodia, respectively [1]. Cambodia is an interesting neighboring country that warrants further study as the value of border trade between Thailand and Cambodia continues to increase steadily. Cambodia also serves as a connection point for cross-border transportation, enabling the distribution of goods by land to Vietnam, a country experiencing consistent economic growth and relying more on imports than exports [2]. Cambodia has garnered international attention for trade and investment. The Asian Development Bank assessed Cambodia's economic situation and found that its economy is expected to expand steadily. The Gross Domestic Product (GDP) grew by 5.3 percent in 2024 and is projected to grow by up to 6.3 percent in 2025 [3]. Trade and investment from many countries have provided the Cambodian population with jobs and steadily increased the average income per capita each year. As Cambodia's economy grows, the country

increasingly relies on importing consumer goods. This reliance stems from Cambodia's demand for goods and services, exceeding the capacity of its domestic production sector. Furthermore, the quality of domestically produced goods and services remains below international standards. Cambodia imports large quantities of goods from China, Thailand, and Vietnam. Thai products, especially daily consumer goods, are particularly popular in Cambodia because of the similar lifestyles and cultures of the two nations.

However, the Thailand-Cambodia border trade still faces several limitations, resulting in most consumer goods sold in the Cambodian market being products from only large operators. This is due to several factors. First, SMEs lack promotion and support to access policies and the various benefits provided by government agencies. For international businesses to succeed, entrepreneurs require support through appropriate government policies [4-5]. Second, limitations in land transport networks, including both rail and road transport, result in delays in the transport of goods and damage during transit. Therefore, efficiently managing logistics is crucial for enhancing the potential of international trade and investment [5-6]. Third, regarding entrepreneurial capabilities, conducting business internationally requires entrepreneurs to study consumer differences, develop products aligned with consumer needs

in foreign markets [7-8], identify opportunities to expand markets, and manage risks arising from changes in consumer behavior or government policies [9].

Despite growing literature on regional trade and SME challenges, there remains a lack of empirical research focusing specifically on the competitive capabilities of border trade entrepreneurs operating between Thailand and Cambodia. While several studies discuss macroeconomic factors and trade statistics, few provide a detailed analysis of the on-ground capabilities, knowledge gaps, or digital readiness of entrepreneurs in these border areas. Furthermore, existing research tends to overlook the impact of cross-border knowledge-sharing mechanisms, and innovation diffusion at the micro-enterprise level. The evolving economic relationship between the two countries also demands updated models to analyze how border entrepreneurs adapt to changes in infrastructure, transport policies, and consumer preferences.

This study aims to identify the key factors affecting the development of competitiveness among Thailand-Cambodia border trade entrepreneurs, including providing in-depth data on entrepreneurs' opinions regarding the current border and cross-border trade situations. The findings serve as guidelines for government agencies in policy development to promote entrepreneurs and enhance international infrastructure for entering the border trade business in the next phase.

2 Literature review

2.1 Thailand's border trade

Thailand has a geographical advantage as the center of the ASEAN region, enabling connections to neighboring countries with adjacent borders. It also serves as a trade gateway for China and India, representing nearly half of the world's population. This strategic position presents Thailand with significant trade opportunities. In addition, establishing the Greater Mekong Sub-Region Cooperation Group, comprising Thailand, Myanmar, Lao PDR, Vietnam, Cambodia, and China, contributes to developing trade, investment, transportation, and other areas under a unified agreement. A key focus is to facilitate the movement of goods and people across international borders through initiatives such as: 1) single-stop inspection and comprehensive product inspections; 2) integrating related systems of member countries, such as customs, immigration, product safety, and standards inspection systems, to streamline procedures; 3) exchanging traffic rights to allow vehicles from member countries to enter and deliver goods within their borders; 4) facilitate cross-border transportation of goods (transit) by conducting inspections only when necessary in accordance with the single-stop inspection principle and refrain from collecting taxes on goods in transit; and 5) facilitating individuals' cross-border movement. However, the current implementation of cross-border transport agreements remains slow due to legal constraints within member states and other limitations [10]. For example,

Thai law prohibits foreign customs officers from working at Thai customs checkpoints. Additionally, customs checkpoint opening and closing times vary between countries; local officers often lack the necessary knowledge and understanding of procedures; related documents are not standardized in a universal language; and transportation channels differ across countries. For the Thai-Cambodian border trade route, which uses road transport in the eastern region of Thailand to connect to Phnom Penh, the highway connecting the cities of Thailand and Cambodia has different numbers of traffic lanes and a limited number of cargo release checkpoints. This leads to congestion on the route and at the cargo release checkpoints (Thailand-Cambodia land checkpoints). Additionally, the quality of road surfaces in Cambodia contributes to damage of goods during transportation. These issues are among the factors that resulted in Cambodia's logistics costs in 2022 reaching 26 percent of the GDP [11]. While Thailand's logistics costs are 13 percent of the GDP [12], they are significantly lower than that of Cambodia. However, Thailand and Cambodia are both committed to developing more efficient border trade routes. As part of this effort, they revived the railway service, which had been suspended for 49 years, by upgrading the Ban Klong Luek border station in Thailand and the Poipet station in Cambodia. Additionally, the efficiency of road surfaces has been improved to provide a better alternative for transporting goods, helping entrepreneurs reduce logistics costs. This allows businesses to offer competitive product prices in the Cambodian market.

2.2 Conceptual framework and hypotheses development

2.2.1 The role of the theory of planned behavior (TPB) in understanding export entrepreneurs

This study develops a framework using the theory of planned behavior (TPB) to study consumer attitudes, behaviors, and social norms that influence purchasing decisions for everyday consumer goods. The TPB is valuable for predicting and explaining intentions and behavioral expressions, contributing to a deeper understanding of human needs [13-14]. As a part of society, businesses must understand human behavior to meet consumers' daily needs. By doing so, businesses can survive, steadily grow, and achieve sustainable development. Social changes directly influence business operations. Culture, which is transmitted from one society to another both materially and mentally, plays a crucial role. Social and cultural factors significantly influence the success or failure of business operations, and exert both direct and indirect effects [15-17]. In addition, a study by Falahat, Soto-Acosta, and Ramayah [4] found that the organizational culture of entrepreneurs is positively associated with creating competitive advantages and improving business performance at the international level. Consequently, exporters must quickly adapt to changes in

international markets, including variations in lifestyle and culture, to build competitive capabilities and achieve a competitive edge in global markets. Finally, the business environment is another critical factor that influences the success or failure of business operations, with both direct and indirect effects.

According to Wheelen and Hunger [15] and Thompson and Strickland [16], the environment influencing business operations comprises the following factors. 1) Social and Cultural Factors: Business is inherently a part of society and social changes directly influence business operations. Culture, which is cultivated and transmitted materially and mentally from one society to another, plays a crucial role. 2) Technological Factors: Technological advancements are essential drivers of new processes and innovations, enabling effective decision-making and problem solving. 3) Economic Factors: Economic conditions directly affect consumers' purchasing power and consumption behavior, thereby influencing business performance. 4) Political and Legal Factors: Changes in political and legal environments affect strategic decision-making, guiding businesses to plan effectively and achieve their objectives. 5) International Factors: Advancements in global communication and transportation allow entrepreneurs to expand beyond their domestic markets, facilitating investments and connections across multiple countries. This aligns with the findings of Ipek and Tanyeri [18], who emphasized that the social and cultural environment in foreign markets is a critical factor that exporters cannot overlook, as it significantly impacts the costs of operating international businesses. Therefore, entrepreneurs must leverage their resources and capabilities to create added value in their products and services, while adhering to social norms. Establishing export strategies based on these principles enables businesses to succeed in foreign markets [19].

Based on the literature review above, the following hypotheses are proposed:

Hypothesis 1 (H1): Consumer culture and lifestyle factors influence foreign environmental factors.

Hypothesis 2 (H2): Consumer culture and lifestyle factors influence export competitiveness factors.

2.2.2 Factors determining the competitiveness of exporters

International trade is a key factor in driving a country's economic growth and development. As the global market environment continues to evolve, exporters must adapt to rapid changes to gain a competitive advantage over their competitors [22]. Government promotion, through the creation of an environment conducive to business, operates in four key areas: 1) economic performance, including economic conditions, international trade, foreign investment, employment, and inflation; 2) government efficiency, including fiscal status, taxes, business laws, and economic and social governance frameworks; 3) business efficiency, including production efficiency, the labor

market, finance, management, and attitudes; and 4) infrastructure, including physical, scientific, technological, educational, health, and environmental aspects. These efforts help exporters plan their strategies more effectively, leading to sustainable competitiveness in foreign markets [23]. According to Forte and Carvalho [20], factors that can be measured in economic/financial terms, such as sales volume, sales growth, and return on investment, along with those that cannot be measured in economic/financial terms, such as competitive pressure, creating awareness and image abroad, and customer satisfaction, influence export performance from both economic and strategic management perspectives. Operating in a globalized environment has pressured entrepreneurs to look beyond the domestic market and seek new opportunities. While trade competition is no longer confined by borders, exports offer organizations a pathway for sustainable growth, especially when the domestic economy is sluggish or declining, or when domestic market demand is limited. Furthermore, the ease of moving goods and services across borders is an environmental factor that significantly impacts export performance. Policy options that the government can use to stimulate exports and enhance Thailand's international trade competitiveness are critical [21-22].

In addition, the research findings of Hanifzadeh, Talebi, and Sajadi [17] identified three key characteristics of the business environment that have the highest impact on business growth: 1) Personal factors: educational attainment, experience related to setting up and managing a business, skills relevant to business growth, risk-taking propensity, amount of human and social capital, and motivation related to business growth. 2) Environmental factors: Environmental benefits including proximity to the environment, environmental dynamism, supportive policies in the business environment, and relevance of the environment to business expertise. 3) Business characteristics: Professional business practices in an environment with highly competitive advantages including brand strength, technology level, and human and social capital.

In this era of globalization, entrepreneurs must develop strategies focused on differentiation by adding value to products and services that surpass those of their competitors. This approach enhances entrepreneurs' competitive abilities and enables creation of sustainable competitive advantages. According to Obadia [23], the benefits derived from operations drive exporters to remain determined and succeed in their international businesses. The first dimension of these benefits is the exporter's economic performance [24]. According to Chu et al. [25], strong relationships, economic promotion policies, and the partner country's environment are crucial to the competitiveness of products in the export market. Moreover, developing countries have adopted various strategies to stimulate the domestic economy and attract investors, such as creating tax incentives and subsidies.

This has led large foreign companies to enter small markets by investing more than they export and using unfair pricing strategies to reduce competition. Promoting a country's economic policies through exports remains a key factor in helping domestic industries grow sustainably. Exports encourage entrepreneurs to focus on developing human resource skills, utilizing technology, and efficiently using production factors. This, in turn, helps spread the operational risks [26].

Based on the above literature review, the following hypothesis can be stated:

Hypothesis 3 (H3): Foreign environmental factors influence export competitiveness factors.

Additionally, a model is developed based on the literature review to explain the relationships between the variables, as shown in Figure 1.

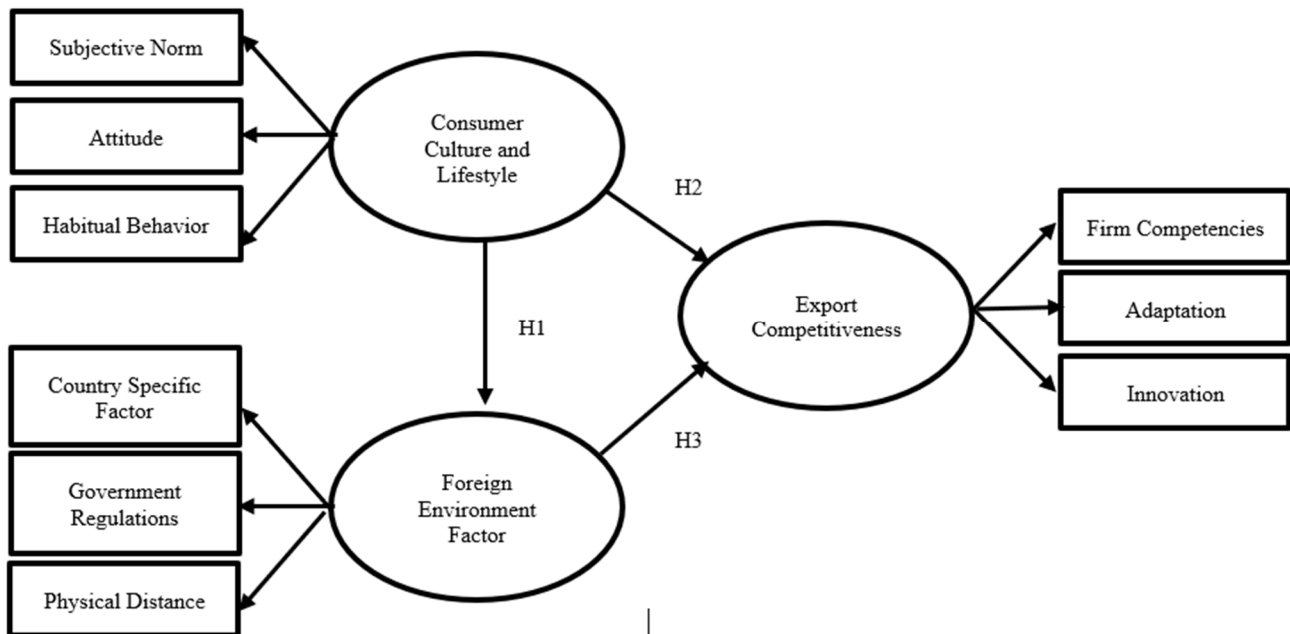


Figure 1 Conceptual framework

3 Methodology

3.1 Participants and procedure

This study employs a quantitative methodology to identify the key factors that influence the competitiveness of border trade entrepreneurs, with data collected using a structured questionnaire administered to experienced exporters and distributors of consumer goods. The questionnaire comprised five sections: 1) general establishment information (closed-ended questions), 2) cultural and consumer lifestyle factors, 3) foreign environmental factors (closed-ended questions), 4) exporter competitiveness factors (closed-ended questions utilizing a 5-point Likert scale for interval-scale measurement), and 5) open-ended questions for additional suggestions from business operators to enhance border trade potential.

The research instruments were rigorously validated for quality, with content validity confirmed by three experts yielding an Index of Item Objective Congruence (IOC) between 0.67 and 1.00, exceeding the standard criterion of 0.50 to 1.00 [27]. Reliability testing produced Cronbach's alpha coefficients ranging from 0.743 to 0.917, surpassing the acceptable threshold of 0.70 [28].

3.2 Data analysis

This study utilized quantitative data collection from primary sources, employing questionnaires as research tools to gather data from areas bordering Thailand and its neighboring countries. A purposive sampling method was chosen to maximize the likelihood of accessing a sample group capable of providing relevant information that aligned with the research objectives while minimizing potential response bias. Considering the criteria for determining the sample size for structural equation modeling (SEM) analysis outlined by Kline [29], the sample size for a moderately complex model should not be less than 200. Accordingly, this study set the minimum sample size at 200 participants, using information provided by the executives or managers of the establishments.

The data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics—such as percentages, means, and standard deviations—were used to summarize the demographic and general characteristics of the respondents. For inferential analysis, SEM was employed due to its suitability for examining complex relationships among both observed and latent variables. This method is particularly effective for

investigating the multidimensional nature of entrepreneurial competitiveness. Moreover, SEM allows for simultaneous testing of direct and indirect effects, offering a comprehensive view of how various factors interrelate to influence the competitive capabilities of border trade entrepreneurs. This analytical approach aligns closely with the study's aim of identifying key structural relationships and generating insights to inform future policy development.

4 Results

4.1 Firm demography and sample characteristics

The analysis of general data from 200 establishments revealed that the majority were limited companies,

accounting for 78 establishments (39%), followed by public limited companies with 65 establishments (32.5%) and limited partnerships/general partnerships with 57 establishments (28.5%). Most establishments had five to 10 years of business experience, representing 78 establishments (39%), and most operated in the food, beverage, and tobacco industries, totaling 133 establishments (66.5%). Regarding the questionnaire respondents, the analysis showed that most were male (51.5%) and had five to 10 years of experience in imports and exports, accounting for 76 establishments (38%) (Table 1).

Table 1 Firm demography and sample characteristics

Firm Demography		Frequently (LSPs)	Percent (%)
Firm Registration			
	Public Limited Company	65	32.5
	Limited company	78	39
	Limited Partnership/ Ordinary Partnership	57	28.5
Total		200	100
Firm Experience			
	Less than 5 years	59	29.5
	5–10 years	78	39
	11–15 years	26	13
	More than 15 years	37	18.5
Total		200	100
Types of Industries			
	Metal products, machinery, and transport equipment	56	28
	Food, beverages, and tobacco	133	66.5
	Textiles and leather	5	2.5
	Other	6	3
Total		200	100
Sample Characteristics			
Gender			
	Male	103	51.5
	Female	97	48.5
Total		200	100
Work Experience			
	Less than 5 years	12	6
	5–10 years	76	38
	11–15 years	64	32
	More than 15 years	48	24
Total		200	100

Table 2 presents the results of the data analysis using descriptive statistics from the mean, standard deviation, and relationships between the variables. It demonstrates that the culture and lifestyle of consumers and the foreign

environment are important for the competitiveness of exporters. The variables used in this study have statistically significant relationships.

Table 2 Mean, standard deviation, and correlation matrix

	Mean	SD	Consumer culture and lifestyle	Foreign environment factor	Export competitiveness
Consumer culture and lifestyle	4.199	0.405	1		
Foreign environment factor	3.995	0.513	0.537**	1	
Export competitiveness	4.049	0.542	0.485**	0.529**	1
Average variance extracted ($\sqrt{\text{AVE}}$)			0.543	0.607	0.617
Composite reliability (CR)			0.991	0.995	0.996

Note: ** significant at the 0.01 level

4.2 Measurement model

Using confirmatory factor analysis, the structural validity test results indicated that the factors of consumer culture and lifestyle, exporter economic efficiency, foreign environment, and exporter competitiveness have factor loadings ranging from 0.400 to 0.829, all exceeding the threshold of 0.4, as suggested by Guadagnoli and Velicer [30], with statistical significance set at $p < 0.001$.

Additionally, the convergent validity test results showed a composite reliability (CR) value greater than 0.7, consistent with the criterion set by Hair, Black, Babin, and Anderson [31]. The discriminant validity test results revealed an average variance extracted (AVE) value greater than 0.5, meeting the standard proposed by Barclay, Higgins, and Thompson [32] as shown in Table 3.

Table 3 Measurement model

Variable	Construct	Items	Factor loading	CR	AVE
Consumer culture and lifestyle	Subjective norm	3	0.400; 0.471; 0.716	0.991	0.543
	Attitude	3	0.592; 0.462; 0.602		
	Habitual behavior	4	0.580; 0.536; 0.451; 0.550		
CMIN/df = 1.744; CFI = 0.927; TLI = 0.900; RMR = 0.031; RMSEA = 0.061					
Foreign environment factor	Country specific factor	5	0.778; 0.548; 0.661; 0.676; 0.512	0.995	0.607
	Government regulations	5	0.531; 0.509; 0.592; 0.600; 0.640		
	Physical distance	4	0.707; 0.498; 0.635; 0.530		
CMIN/df = 1.744; CFI = 0.934; TLI = 0.909; RMR = 0.038; RMSEA = 0.062					
Export competitiveness	Firm competencies	5	0.690; 0.607; 0.412; 0.668; 0.621	0.996	0.617
	Adaptation	5	0.661; 0.829; 0.674; 0.561; 0.604		
	Innovation	5	0.638; 0.501; 0.561; 0.484; 0.627		
CMIN/df = 1.828; CFI = 0.930; TLI = 0.911; RMR = 0.042; RMSEA = 0.065					

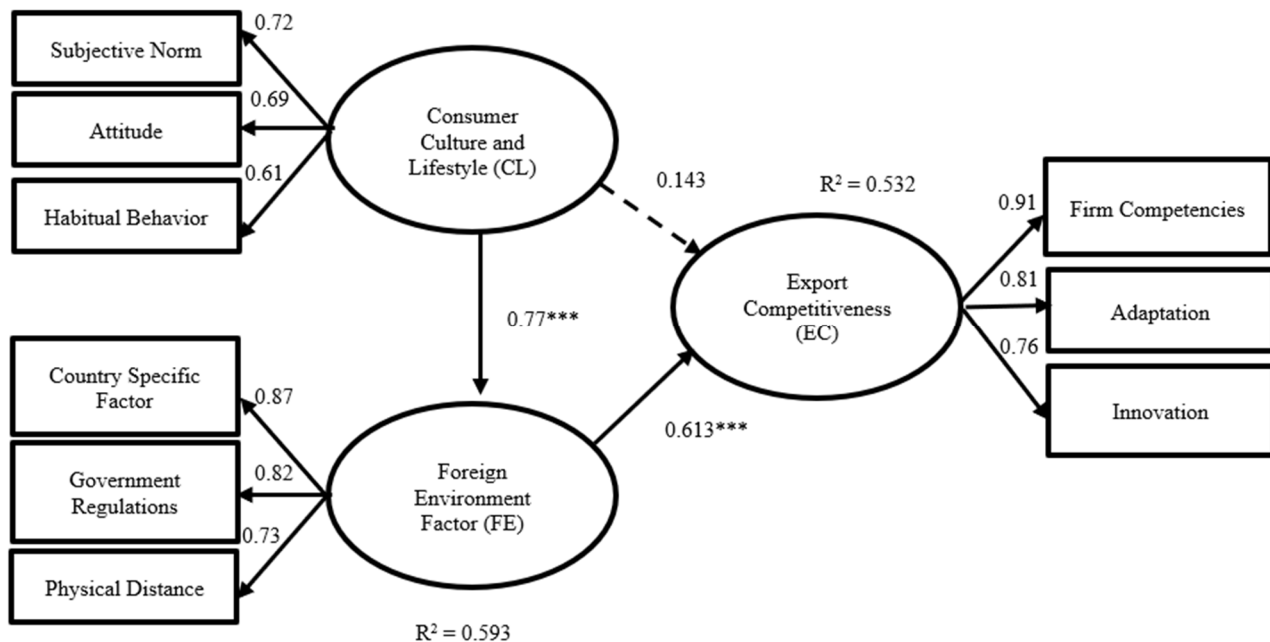
4.3 Structural model and hypotheses testing

The SEM analysis results can be explained as follows:

The test of variance of the independent variables in relation to the dependent variable showed that the foreign environment factor accounted for 59% of the variance ($R^2 = 0.593$), whereas the export competitiveness factor accounted for 53% ($R^2 = 0.532$).

The results of the structural equation analysis indicated that the model was consistent with the empirical data, with

GFI and AGFI values greater than 0.8 [33], SRMR values less than 0.05 [36], and RMSEA values less than 0.08 [34], as shown in Figure 2. The path coefficient values, shown in Table 4, reveal that consumer culture and lifestyle factors have a significant direct influence on the foreign environment factor ($\beta = 0.77$, $p < 0.001$) but do not significantly influence the export competitiveness factor. Conversely, the foreign environment factor directly influences the export competitiveness factor ($\beta = 0.613$, $p < 0.001$).



Chi-Square =28.163; df = 17; χ^2/df =1.657; RMSEA = 0.057; GFI = 0.970; AGFI = 0.922; SRMR = 0.011

Figure 2 Structural model

Table 4 Structural model and hypotheses testing

Hypotheses	Paths	Direct effect	Indirect effect	Relationship
Direct hypothesis				
H1	CL → FE	0.77***	-	supported
H2	CL → EC	0.143	-	not supported
H3	FE → EC	0.613***	-	supported
Mediation hypothesis				
H4	CL → FE → EC	-	0.844	supported

Note: *** significant at the 0.001 level

5 Discussion

The results of this study confirm both Hypothesis 1 (H1) and Hypothesis 3 (H3), highlighting the interconnected roles of consumer culture, foreign environmental factors, and export competitiveness in the context of Thailand–Cambodia border trade. Border trade offers a strategic pathway for entrepreneurs in neighboring countries to expand their market access and tap into new consumer segments. Thailand, as a central player in the Altasia production base (the alternative Asian supply chain), benefits from its abundant production resources, a skilled workforce, and adherence to high production standards—factors that enhance the global competitiveness and appeal of Thai consumer products [40].

Daily consumer goods, in particular, are highly popular in neighboring countries like Cambodia. This popularity is influenced by Cambodian consumers' trust in the quality and branding of Thai products, which is often shaped by direct experience from having lived and worked in Thailand [17][41–42]. These shared experiences and lifestyle similarities foster a strong sense of cultural familiarity and brand confidence, which in turn shape

foreign environmental conditions such as demand patterns, trade preferences, and import behaviors—thus supporting Hypothesis 1 (H1). Additionally, Cambodia's limited domestic production capacity—particularly in consumer goods—makes imported goods a practical necessity. The relatively low distribution and transport costs further ensure the affordability of these goods in Cambodian markets. As a response to growing consumer demand, both Thai and Cambodian governments have intensified cross-border cooperation in the retail and distribution sectors. This has resulted in enhanced logistics infrastructure, improved policy coordination, and greater efficiency in product flow—all of which improve the foreign environmental conditions that influence export success. These developments support Hypothesis 3 (H3), as they illustrate how favorable external factors—such as infrastructure development, public utility expansion, and policy support—enhance the export competitiveness of Thai entrepreneurs. For instance, the expansion of Thai construction material exports into Cambodia has been driven by the country's rapid infrastructure growth and consistent economic development [35–37]. This indicates that structural and institutional factors within the foreign

environment directly contribute to Thai businesses' ability to operate effectively and competitively in cross-border trade.

In contrast, the study's findings do not support Hypothesis 2 (H2). While literature such as Thompson and Strickland [38] emphasizes the need for businesses to adapt their operations to fit the socio-cultural dimensions of foreign markets, this study found that most Thai entrepreneurs do not significantly adjust their products for the Cambodian market. Instead, entrepreneurs prioritize market expansion based on perceived cultural and lifestyle similarities, choosing to retain existing product formats. Responses to open-ended questions indicate that entrepreneurs view product adaptation as unnecessary, cost-intensive, and risky—particularly because the goods being exported (primarily basic consumer products) already align with Cambodian tastes, cultural norms, and consumption habits. This finding suggests that in border trade contexts where cultural alignment is high, such as between Thailand and Cambodia, the perceived need for product adaptation may be minimal. Entrepreneurs often rely on the existing cultural compatibility to drive exports, reducing the urgency for market-specific customization. As a result, while consumer culture significantly shapes the external trade environment (supporting H1), it does not always lead to adaptive business behavior (contradicting H2).

In conclusion, the findings underscore the importance of consumer lifestyle and culture in shaping trade conditions and the strategic role of external environmental factors in enhancing export competitiveness. These insights are especially relevant for policymakers and businesses seeking to strengthen cross-border trade through infrastructure investment, policy coordination, and the leveraging of cultural proximity.

6 Conclusion

6.1 Theoretical contributions

This research utilized the TPB developed by Icek Ajzen in 1985 as a framework to predict relationships within a structural equation model and explain individual behavior. This theory offers valuable insights for decision-making in border trade, outlined as follows: Market Analysis: Entrepreneurs should evaluate factors such as market demand, potential risks, positive attitudes, and opportunities for their products or services before committing to border trade. Motivational Factors: Entrepreneurs should identify motivations for engaging in border trade, including government promotional policies, support from industry associations or trading partners, and the influence of successful competitors, which may encourage them to follow similar strategies. Operational Preparedness: Entrepreneurs should gain a comprehensive understanding of access to financial resources, foreign market regulations, and logistics capabilities. Organizations with stronger knowledge, control, and

readiness in these areas are better positioned to achieve success in cross-border trade.

To investigate these complex and interrelated factors, the study employs Structural Equation Modeling (SEM), a particularly suitable analytical approach. SEM allows for the simultaneous analysis of multiple dependent relationships and the inclusion of latent variables, which is critical for capturing abstract constructs such as consumer culture, foreign environmental influences, and export competitiveness. Unlike traditional regression techniques, SEM accommodates both direct and indirect effects, making it ideal for testing the mediated relationships proposed in the conceptual framework. As a theory-driven, confirmatory method, SEM is well-aligned with the study's hypotheses (e.g., H1 and H3), enabling empirical validation of theoretical assumptions. Moreover, SEM controls for measurement error and provides robust model fit indices (such as CFI, RMSEA, and TLI), thereby enhancing the reliability, precision, and policy relevance of the research findings.

6.2 Practical implications

The findings of this study offer statistically significant insights that support Hypothesis 1 (H1) and Hypothesis 3 (H3), revealing clear relationships among consumer culture, foreign environmental factors, and export competitiveness. The structural equation modeling (SEM) results confirm that consumer lifestyle and cultural familiarity—particularly the trust of Cambodian consumers in Thai products—have a strong positive effect on shaping the foreign environmental conditions in the Cambodian market. In turn, these environmental factors, including trade policies, infrastructure, and logistics systems, significantly influence the export competitiveness of Thai entrepreneurs operating along the border. These statistical findings suggest that the theoretical model used in this study is not only empirically valid but also practically relevant.

In addition, the results of this study provide actionable insights for practitioners and policymakers in both Thailand and Cambodia, especially in the context of enhancing the competitive capabilities of border trade entrepreneurs. The statistically supported relationships between consumer culture, foreign environmental factors, and export competitiveness highlight the need for targeted strategies that address both individual entrepreneurial readiness and systemic trade conditions. Based on these findings, several key recommendations are proposed:

Entrepreneurial Knowledge Development: Governments should prioritize educational initiatives that equip entrepreneurs with a clear understanding of regional economic cooperation frameworks, particularly ASEAN trade agreements. By improving their knowledge of how to access and apply these policies, entrepreneurs will be better positioned to identify trade opportunities, mitigate risks, and engage more effectively in cross-border commerce.

Cross-Border Collaboration: The research supports the establishment of Special Economic Zones (SEZs) along the Thai-Cambodian border. These zones can act as growth engines for SMEs by providing shared infrastructure, simplifying cross-border employment policies, and streamlining customs and trade facilitation. Enhanced coordination between both countries will improve operational efficiency and reduce barriers to entry for new entrepreneurs.

Customs System Enhancement: The SEM analysis underscores logistical and procedural inefficiencies as major constraints to export competitiveness. To address this, both governments should invest in customs modernization by adopting integrated digital systems, enabling real-time data exchange, and implementing risk-based inspection frameworks. These measures will reduce processing times and enhance the predictability and reliability of cross-border trade.

Adoption of Electronic Platforms: Embracing digital transformation is critical for reducing administrative burdens. The integration of electronic platforms—for licensing, customs documentation, and logistics coordination—will not only streamline operations but also improve transparency and governance, creating a more inclusive and business-friendly environment for SMEs involved in international trade.

In summary, these targeted policy interventions—rooted in the empirical findings of this study—highlight the importance of aligning entrepreneurship support with broader structural reforms to unlock the full potential of border trade between Thailand and Cambodia.

6.3 Limitations and future research

This research has several limitations: 1) **Scope of Data Collection:** The data was gathered solely from Thai entrepreneurs engaged in border trade with Cambodia. Future research could broaden its scope to include entrepreneurs from other countries involved in border trade. This provides insights from a wider range of perspectives and captures the diverse experiences of entrepreneurs in different contexts. 2) **Focus on Thai Entrepreneurs:** The study exclusively focuses on Thai entrepreneurs' opinions. Future studies could extend this study to include the perspectives of both importers and exporters. This approach offers more comprehensive insights and helps develop sustainable strategies to enhance the potential of border trade.

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References

[1] Department of Foreign Trade: Department of Foreign Trade News, [Online], Available: <https://www.dft.go.t>

- h/th-th/NewsList/News-DFT/Description-News-DFT/ArticleId/28472/28472 [17 Sep 2024], 2024.
- [2] Asian Development Bank: Cambodia diversifying beyond garments and tourism country diagnostic study, [Online], Available: <https://www.adb.org/sites/default/files/publication/149852/cambodia-diversifying-country-diagnostic-study.pdf> [17 Sep 2024], 2024.
- [3] Asian Development Bank: ADB's work in Cambodia, [Online], Available: <https://www.adb.org/where-we-work/cambodia/overview> [17 Sep 2024], 2024.
- [4] FALAHAT, M., SOTO-ACOSTA, P., RAMAYAH, T.: Analysing the importance of international knowledge, orientation, networking and commitment as entrepreneurial culture and market orientation in gaining competitive advantage and international performance, *International Marketing Review*, Vol. 39, No. 3, pp. 463-481, 2021.
<https://doi.org/10.1108/imr-02-2021-0053>
- [5] NJINYAH, S.Z.: The effectiveness of government policies for export promotion on the export performance of SMEs Cocoa exporters in Cameroon, *International Marketing Review*, Vol. 35, No. 1, pp. 164-185, 2018.
<https://doi.org/10.1108/imr-05-2016-0103>
- [6] FAROQUE, A.R., KUIVALAINEN, O., AHMED, J.U., RAHMAN, M., ROY, H., ALI, M.Y., MOSTAFIZ, M.I.: Performance implications of export assistance: the mediating role of export entrepreneurship, *International Marketing Review*, Vol. 38, No. 6, pp. 1370-1399, 2021.
<https://doi.org/10.1108/imr-07-2020-0141>
- [7] SOUSA, C.M.P., RUZO-SANMARTÍN, E., VARELA-NEIRA, C., TAN, Q.: How to successfully adapt distribution strategy in exporting? The moderating effects of commitment and responsiveness, *International Marketing Review*, Vol. 41, No. 6, pp. 1218-1241, 2024.
<https://doi.org/10.1108/IMR-06-2023-0123>
- [8] ARUN, K., YILDIRIM OZMUTLU, S.: The effect of environmental competitiveness, customer and competitor orientation on export performance, *Journal of Business & Industrial Marketing*, Vol. 39, No. 2, pp. 142-160, 2024.
<https://doi.org/10.1108/JBIM-01-2022-0019>
- [9] LUKASON, O., VISSAK, T.: Internationalization and failure risk patterns, *Review of International Business and Strategy*, Vol. 29, No. 1, pp. 25-43, 2019.
<https://doi.org/10.1108/ribs-06-2018-0054>
- [10] International Institute for Trade and Development: Cross-border transportation between Thailand and neighboring countries, [Online], Available: https://www.itd.or.th/en/itd-data-center/67_17 [17 Sep 2024], 2023.
- [11] Phnom Penh Post: Cambodia updates national accounts base year for enhanced economic accuracy, [Online], Available: <https://www.phnompenhpost.com/business/cambodia-updates-national-accounts->

- base-year-for-enhanced-economic-accuracy
[17 Sep 2024], 2024.
- [12] Office of the National Economic and Social Development Council: Thailand's Logistics Report 2023, [Online], Available: <https://www.nesdc.go.th/download/logistics/report/LogisticsReportTH.pdf> [17 Sep 2024], 2023.
- [13] AJZEN, I.: The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, Vol. 50, No. 2, pp. 179-211, 1991. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [14] VANICHKITPISAN, P., TEMIYASATHIT, C.: *Factors influencing attitude toward behavior in using mass transit system in Bangkok: a case study in car users*, 2017 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore, 2017, pp. 412-416, 2017. <https://doi.org/10.1109/IEEM.2017.8289923>
- [15] HUNGER, J.D., WHEELER, T.L.: *Strategic Management*, California, Prentice Hall, 2000.
- [16] THOMPSON, A.A., STRICKLAND, A.J.: *Strategic Management: Concepts and Cases*, New York, NY, USA: McGraw-Hill, 2003.
- [17] HANIFZADEH, F., TALEBI, K., SAJADI, S.M.: The analysis of effect of aspiration to growth of managers for SMEs growth case study, *Journal of Entrepreneurship in Emerging Economies*, Vol. 10, No. 2, pp. 277-301, 2018. <https://doi.org/10.1108/jee-10-2016-0045>
- [18] İPEK, İ., TANYERI, M.: Home country institutional drivers and performance outcomes of export market orientation: the moderating role of firm resources, *International Journal of Emerging Markets*, Vol. 16, No. 4, pp. 806-836, 2020. <https://doi.org/10.1108/ijoem-10-2019-0803>
- [19] BRUTON, G., KHAVUL, S., SIEGEL, D., WRIGHT, M.: New financial alternatives in seeding entrepreneurship: microfinance, crowdfunding, and peer-to-peer innovations, *Entrepreneurship Theory and Practice*, Vol. 39, No. 1, pp. 9-26, 2015. <https://doi.org/10.1111/etap.12143>
- [20] FORTE, R.P., CARVALHO, S.: Do domestic market characteristics influence firms' export intensity?, *EuroMed Journal of Business*, Vol. 19, No. 2, pp. 398-423, 2022. <https://doi.org/10.1108/emjb-09-2021-0129>
- [21] MAHAKITSIRI, D., SUWANPRASERT, W.: Who are pure exporters?, *The World Economy*, Vol. 46, No. 6, pp. 1759-1781, 2023. <https://doi.org/10.1111/twec.13351>
- [22] GEBRE, W.M., BIRBIRSA, Z.A. ABEGAZ, M.B.: The export performance of textile and apparel industry of Ethiopia: a comparative study with global emerging exporters, *Research Journal of Textile and Apparel*, Vol. ahead-of-print, No. ahead-of-print, pp. 1-16, 2024. <https://doi.org/10.1108/RJTA-11-2023-0123>
- [23] OBADIA, C.: Benefits-based drivers of exporters' attitudinal commitment toward their foreign distributors, *International Marketing Review*, Vol. 27, No. 6, pp. 606-629, 2010. <https://doi.org/10.1108/02651331011088254>
- [24] NES, E.B., SOLBERG, C.A., SILKOSET, R.: The impact of national culture and communication on exporter-distributor relations and on export performance, *International Business Review*, Vol. 16, No. 4, pp. 405-424, 2007. <https://doi.org/10.1016/j.ibusrev.2007.01.008>
- [25] CHU, H.L., DO, N.T., NGUYEN, L., LE, L., HO, Q.A., DANG, K., TA, M.A.: The economic impacts of the European Union's Carbon Border Adjustment Mechanism on developing countries: the case of Vietnam, *Fulbright Review of Economics and Policy*, Vol. 4, No. 1, pp. 1-17, 2024. <https://doi.org/10.1108/frep-03-2024-0011>
- [26] HAINI, H., WEI LOON, P., RAIMI, L.: Does export structure enhance the growth gains from foreign investment? Evidence from the ECOWAS region, *International Journal of Development Issues*, Vol. 23, No. 2, pp. 190-211, 2023. <https://doi.org/10.1108/ijdi-12-2022-0282>
- [27] ROVINELLI, R.J., HAMBLETON, R.K.: On the use of content specialists in the assessment of criterion-referenced test item validity, *Tijdschrift Voor Onderwijs Research*, Vol. 2, pp. 49-60, 1977.
- [28] TAVAKOL, M., DENNICK, R.: Making sense of Cronbach's alpha, *International Journal of Medical Education*, Vol. 2, pp. 53-55, 2011. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- [29] KLINE, R.B.: *Principles and Practice of Structural Equation Modeling*. New York, NY, USA: Guilford Press, 2011.
- [30] GUADAGNOLI, E., VELICER, W.F.: Relation of sample size to the stability of component patterns, *Psychol. Bull.*, Vol. 103, No. 2, pp. 265-275, 1988. <https://doi.org/10.1037/0033-2909.103.2.265>
- [31] HAIR, J.F., BLACK, W.C., BABIN, B.J., ANDERSON R.E.: *Multivariate Data Analysis*, 7th ed., New York, NY, USA, Pearson, 2010.
- [32] BARCLAY, D., HIGGINS, C., THOMPSON, R.: The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration, *Technology Studies*, Vol. 2, pp. 285-309, 1995.
- [33] BYRNE, B.M.: *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, Mahwah, NJ, USA, Lawrence Erlbaum Associates, 2001.
- [34] HU, L.T., BENTLER, P.M.: *Evaluating model fit*, In: *Structural Equation Modeling: Concepts, Issues, and Application*, R.H. Hoyle, Ed. Thousand Oaks, CA, USA: Sage, 1995, pp. 77-99, 1995.
- [35] CHU, H.L., DO, N.T., NGUYEN, L., LE, L., HO, Q.A., DANG, K., TA, M.A.: The economic impacts

of the European Union's Carbon Border Adjustment Mechanism on developing countries: the case of Vietnam, *Fulbright Review of Economics and Policy*, Vol. 4, No. 1, pp. 1-17, 2024.

<https://doi.org/10.1108/frep-03-2024-0011>

- [36] FAROQUE, A.R., KUIVALAINEN, O., AHMED, J. U., RAHMAN, M., ROY, H., ALI, M.Y., MOSTAFIZ, M.I.: Performance implications of export assistance: the mediating role of export entrepreneurship, *International Marketing Review*, Vol. 38, No. 6, pp. 1370-1399, 2021.

<https://doi.org/10.1108/imr-07-2020-0141>

- [37] NJINYAH, S.Z.: The effectiveness of government policies for export promotion on the export performance of SMEs Cocoa exporters in Cameroon, *International Marketing Review*, Vol. 35, No. 1, pp. 164-185, 2018.

<https://doi.org/10.1108/imr-05-2016-0103>

- [38] THOMPSON, A.A., STRICKLAND, A.J.: *Strategic Management: Concepts and Cases*, New York, NY, USA, McGraw-Hill, 2003.

Review process

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