

Influential Factors on Border Trade Value between Thailand and Neighboring Countries (Myanmar, Laos, Cambodia, and Malaysia)

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Received: 02 May 2022

Revised: 05 June 2022

Accepted: 06 June 2022

Abstract

The value of Thailand's border trade tends to grow every year. Border trade refers to developing good relationships through economic, social, and security cooperation with neighboring countries (Myanmar, Laos, Cambodia, and Malaysia). Many studies of border trade have focused on a specific area/neighboring country. Some work has been carried out to investigate how economic community, consumer purchasing behavior, and promotion policy affect the strategic plan for border trade, border trade promotion, and export development. Previous works have not comprehensively examined factors affecting total border trade value, border trade export value, and border trade import value. Therefore, the objectives of the study are to identify factors affecting Thailand's total border trade value, border trade export value, and border trade import value. The method used to investigate factors affecting border trade value is multiple regression and ordinary least square (OLS). Data were collected from the National Statistical Office, the Department of Foreign Trade, and the Thailand Board of Investment from 2009 to 2021. The multiple regression and ordinary least square (OLS) were applied to test the model. The results revealed the growing population of border provinces and the increasing number of border provinces affecting Thailand's total border trade value of 4.724 and 0.131, respectively. The results show that border trade export value is related to the growing population of border provinces and the increasing number of border provinces within 4.752 and 1.305, respectively. Furthermore, these findings support the growth of the population of border provinces, consisting of consumers and labors, and the importance of border province numbers that are essential border trade gateways affecting border trade import value within 5.092 and 1.843, respectively. The result of the study could provide a better understanding of the factors that affect the value of Thailand's border trade.

Keywords: Trade, Border Trade, Export, Import, Neighboring Countries

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Introduction

The increasing convergence of worldwide economies and societies, as expressed in the free trade agreements and free trade areas, is a complicated mechanism involving many facets of our lives. Thailand is located among neighboring countries. It is bordered by Cambodia and Laos to the east, Malaysia to the south, and Myanmar to the north and west. Border trade has become one of the main engines driving Thailand's economy (Pinaduang, 2018).

Department of Foreign Trade (2019) indicated that the Thai border trade grew by 4.01 percent in 2018. Total border trade was worth THB 1,124,672.50 million, consists of import value was THB 650,908.73 million (decreased by 0.54 percent) and export value was THB 473,763.77 million (increased by 10.99 percent). The greatest border trade value was Malaysia, Laos, Myanmar, and Cambodia, respectively. Although, Thailand's border trade fell by 14.7 percent in Januar-May of 2020 as the Coronavirus has wrecked the world economy, and nearly all border control points have been closed by neighboring countries. The total value of THB 309,630 million, exports were THB 183,720 million, decreased by 12.8 percent, and imports were THB 125,910 million, decreased by 17.2 percent. Thailand maintained a trade surplus of THB 57,810 million.

Thailand's border trade with Malaysia, the biggest trading partner out of the four neighboring countries, dropped by as much as 32.4 percent to THB 87,850 million. This was followed by Laos (THB 77,170 million, decreased by 6.59 percent), Myanmar (THB 73,740 million, decreased by 10.96 percent), and Cambodia (THB 70,870 million, increased by 5.2 percent) (Parpart, 2020).

Border trade has played a key role in the development of Thailand for many years. From the previous studies, many authors have examined factors affecting border trade between Thailand and neighboring countries. Krainara and Routray (2015) investigated the prospect of cross-border trade between Thailand and neighboring countries and associated development potentials closer to the border regions. Boocharattanachai (2017) examined the level of factors influencing the export business development along the Thai and Cambodian border in Sa Kaeo. Thongsomjit et al. (2017) studied the level of importance of the antecedents of government promotion policy, the relationship of antecedents of government promotion policy, and the strategic border trade plan of Thailand and Laos at the Chiang-Krong border control checkpoint. Son (2018) studied the factors affecting cross-border clothing trade between Aranyaprathet and Poipet. Kamol et al. (2019) examined factors that affected the northeast border trade economy after the creation of the Vientiane New World (VNW). Pannarai and Ngeoywijit (2020) investigated business factors affecting and promoting the border trade between Thailand and Laos in Nakhon Phanom and Mukdahan.

Although there have been many studies on border trade, they have not identified factors affecting Thailand's total border trade value, border trade export value, and border trade import value. Therefore, it is necessary to conduct a study to investigate the significant factors of Thailand's

border trade value. Moreover, this paper attempts to fill the gap in the literature on border trade between Thailand and neighboring countries. This study will make a thorough analysis of the significant factors of Thailand's border trade value from 2009 to 2021, not only total border trade value but also border trade export and import value.

Research Objective

To identify factors affecting Thailand's total border trade value, border trade export value, and border trade import value from 2009 to 2021.

Literature Review

In the current study, Yaw (2017) mentioned to the population of the border provinces in India and Myanmar have not only crossed geographically but also close historical, cultural and economic relations, and the same ethnic groups live on both sides of the border. Furthermore, border trade is important for economic growth in Myanmar, as it has a direct impact on the welfare of people who depend on both sides. Kasemsuk et al. (2017) declared market demand that derives from the growth of population affecting the competitiveness increasing of trade operators at the Thailand-Cambodia border especially demand size that is the total potential number of consumers or sales.

For geographical distance (land border), Arvis et al. (2012) indicated that one of the main issues with trade costs is to determine their sources and size. As far as their origins are concerned, it is agreed that bilateral trade costs are the product of external and internal influences. External factors that contribute to the differentiation factors between exporters and importers are the following, transportation costs, trading partners, and geographical distance. Internal factors are unique to origin or destination and reflect the thickness of their borders as follows: international connectivity, logistic efficiency, and tariffs and non-tariff measures.

Border crossing points and customs clearance points can be barriers to border trade as Guo and Wang (2009); Sharma et al. (2015) stated that most retail products can be taken across borders and inspections are restricted. If the Government of Mexico raises controls on goods or the number of inspections of tourists, the retail business on the U.S. side will experience these consequences depending on the transition. Northeastern Branch of Bank of Thailand reported in 2008 that poor information and communication technology (ICT) supporting custom operation is one of the barriers impeding border trade between Thailand and Cambodia. Moreover, the crowded Klong Luek (Aranyaprathet, Sa Kaeo) custom pass point caused transport delays. Hadjimarcou et al. (2017) investigated retailers participating in foreign marketing focused on the area in which they operate. Rather than aggressively exploring and entering new markets, retailers in border areas around the

world are engaged in exports because their consumers are traveling to achieve them. Therefore, traditional approaches to segmentation and related retail strategies can indeed be questioned at international border points.

On the other hand, Aung (2009) delivered that the increase in border trade is due to the bilateral cooperation of the country with its neighboring countries. The border points are an important channel for importing products to respond to domestic demand. Kasemsuk et al. (2017) mentioned one of the factors affecting the competitiveness increasing of trade operators is infrastructure development and customs clearance point.

The Special Border Economic Zone (SBEZ) is a network of activities aimed at facilitating border trade and investment and facilitating the economic and social growth of the region along the border between countries. It incorporates the definition of a Special Economic Zone (SEZ) but includes a wider range of additional areas that serve as a bilateral border initiative. Lord and Tangtrongita (2014) supported the creation of a Special Border Economic Zone (SBEZ) that will attract investors in productive activities and, respectively, will promote value chains in the subregion that spur border trade and investment, and enhance the social and economic well-being of the people along with the border areas.

Research Methodology

The main technique applied in this research is the trade gravity model by using multiple regression and ordinary least squares (OLS). The OLS method can be examined the effect of total border trade value, border trade export value, and border trade import value on border trade factors. The gravity model is mostly applied to analyze the main factors influencing Thailand's border trade value (Gomez-Herrera et al., 2013; Ganbaatar et al., 2021). In this investigation, the dependent variables consist of 1. total border trade value, 2. border trade export value, and 3. border trade import value in the period 2009-2021. The independent variables, relatively have a relationship with above mentioned dependent variables. This study applies EViews7, a statistical package used mainly for time-series oriented econometric analysis to analyze significant factors.

Many studies of border trade have focused on a specific area/neighboring country (Chansuk and Tavonprasith, 2015; Permboon et al., 2019; Zasen, 2020; Roopsuwankun and Avakiat, 2021). Some work has been carried out to investigate how economic community, consumer purchasing behavior, and promotion policy affect the strategic plan for border trade, border trade promotion, and export development (Krainara and Routray, 2015; Boocharattanachai, 2017; Thongsomjit et al., 2017; Son, 2018; Kamol et al., 2019; Pannarai and Ngeoywijit, 2020). Previous works have not comprehensively examined factors affecting total border trade value, border trade export value, and border trade import value by using demographic, geographic, checkpoint, and government

promotion factors. Data and source can be concluded as shown in Table 1. Before estimating, the Variable Inflation Factors (VIF) is used to analyze the variance of the ordinary least squares estimators among the explanatory variables which value is not more than 5 in each variable. It means all of the hypothesis is not faced with multicollinearity.

Table 1 Data and source for this study

Data	Abbreviation	Source
Total border trade value (Million THB)	TOCRO	Department of Foreign Trade, Ministry of Commerce
Border trade export value (Million THB)	EXCRO	Department of Foreign Trade, Ministry of Commerce
Border trade import value (Million THB)	IMCRO	Department of Foreign Trade, Ministry of Commerce
Population of border provinces (People)	POP	National Statistical Office
Number of border crossing points (Points)	BCP	Department of Foreign Trade, Ministry of Commerce and Foreign Affairs Division, Ministry of Interior
Number of customs clearance points (Points)	CCP	Department of Foreign Trade, Ministry of Commerce and Thai Customs
Geographical distance-Land Border (Kilometers)	GEODIS	Department of Foreign Trade, Ministry of Commerce
Number of border provinces (Provinces)	BORPRO	Department of Foreign Trade, Ministry of Commerce
Number of special border economic zones (Provinces)	SBEZ	Thailand Board of Investment

According to Table 1, this study aimed to explore three parts as Table 2 below.

Table 2 Regression models

<p>1. Factors affecting Thailand's total border trade value that was determined by a formula used. This equation is</p> $Y_1 = \alpha + \beta_{x_3} + \beta_{x_5} + \beta_{x_3} + \beta_{x_4} + \beta_{x_5} + \beta_{x_6} + \beta_{x_7} + \beta_{x_8} + \epsilon$ <p>Where</p> <p>Y_1 = Total border trade value</p> <p>β_{x_1} = Border trade export value</p> <p>β_{x_2} = Border trade import value</p> <p>β_{x_3} = Population of border provinces</p> <p>β_{x_4} = Number of border crossing points</p> <p>β_{x_5} = Number of customs clearance points</p> <p>β_{x_6} = Geographical distance (Land border)</p> <p>β_{x_7} = Number of border provinces</p> <p>β_{x_8} = Number of special border economic zones</p> <p>ϵ = error term</p>	<p>2. Factors affecting Thailand's border trade export value that was determined by a formula used. This equation is</p> $Y_2 = \alpha + \beta_{x_{21}} + \beta_{x_{22}} + \beta_{x_3} + \beta_{x_4} + \beta_{x_5} + \beta_{x_6} + \beta_{x_7} + \beta_{x_8} + \epsilon$ <p>Where</p> <p>Y_2 = Border trade export value</p> <p>β_{x_1} = Total border trade value</p> <p>β_{x_2} = Border trade import value</p> <p>β_{x_3} = Population of border provinces</p> <p>β_{x_4} = Number of border crossing points</p> <p>β_{x_5} = Number of customs clearance points</p> <p>β_{x_6} = Geographical distance (Land border)</p> <p>β_{x_7} = Number of border provinces</p> <p>β_{x_8} = Number of special border economic zones</p> <p>ϵ = error term</p>	<p>3. Factors affecting Thailand's border trade import value that was determined by a formula used. This equation is</p> $Y_3 = \alpha + \beta_{x_{31}} + \beta_{x_{32}} + \beta_{x_3} + \beta_{x_4} + \beta_{x_5} + \beta_{x_6} + \beta_{x_7} + \beta_{x_8} + \epsilon$ <p>Where</p> <p>Y_3 = Border trade import value</p> <p>β_{x_1} = Total border trade value</p> <p>β_{x_2} = Border trade export value</p> <p>β_{x_3} = Population of border provinces</p> <p>β_{x_4} = Number of border crossing points</p> <p>β_{x_5} = Number of customs clearance points</p> <p>β_{x_6} = Geographical distance (Land border)</p> <p>β_{x_7} = Number of border provinces</p> <p>β_{x_8} = Number of special border economic zones</p> <p>ϵ = error term</p>
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The confidence level was set at 95 percent. The allowance for error was set at 5 percent, so $\epsilon = 0.05$. Even more, the Durbin-Watson statistic test will be used to prove the Autocorrelation problem because the data are time series.

The data were processed with EViews7 statistics of all variables used in the regression are provided in Table 3 and 4 below.

Table 3 Descriptive statistics of the dataset

Variables	N	Mean	Std. Dev.	Min	Max
TOCRO	13	2.620	0.012	2.592	2.634
EXCRO	13	2.582	0.012	2.550	2.595
IMCRO	13	2.548	0.013	2.526	2.570
POP	13	2.831	0.001	2.829	2.832
BCP	13	3.018	1.089	1.099	3.850
CCP	13	3.691	0.059	3.584	3.784
GEODIS	13	8.642	0.000	8.640	8.643
BORPRO	13	3.578	0.109	3.401	3.738
SBEZ	12	1.806	0.872	0.000	2.708

Source: Author (2022)

Note: All data is transformed to the natural logarithm.

The result shows that all dependent and independent variables are transformed to the natural logarithm form. There are 9 observations, which use time-series data to estimate the models from 2009 to 2021. The mean value in descriptive statistics reveals that the data has a normal distribution.

Table 4 Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
TOCRO	1.000								
EXCRO	0.961	1.000							
IMCRO	0.939	0.873	1.000						
POP	0.306	0.109	0.517	1.000					
BCP	0.398	0.193	0.614	0.692	1.000				
CCP	-0.343	-0.333	-0.323	0.346	-0.068	1.000			
GEODIS	0.118	-0.053	0.319	0.640	0.530	0.496	1.000		
BORPRO	0.148	-0.029	0.352	0.549	0.648	0.468	0.599	1.000	
SBEZ	0.329	0.141	0.529	0.560	0.509	0.319	0.654	0.665	1.000

Source: Author (2022)

Note: 1. All data is transformed to the natural logarithm.

2. Dependent variables consist of TOCRO, EXCRO, and IMCRO

3. TOCRO: Logarithm of total border trade value, EXCRO: Logarithm of Border trade export value, IMCRO: Logarithm of Border trade import value, ...

Table 4 shows the correlation matrix between explanatory variables and dependent variables. The results are all below 0.7, which means the data does not have a multicollinearity problem.

Findings

This study is to investigate factors affecting 1) Thailand's total border trade value, 2) border trade export value, and 3) border trade import value by using EViews7 to calculate and analyze data. The findings are as followed;

Table 5 The result of OLS regression

Variables	(1) TOCRO	(2) EXCRO	(3) IMCRO
POP	4.724*** (11.135)	4.752*** (12.141)	5.092*** (11.296)
BCP	.109 (.246)	.185 (.268)	.012 (.250)
CCP	.988 (2.216)	1.685 (2.417)	0.112 (2.248)
GEODIS	21.400 (3.229)	20.045 (4.815)	26.637 (2.240)
BORPRO	.131*** (3.173)	1.305*** (3.459)	1.843*** (3.218)
SBEZ	.062 (.102)	.105 (.111)	.002 (.103)
Constant	-25.115*** (5.455)	-23.046*** (7.382)	-32.532*** (4.530)
Observations	13	13	13
R-squared	0.761	0.601	0.882
F-statistic	101.211	22.877	50.348
t-Statistic	-10.761	-4.489	-8.463
Durbin-Watson stat	2.241	2.098	1.588

Source: Author (2022)

- Note: 1. All data is transformed to the natural logarithm.
2. Standard errors in parentheses significant at *** p<0.01 level

1. Factors affecting Thailand's total border trade value

$$\widehat{TOCRO} = -25.115 + 4.724POP + 0.131BORPRO$$

The value of the R square is 0.761. We would conclude that 76.1 percent of Thailand's total border trade value can be explained by the population of border provinces and the number of border provinces. Factors affecting Thailand's total border trade value can be tested for significance as shown in Table 5. The OLS estimation revealed two main variables that related to Thailand's total border trade value including the population of border provinces (POP) and the number of border provinces (BORPRO) at a significant level of 0.05 but the number of border crossing points (BCP), the number of customs clearance points (CCP), geographical distance-land border (GEODIS), and the number of special border economic zones (SBEZ) are not related to Thailand's total border trade value.

According to the rule of thumb, the Durbin-Watson statistic should be between 1.5 and 2.5, and then the regression model is not subjected to an autocorrelation problem. The Durbin-Watson statistic of this model is 2.241. It shows the insignificant autocorrelation issue.

In conclusion, if the population of border provinces increases by 1 percent, other things being equal, Thailand's total border trade value will increase by 4.724 units. According to Kasemsuk et al. (2017), market demand that derives from the growth of population affecting the competitiveness increasing of trade operators at the Thailand-Cambodia border especially demand size that is the total potential number of consumers or sales. If the number of border provinces increases by 1 percent, other things being equal, Thailand's total border trade value will increase by 0.131 units.

According to the results, this study has two main findings the population of border provinces and the number of border provinces. Demographics can include any statistical factors that affect the growth or decline of the population. The growth of the population of border provinces affects total border trade value as the study by Kasemsuk et al. (2017) indicated that market demand affects competitiveness increasing trade operators at the Thailand-Cambodia border especially demand size that is the total potential number of consumers or sales. Therefore, the more population of border provinces, the more demand size for border trade.

There are 76 provinces in Thailand until 2011, Bueng Kan is a newly established province, making Thailand has 77 provinces and Bueng Kan became the thirty-first province of border provinces. It is located in the Northeastern Thailand. It borders, from the north, Nong Khai, Sakon Nakhon, and Nakhon Phanom. To the north and east, it borders Bolikhamsai of Laos, with the Mekong River forming the boundary.

Bidding is scheduled for July 2020 for the construction of the Fifth Thai-Laos Friendship Bridge project. It is anticipated that construction of the bridge will begin later this year and will be completed by 2023. The project will connect Bueng Kan and the Bolikhamsai of Laos across the river Mekong (Xinhua, 2020). The new province as Bueng Kan becomes an important province that encourages border trade between Thailand and Laos.

2. Factors affecting Thailand's border trade export value

$$\widehat{EXCRO} = -23.046 + 4.752POP + 1.305BORPRO$$

The value of the R square is 0.601. We would conclude that 60.1 percent of border trade export value can be explained by the population of border provinces and the number of border provinces. Factors affecting Thailand's border trade export value can be tested for significance as shown in Table 5. The OLS estimation revealed two main variables that related to Thailand's border trade export value including the population of border provinces (POP) and the number of border provinces (BORPRO) at significant level 0.05 but the number of border crossing points (BCP), the number of customs clearance points (CCP), geographical distance-land border (GEODIS), and the number of special border economic zones (SBEZ) are not related to Thailand's border trade export value.

Time series data is present in this regression model. We need to check the randomness of the data set and to test whether there is a correlation between the observations of a time series data. According to the rule of thumb, Durbin-Watson statistic should be between 1.5 and 2.5, and then the regression model is not subjected to autocorrelation problem. The Durbin-Watson statistic of this model is 2.0986, which deviated not much far from 2.0000. It shows the insignificant autocorrelation issue.

If the population of border provinces increases by 1 percent, other things being equal, border trade export value will increase by 4.752 units. If the number of border provinces increases by 1 percent, other things being equal, border trade export value will increase by 1.305 units.

3. Factors affecting Thailand's border trade import value

$$\widehat{IMCRO} = -32.532 + 5.092POP + 1.843BORPRO$$

The value of the R square is 0.882. We would conclude that 88.2 percent of border trade import value can be explained by the population of border provinces and the number of border provinces. Factors affecting Thailand's border trade import value can be tested for significance as shown in Table 5. The OLS estimation revealed two main variables that related to Thailand's border trade import value including the population of border provinces (POP) and the number of border provinces (BORPRO) at significant level 0.05 but the number of border crossing points (BCP), the

number of customs clearance points (CCP), geographical distance-land border (GEODIS), and the number of special border economic zones (SBEZ) are not related to Thailand's border trade import value.

Time series data is present in this regression model. We need to check the randomness of the data set and to test whether there is a correlation between the observations of a time series data. According to the rule of thumb, Durbin-Watson statistic should be between 1.5 and 2.5, and then the regression model is not subjected to autocorrelation problem. The Durbin-Watson statistic of this model is 1.5887, which deviated not much far from 1.5000. It shows the insignificant autocorrelation issue.

In conclusion, the parameters can predict 88.2 percent of the dependent variable in this multiple regression model. The overall test of significance of regression parameters (F-test) shows an evidence to conclude that two parameters are not equal to zero and the overall relationship between dependent and independent variables is significant. The result of t-test shows that the individual independent variables are significant. Moreover, this model is not subjected to autocorrelation problems. Although the error term might cause abnormalities, this model is a good factor.

If the population of border provinces increases by 1 percent, other things being equal, border trade import value will increase by 5.092 units. If the number of border provinces increases by 1 percent, other things being equal, border trade import value will increase by 1.843 units.

Discussion

The findings are indicated that two significant factors contain the population of border provinces, and the number of border provinces significantly contributed to Thailand's total border trade value, border trade export value, and border trade import value. This study demonstrates demographic factors as the population of border provinces, and geographic factors as the number of border provinces can increase border trade value.

First, the population is one of the crucial factors for the border trade value of Thailand. The more population of border provinces, the more demand size for border trade. Yaw (2017) indicated that countries are geographically close to each other, and they had close historical, cultural, and economic ties, with the same ethnic groups living on both sides of the border. Furthermore, border trade is vital for economic growth, as it has a direct impact on the welfare of people who depend on both sides. Kasemsuk et al. (2017) declared market demand that derives from the growth of population affecting the competitiveness increasing of trade operators at the Thailand-Cambodia border especially demand size which is the total potential number of consumers or sales. The growth of population in border provinces influences border trade export value. Besides consumer

expansion, at the same time, labors are also expanding to respond economic growth along the border province (Sasong, 2019).

The more population of border provinces, the more consumers for import products from neighboring countries. Due to Thailand is production base for foreign investors, for this reason, Thailand must import products including natural gas, magnetic tape, industrial engines, storage media, computer components, circuit board, and copper to respond to its industrial production such as computers, electronic appliances, optical materials, and vehicles (Bank of Thailand, 2020). At the same time, Thailand's essential export products are as follows computers and cars that use the above import products as materials or components (Ministry of Commerce, 2018).

In addition, incentives and promotions for investors in SEZ that located in border provinces cause the growth of population in border provinces. Most of the target industries are labor-intensive, as furniture, agricultural and agricultural processing as industries in Bueng Kan, although it is not SEZ but it is one of potential border provinces. A creation of new province as Bueng Kan in 2011, border trade import value is continually increasing. Many industries require a large amount of labor to produce their goods or services (Department of Industrial Works, 2020). Thence, the more factories in border provinces, the more labors in such area. As the study by Rodriguez- Sanchez (2020), the retail export industry is critical to the economies of the US and Mexico border regions because it allows businesses to develop while also providing jobs for a large number of people. Moreover, the mobility of employees and labor skills development can be a competitive advantage for border trade and create a good relationship between the two countries (Saengchai, 2016).

Another critical determinant for Thailand's border trade value is the number of border provinces. Border trade activities between Thailand and neighboring countries occurring on the border provinces all over the country. Janmuean (2018) suggested that the provinces along the Mekong River in northeast Thailand and districts in Laos are more closely related to creating economic cooperation, society, culture, and politics, and it becomes a new geopolitical area along the Mekong River, which is the Greater Mekong Sup-region Initiative (GMS). Massonia and Abe (2022) stated that cross-border twin cities (such as the Mae Sot (Thailand) and Myawaddy (Myanmar), Mukdahan (Thailand) and Savannakhet (Laos), and Nakhon Phanom (Thailand) and Thakhek (Laos)) are urban organisms with solid connectivity to the economy and society of their neighbors across the border. These cities offer enormous potential for becoming integrated nodes in border value chains and serving as border trade hubs. As Jaroensathapornkul (2017), the solution to support Thailand and Cambodia's border trade is the construction of truck terminals in border cities (as Sa Kaeo) to serve as hubs for products pooling and distribution. More convenient for transporting commodities can develop the nation's economy.

For southern border provinces, Anuar and Harun (2018) demonstrated that Su-ngai Kolok (Narathiwat, Thailand) and Rantau Panjang (Kelantan, Malaysia) have been shown to be shopping utopias for local and foreign tourists, and have the potential to become leading border tourism products of the Thailand-Malaysia border. As the study of Zasen (2020), the growth of Ubon Ratchathani's border trade market encourages the export of consumer items to people in adjacent nations. These border provinces can boost border trade with continue negotiations with neighboring countries (National News Bureau of Thailand, 2021). In agreement with Senphuwa (2019), the development initiatives for retailers at the permanent border crossing point of Chong Sa-ngam (Srisaket, Thailand) can foster partnerships at the provincial level between Thailand and Cambodia as business partners.

Thailand benefits from the strong trend of businesses and investors running business in SEZ in 10 border provinces throughout the country, including Chiang Rai, Nong Khai, Nakorn Phanom, Mukdahan, Tak, Kanchanaburi, Sa Kaeo, Trat, Songkhla, and Narathiwat. The SEZ strategy was introduced for the first time in 2015, based on the government's belief in the strong potential of the 10 regions to link with neighboring countries in terms of trade, economy and investment. Additionally, based on unique geographical strength and locally accessible resources, particular target industries for each SEZ have been clearly defined such as agricultural processing and furniture (Thailand Board of Investment, 2017).

Therefore, these findings support the growth of the population of border provinces, consists of consumers and labors that affecting Thailand's border trade value and the number of border provinces are essential for border trade gateways.

Recommendation

According to selected variables to analyze in this study and ignores the other variables. Further studies should consider other variables as well. Moreover, the other studies that related to border trade between Thailand and neighboring countries should examine other issues, for example, the influence of Thailand and Myanmar border trade, significant factors of Thailand and Laos border trade, factors leading to Thailand and Cambodia border trade, factors affecting Thailand and Malaysia border trade. Export and import value are interesting aspects, especially factors affecting border trade value in each neighboring countries as a difference in economic, demography, geography, tourism, infrastructure, transportation etc. Export and import products in each border are worth investigating, which product should produce more to respond increasing market demand or how to support potential industries or areas for import substitution. Other than border trade that is a part of cross border trade, transit trade, includes the transit of goods across more than one nation, is also

a part of it. Transit trade for Thailand consists of trading with Singapore, southern China, Vietnam, India and Sri Lanka that is new issue for this field of study.

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