Research Articles

Development of Trade and Investment Cooperation in Greater Mekong Sub-region: Thailand, Laos, Vietnam, and Cambodia*

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Abstract

This research aims to study on the trade and investment development among Greater Mekong Sub-region (GMS) countries, including Cambodia, Laos, Thailand, and Vietnam. Recently this sub-region has played more positive roles in terms of economic development and in international economic cooperation. For the first section, the gravity model is employed to explain the factors affecting the trade between Thailand and countries in GMS. The research found that Gross Domestic Products (GDP) of each country, tariff rates, trade facilities, and distance between countries are able to explain the trade value between Thailand and GMS countries. The second section of the research explains the factors affecting foreign direct investment (FDI) inflows to Thailand and to Vietnam. By using ARIMAX model, the study found that GDP per Capita, real interest rates, and degree of openness can be the leading indicators for FDI. For Vietnam, exchange rate is the additional variable that can be leading indicator for FDI. The third section of this research is the study on the effects of Thailand-Cambodia economic cooperation under the ACMECS framework. The study found that the infrastructure development under ACMECS provides the positive opportunities for Thai investors to invest in Cambodia. The study suggests that there are some industries that Thai investors may have comparative advantages in investment, such as, construction, tourism, drinking water, garments, and medical services. These are markets with high domestic demand but lacks of domestic supply.

Keyword: Cooperation Development, Trade and Investment, Greater Mekong Sub-region, ACMECS

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Introduction

Greater Mekong Sub-region (GMS), consisting of Thailand, Laos, Cambodia, Vietnam, Myanmar, and China (Yunnan and Guangxi provinces) is an area with high potential in economic growth. In the present, the cooperation in trade and investment within the area has become more important than before. Such cooperation is supported by a specific geographical characteristic of the area: that the six countries coexist on the same river.

In the past three decades, the structure of international trade between Thailand and other GMS members, including Laos, Cambodia, Vietnam, Myanmar, and China (Southern provinces including Yunnan and Guangxi provinces), has faced changes both in the aspect of structure and volume.

Figures 1 and 2 depict the general trend of such changes.

Unit: Millions of USD

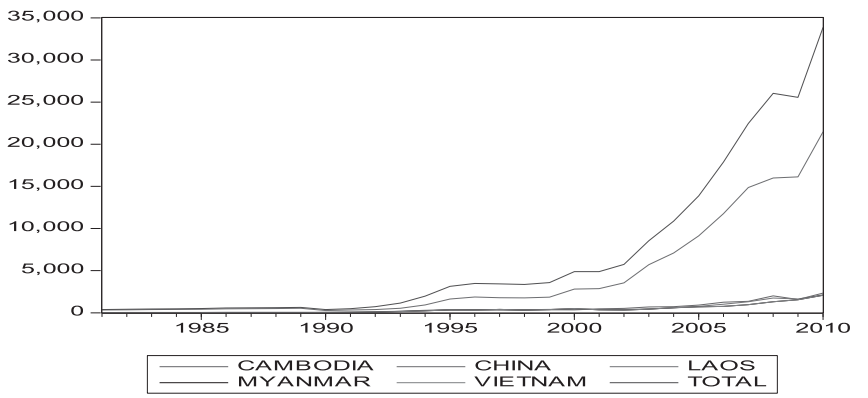

Figure 1 Volumes of Thailand Exports to the GMS Countries

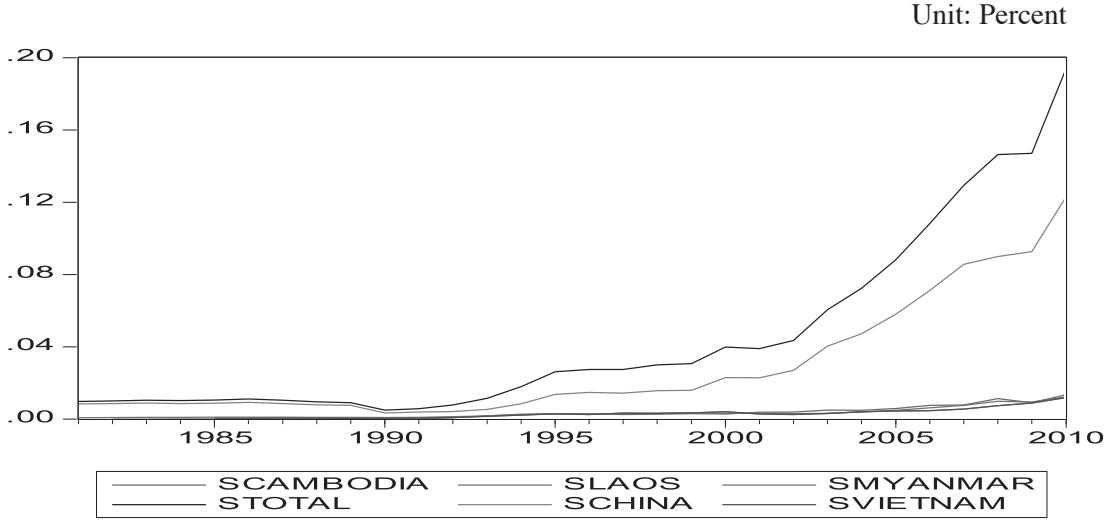

Figure 2 Shares of Thailand Export to Real GDP

Both Figures 1 and 2 show an increasing trends both in the aspect of export value and the aspect of share.The export volume has had escalated dramatically after the region's economic crisis occured in 1997 (Figure 1). In present, Thailand trade with the GMS countries has approximately 20% share of the country's real GDP (Figure 2), a very high proportion, and is expected to continue rising.

From the provided macroeconomic statistics, it could be inferred that trade cooperation within the GMS has accounted for the subregion's economic development potentials. Moreover, the current globalization-influenced economic development plans are the anchor of international trade and investment conferences and thus, the development in commerce of GMS countries could not stay strictly domestic. The development cooperation in the aspects of economy, society, and environment is a viable method for the GMS countries to allocate the limited resources of the region to achieve maximum efficiency.

Such cooperation is based on the promotion of intraregional trade and investment, with the goals being the regional wealth, eradication of poverty, and promotion of sustainable development. To date, the GMS countries have agreed on nine categories of development cooperation: transportation, telecommunication, energy, trade, investment, agriculture, environment, tourism, and human resource development. However, economic development will

affect the society and environment along with causing various problems, such as resources, pollution, and society-related problems.

The objectives of the study: 1) To examine the scope of cooperation and development in trade and investment between Thailand and other countries within the Greater Mekong Sub-region, including the Laos, Vietnam, and Cambodia. 2) To define the structure and trends of trade and investment cooperation among the Greater Mekong Sub-region countries. 3) To generate régime options which will lead to sustainable development of the Greater Mekong Sub-region.

Trade between Thailand and the GMS Countries

This study aims to examine economic changes, especially ones related to structure and trends of trade between Thailand and other GMS countries and to generate régime options for the development of the subregion. The objective of this study is to define the structure and trends of export and import volumes between Thailand and other GMS countries as trading partners by the mean of SWOT (Strength, Weakness, Opportunity, and Threat) analysis and an international economy model known as the Gravity Model.

The secondary data used for estimation is panel data, a hybrid format between the cross section and time series from 1981 to 2010. The model to make estimation of such data is known as Generalized Least Square (GLS). The variables include the real export and import volumes between Thailand and other GMS countries, growth of GDP per capita, burden of customs procedure, tariff rate, and distance between capital cities.

Results

Statistical Overview

From the use of available data to make estimation other than dependent variables such as Thailand's real volumes of export and import regarding other GMS countries, real GDP, growth of GDP per capita, burden of customs procedure, tariff rate and, distance between capital cities. It was found that some information among the panel data of GMS countries appeared incomplete due to the fact that some variables have only been recorded for the past 5-10 years. The amount of information absent from the panel data could adversely affect the credibility of the estimation. In attempt to negate the effects of the information limitation, the estimation would be done with the following assumptions:

A. Each GMS country's burden of customs procedure in the period with absent data remain unchanged from the latest annual index.

B. Thailand's real export and import volume with Yunnan and Guangxi provinces equal to 10% of Thailand's real export and import volume with China throughout the studied period.

Estimation by Gravity Model

The objective of this study is to define changes in trade structures and trends of Thailand's export and import volume with other countries within GMS by using panel data information regarding international trades to formulate a relationship equation for the export and import volume.

The estimation of Thailand's export and import volume with partner countries within GMS by the Gravity Model is shown in Tables 1 and 2.

Table 1 Estimation of Export Volume

Method: Generalized Least Square

Dependent variable: Export volume of Thailand to other countries within GMS ($lnEX_{ijt}$)

Variables (Legend)	Model Number 1	Model Number 2
Constant (C)	**9.86***	**-12.65****
Real GDP of Thailand (lnY_{it})	**1.07****	**0.89***
Real GDP of partner country (lnY_{jt})	**0.78****	**0.72***
Thailand's growth of GDP per capita $\left(ln\left(\frac{y}{n}\right)_{it}\right)$	**-3.85****	(dropped)
Partner country's growth of GDP per capita $\left(ln\left(\frac{y}{n}\right)_{jt}\right)$	3.01	(dropped)
Partner country's burden of customs procedure (lnB_{jt})	2.07	(dropped)
Partner country's tariff rate (lnT_{jt})	-1.85	**-0.64****
Distance between Thailand and partner country (lnD_{ij})	**-0.09****	**-1.77***
Ward Chi-square(p-value)	491.46 (0.00)	447.82 (0.00)
R square	0.72	0.61

Source: The researcher's estimation. The symbols ** and * designate statistical significance of 90 and 95 percent, respectively.

The models are capable of explaining the export and import volumes well. The R Square are 0.72 and 0.61.

The first model of Table 1 is a general model which takes all variables according to the theory into account while Model 2 omits some of the variables due to the occurred multicollinearity between the variables, such as burden of customs procedure and tariff rate.

Moreover, Thailand's growth of GDP per capita from the first model is found to be negative (-3.85), contradicting the theory itself. The partner country's growth of GDP per capita, though compliant with the theory, does not have statistical significance.

Thus, Model 2 was chosen for the discussion.

The estimation of Thailand's export volume to GMS countries can be described as:

$$lnEX_{ijt} = -12.65^{**} + 0.89^{*} lnY_{it} + 0.72^{*} lnY_{jt} - 0.64^{**} lnT_{jt} - 1.77^{*} lnD_{ij}$$

R square = 0.61

The symbols ** and * designate statistical signification of 90 and 95 percent, respectively.

From the estimation, the real GDP of Thailand and partner country (Y_{it},Y_{jt}) both have positive relationship with Thailand's export volume. Such finding complies with the theoretical speculation and have statistical significance of 95 percent. On the other hand, the partner country's tariff rate and the distance both have negative relationship with the export volume at 90 and 95 percent significance respectively.

To quantify additional effects of each variables, due to the log linear format of the estimation, the coefficient of the estimation may be interpreted with the characteristic of flexibility as described below.

For the group of positive variables, 1 percent increment of real GDP of Thailand and partner country, where other variables remain unchanged, will result in an increase of export volume of 0.89 and 0.72 percent, respectively, showing that Thailand's real GDP is relatively more influential than that of the partner country.

For the group of negative variables, 1 percent increment of tariff rate and distance between capital cities, where other variables remain unchanged, will result in a decrease in export volume of 0.64 and 1.77 percent, respectively.

Table 2 Estimation of Import Volume

Method: Generalized Least Square

Dependent variable: Export volume of Thailand to other countries within GMS $(lnEX_{ijt})$

Variables (Legend)	Model Number 3	Model Number 4
Constant (C)	**-6.23***	**8.11***
Real GDP of Thailand (lnY_{it})	**0.91****	**0.35****
Real GDP of partner country (lnY_{jt})	**0.48****	**0.66***
Thailand's growth of GDP per capita $(ln\left(\frac{y}{n}\right)_{it})$	-2.19	(dropped)
Partner country's growth of GDP per capita $(ln\left(\frac{y}{n}\right)_{jt})$	1.55	(dropped)
Thailand's burden of customs procedure (lnB_{jt})	-2.27	(dropped)
Thailand's tariff rate (lnT_{jt})	0.26	**-1.17****
Distance between partner country and Thailand (lnD_{ij})	0.63	**-1.52****
Ward Chi-square(p-value)	302.84 (0.00)	279.62 (0.00)
R square	0.66	0.43

Source: The researcher's estimation. The symbols ** and * designate statistical significance of 90 and 95 percent, respectively.

The method used to analyze Thailand's import volume from GMS country (Table 2) is similar to that of the export volume (Table 1).

The Gravity Model's aptness at describing the import volume is relatively lesser comparing to that of the export volume, having R square of 0.66 and 0.43.

The third model of Table 2 is a general model which takes all variables according to the theory into account while the forth model omits some of the variables due to the occurred multicollinearity between the variables: Thailand's burden of customs procedure (B_{it}) and Thailand's tariff rate (T_{it}). Estimation from the third model is erratic because some of the variables' coefficient appears to contradict the theory and/or does not have statistical significance.

Thus, the forth model was chosen for the discussion.

The estimation of Thailand's import volume from GMS countries can be derived from the forth model as:

$$lnIM_{ijt} = 8.11^{**} + 0.35^{**} lnY_{it} + 0.66^{*} lnY_{jt} - 1.17^{**} lnT_{it} - 1.52^{**} lnD_{ij}$$

R square = 0.43

The symbols ** and * designate statistical signification of 90 and 95 percent, respectively.

From the estimation, the real GDP of Thailand and partner country (Y_{it}, Y_{jt}) both have positive relationship with Thailand's import volume. Such finding complies with the theoretical speculation and have statistical significances of 90 and 95 percen- respectively. On the other hand, Thailand's tariff rate and the distance both have negative relationship with the import volume at 90 percent significance.

The estimation may be interpreted quantitatively with the characteristic of elasticities as described below.

For the group of positive variables, 1 percent increase of real GDP of Thailand and partner country, where other variables remain unchanged, will result in an increase in import of 0.35 and 0.66 percent, respectively.

For the group of negative variables, 1 percent increase of Thailand's tariff rate and distance between capital cities, where other variables remain unchanged, will result in import volume decrease of 1.17 and 1.52 percent, respectively.

Analysis of Thailand's Export to Laos

The analysis only concerns one partnership, between Thailand and Laos and thus, lacks the panel data characteristics. Least Square method can be used to make estimation.

In Least Square estimation, the parameter used is the marginal effect that each variable has on the average export volume from Thailand to Laos during the 1981 – 2010 period.

However, the use of a single pair of partnering countries makes the distance, a significant variable in the Gravity Model, no longer a variable. (The distance between Bangkok and Vientiane is constantly 521 kilometers throughout the period of study.) This does not comply with the condition of the Least Square method. Thus, the distance value is excluded from this estimation.

The distribution formats of the data of Thailand's export to Laos are shown in Figure 3.

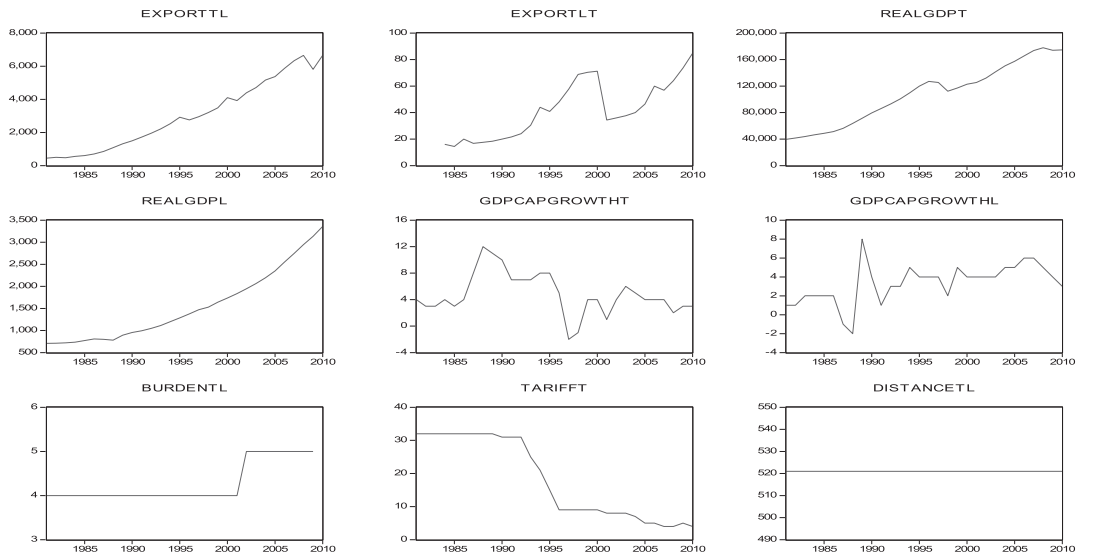

Figure 3 Estimations of Thailand Export to Laos

The estimations of Thailand's export to Laos are shown in Table 3.

Table 3 Estimations of Thailand Export to Laos

Estimation method: Least Square

Dependent variable: Thailand's export volume to Laos ($lnEX_{TLt}$)

Variables (Legend)	**Model Number 5**	**Model Number 6**
Constant (C)	**-12.39****	**17.16****
Real GDP of Thailand (lnY_{it})	**1.64****	**3.23****
Real GDP of Laos (lnY_{Lt})	0.13	**1.14***
Thailand's growth of GDP per capita $(ln\left(\frac{y}{n}\right)_{Tt})$	0.01	(dropped)
Laos growth of GDP per capita $(ln\left(\frac{y}{n}\right)_{Lt})$	0.00	(dropped)
Laos burden of customs procedure (lnB_{Lt})	0.32	(dropped)
Laos tariff rate (lnT_{Lt})	-3.68	**-0.07****
Distance between Thailand and Laos (lnD_{TL})	(dropped)	(dropped)
F stat	374.53	182.01
R square	0.98	0.32

Source: The researcher's estimation. The symbols ** and * designate statistical significance of 90 and 95 percent, respectively.

The estimation of Thailand's export to Laos from Table 3 shows that the Least Square method has a significantly multicollinearity problem, shown by very high R square value and very low statistical significance (conflicting test). From Model 5, only Thailand's Real GDP achieve the statistical significance of 90 percent.

In Model 6, both countries' GDP growth indices along with Laos' tariff rate are excluded from the estimation. The attempt imroves the statistical significance of the other variables.

Model 6 was chosen for the discussion.

$$lnEX_{TLt} = 17.16^{**} + 3.23^{**} lnY_{Tt} + 1.14^{*} lnY_{Lt} - 0.07^{**} lnT_{Lt}$$

R square = 0.32

The symbols ** and * are statistical significance of 90 and 95 percent, respectively.

From the estimation, only three variables; the real GDPs of Thailand and Laos and Laos tariff rate *(Y_{Tt}, Y_{Lt}, T_{Lt})*; have valid relationships with Thailand's export volume to Laos throughout 1981 – 2010 periods.

The coefficients of the estimation can be interpreted with the characteristic of flexibility as described below.

One percent increment of real GDPs of Thailand and Laos, where other variables remain unchanged, result in Thailand's export volume increasing 3.23 and 1.14 percent, respectively. One percent increment of Laos tariff rate, where other variables remain unchanged, results in export volume decreasing 0.07 percent. The latter shows that Laos' commercial tax rate policies have very little effect on Thailand's export volume in the past three decades.

Foreign Direct Investment in Vietnam and Thailand

At present, all developing countries in Asia have adopted policies that are promoting free market, eliminating trade barriers, and competing in providing incentives to business transaction discounts. Such economic schemes have resulted in the increase in foreign investment volume to developing countries in Asia. Data from UNCTAD indicates that in 1980, the volume of foreign direct investment in Asian developing countries was 545 million US Dollars, which increased to 357,846 million US dollars 30 years later.

This occurrence can be explained by the present mainstream economic idea that the past economic policies aiming to protect domestic entrepreneurs from the foreign competition are very costly to the consumers' welfare and are cost-inefficient in the long run. Thus, Asian developing countries appeared to turn to policies that more open to foreign investment from 1987 up to present. (Brooks, et al., 2003)

During the past 20 years, Thailand and Vietnam are two of the appropriate examples of the statement above.

Table 4 Foreign Direct Investment to Thailand, Vietnam, and developing Asian countries during the period of 1988 – 2010

Unit: MillionUSD

	1988 – 1990	1998 – 2000	2008 – 2010
Thailand	1,105	6,102	9,675
	(-)	(452%)	(58%)
Vietnam	76	1,412	9,003
	(-)	(1,757%)	(537%)
Asia (developing countries)	18,031	50,492	82,000
	(-)	(180%)	(62%)

Source: Three-year averages, calculated from United Nations Conference on Trade and Development, Foreign Direct Investment Online database. The numbers in brackets designate growth rate of previous decade.

The volumes of foreign direct investment show that both Thailand and Vietnam have had increasing amounts of foreign investment throughout the 20-year period, the same way other developing countries in Asia do. It is noticeable that Vietnam's decadal growth of foreign investment has been higher than that of Thailand, a result from Vietnam's adopting free-trade policies later than Thailand (DoiMoi, or the renovation) in 1986. 10 years after Vietnam's first foreign investment law becoming effective in 1987, the foreign investment rose from 76 million US Dollars to 1,412 million US dollars, a 1,751% growth.

At present, the volumes of foreign investment in Thailand and Vietnam are comparable at 9,675 and 9,003 million US dollars, respectively. However, the foreign-investment-to-GDP ratio as shown in another set of data in Table 5 illustrates the relative importance of foreign investment to the economy.

Table 5 Shares of Foreign Direct Investment to GDP of Thailand, Vietnam, and The Developing Asian countries from 1988 to 2010

Unit: Percent of GDP

	1988 – 1990	1998 – 2000	2008 – 2010
Thailand	2.45	4.97	3.03
	(-)	(102%)	(-39%)
Vietnam	0.78	4.92	9.51
	(-)	(1,171%)	(93%)
Asia (developing countries)	1.36	3.24	3.05
	(-)	(138%)	(-6%)

Source: Calculated from United Nations Conference on Trade and Development, Foreign Direct Investment Online database. The numbers in brackets designate growth rate of previous decade.

Considering the ratio of foreign direct investment to GDP of Thailand and Vietnam, it is found that, although the investment-to-GDP ratio of the subjects have increased in the 20-year period of the study, Vietnam's ratio in 2010 was 9.51% and was much higher than that of other developing Asian countries.

It could be said that foreign direct investment plays a vital role in Vietnam's economic growth. Vietnam has succeeded in recruiting massive volume of investment from other countries throughout the 20-year period of time. On the other hand, its dependence on foreign direct investment has generated threats that policy makers need to take seriously (Pham, 2002).

Methodology

The econometric method known as Autoregressive Integrated Moving Average with External or ARIMAX Model was used to find leading indicators and to predict the volume of foreign direct investment of both Vietnam and Thailand. The method consists of three steps (details in Gujarati, 1995; Kamolwan, 2012): 1) testing the validity of indicators, 2) testing the consistency of data and 3) estimation of valid model and prediction of the parameter.

Results

Comparison between estimation by model with and without indicators (ARIMA and ARIMAX, respectively) is shown in Table 6.

Table 6 Comparison to the Results of Estimation

Independent variables (quarterly lag)	Vietnam		Thailand	
	ARIMA	ARIMAX	ARIMA	ARIMAX
D(FDI)(1)	**15.32***	**1.81***	**12.01***	**0.98***
D(FDI) (4)	**-**	**-**	**2.81***	0.07
D(FDI) (9)	**-8.36***	**-0.91***	**-**	-
SHOCK (4)	**-7.69***	-3.38	**-4.92***	-1.75
GDP PER CAPITA (4)	-	**2.01***	-	**3.84***
R INTEREST (3)	-	**-0.97***	-	**-0.87***
OPENNESS (2)	-	**7.23***	-	**5.42***
EXCHANGE (2)	-	**1.92***	-	-
Adjust R2	0.30	0.39	0.32	0.41
Root Mean Square Error	330.17	313.14	310.25	299.75

Source: The researcher's estimation. The symbol * designate where $p < 0.05$.
The estimation is shown in Appendix.

From the estimation, all indicators comply with the theory and are over 95 percent statistically significant in describing the foreign direct investment volume of Thailand and Vietnam within the studied period. The comparison of root mean square errors reveals that the model with indicators (ARIMAX) can better describe the foreign direct investment volume of Thailand and Vietnam in the 20-year period and is chosen to predict the foreign direct investment in the next six quarters as shown in Table 7.

Table 7 Prediction of Foreign Direct Investment

Unit: Million US dollars

	2011(Q1)	2011(Q2)	2011(Q3)	2011(Q4)	2012(Q1)	2012(Q2)
Vietnam	2108.19	2104.03	2139.84	2215.53	2331.09	2486.92
Thailand	2132.59	2128.53	2153.84	2228.78	2332.59	2469.78

Source: Reseacher's estimation

ACMECS Thailand–Cambodia Cooperation Strategy

Ayeyawady Chaopraya Mekong Economic Cooperative Strategy (ACMECS) between Thailand, Cambodia, Laos, Myanmar, and Vietnam has the objective to reduce the currently wide economic gap between the member countries. Thailand has the highest GDP per capita of 5,210 US Dollars while Cambodia has the lowest of such: 880 US Dollars.[1] Narrowing the economic gap will support the subregion's sustainable growth which will in turn helps the ASEAN Economic Community (AEC).

ACMECS activities focus on eradicating poverty for the sustainable development as the set goal. The core strategy, to strengthen the existing cooperating projects within the region, sets up the general direction of the activities, such as promoting the border cities as area for economic growth. The Sister Cities project, for an example, is a citieslinking between two border cities of two neighboring countries within ACMECS. Each ACMECS activity uses the members' relative advantages by mutual agreement for the fair share of benefits. The cooperations could be divided into eight categories, each assigned to a coordinating country, including trade facilitating, investment, agriculture, industry, energy, transportation, tourism, human resource development, public health, and environment.

Cooperation between Thailand and Cambodia in ACMECS

Cambodia is an ACMECS member country whose economy is highly affected by Thailand's investment. Bilateral projects between Thailand and Cambodia within ACMECS agreement account for 72 projects with the largest section being the agriculture-industrial projects (27 projects) and the second largest section being the tourism projects (18 projects). The noticeable projects are such as waiving of agricultural product tariffs and ACMECS Single Visa project. Cambodia is the country that Thailand relates most within the ACMECS members Two supporting factors are Thailand's high volume of investment in Cambodia and Cambodia's more open policies (regarding investment, tourism, and infrastructure development) after its civil war and economic depression.

Many of the cooperating projects between Thailand and Cambodia within

[1] Information from www.worldbank.org (without data of Myanmar's GDP per capita)

ACMECS agreement that have not yet succeeded, have been cancelled, or postponed such as agricultural cooperation in identifying the most suitable land for eucalyptus plantation. The project has been cancelled because of Cambodia's lack of clarity in the scope of study, and inability to identify the viable plots of land. Two examples in the industry sector that have also been cancelled are Biomass energy project (with eight million Thai Baht set budget) and solar energy project (with 12 million Thai Baht set budget). It is noticeable that projects related to development of energy in Cambodia have failed. Possible explanations are that Cambodia lacks clarity in terms of policies regarding energy, that it lacks the needed budget to conduct the study, or that it lacks continuity in the study.

Foreign Investment Volume of Thailand and Cambodia

Cambodia opened to foreign investment on 1 August 1994 with Cambodian Investment Board (CIB) to approve the investment support projects. In 2012, there were 157 projects approved, totaling at 334 million US dollars with Chinese investors having the highest number of projects (41 projects, 26.1 percent). Thailand was the seventh with eight projects. Comparing the volume of projects between 2012 and 2011 (334 and 507 million US Dollars, respectively), there was a decrease of 173 million US Dollars or 34.15 percent (as shown in Table 8).

Table 8 Investment Approved by the Cambodian Board of Investment during 2008 – 2012

Content	2008	2009	2010	2011	2012
Volume of investment (million US dollars)	259.9	149.0	172.8	507.3	334.1
Number of projects	101	100	102	148	157

Source: Cambodian Board of Investment (from Department of Foreign Trade, Phnom Penh)

Considering number of projects, the largest category of foreign investment in Cambodia in 2010 – 2012 was ready-to-wear garments with 46, 78, and 82 projects in 2010, 2011, and 2012, respectively. The second largest was footwear with 8, 8, and 13 projects in 2010, 2011, and 2012, respectively. Investment volume-wise, the order is different. In 2010, the largest two categories were agro industry and ready-to-wear garments (75 and 53 million US dollars, respectively). In 2011, they were rubber industry and ready-to-wear garments (295 and 130 million US dollars, respectively). In 2012, they were ready-to-wear garments and shopping malls (165 and 39 million US dollars). This information is shown in Table 9. Ready-to-wear garment is a category greatly invested by foreign investors for the export due to Cambodia's low labor cost and exporting tariffs of Generalized System of Preferences (GSP) when they export to the United States, the European Union, and Japan.

Table 9 Volume of Approved investment Projects in Cambodia during 2010 – 2012 by Category

Place	2010		2011		2012	
	Industry	**Volume (million USD)**	**Industry**	**Volume (million USD)**	**Industry**	**Volume (million USD)**
1	Agro industry	75.5	Rubber	295.0	Garment	165.3
2	Garment	53.8	Garments	130.2	Shopping Mall	39.5
3	Industry	7.5	Tourism	14.5	Mill	38.3
4	Transportation	3.0	Mining	12.0	Footwear	18.5
5	Tourism	3.0	Hardware	10.0	Rubber	9.0
	Sum of Top Five	**142.8**	**Sum of Top Five**	**461.7**	**Sum of Top Five**	**270.6**
	Sum of All	**172.8**	**Sum of All**	**507.3**	**Sum of All**	**334.1**

Source: Cambodian Board of Investment (from Department of Foreign Trade, Phnom Penh)

Thai investors have invested the most in Hotel. Throughout 1994 – 2012, there were nine hotel projects approved by the CIB, worth 138 millionUS dollars. Sixty-three million US dollars of the share was held by Thai investors. Some of the examples are DelaPrix hotel in Siem Reap province and Poi Pet International Club in Teay Meanchey province. The second most invested business is agro-industry, worth 76 million US dollars. Forty million US dollars of the share was held by Thai investors. Some of the examples are the CP Group and the Mitr Phol sugar group. The third most invested business is wood processing, worth 27 million US dollars. Twenty-three million US dollars of the share was held by Thai investors, such as Kanok Furniture Company (details in Table 10).

Table 10 Foreign and Thailand's Investment in Cambodia during 1994 – 2011

Place	Category	Number of Projects	Volume (Million Dollars)	
			Overall	Thai
1	Hotel	9	138.4	63.1
2	Agro-industry	11	75.7	40.4
3	Wood Processing	2	27.5	23.6
4	Food Processing	9	20.5	17.5
5	Industry	14	18.7	13.6
6	Other	37	82.5	69.3
Total		**82**	**363.3**	**227.5**

Source: Department of Foreign Commerce in Phnom Penh: http://www.depthai.go.th

However, there are many hurdles that Thai investors must overcome to invest in Cambodia. From the Cambodia's problem factor analysis in 2012 done by the World Economic Forum, government corruption was the most problematic factor at 19.0 percent. The government scored 3.1 out of 7 in the public's trust rating, placing 61st among 148 countries worldwide. The policy transparency scored 3.6, placing 119th. The next factor is the inefficiency of government work at 13.3 percent; this could be seen from the required period for business registration approval of 85 days, placing Cambodia in the 138th place.The next factors are such as ill- educated labor, inadequate infrastructure, and inconsistent government policies.

Conclusion and Policy Recommendations

The first section of the research aims at defining the trends of international commerce between Thailand and other countries within GMS agreement. The GMS has been more importance to Thailand as can be seen from the data that the volumes of Thailand's export and import with other GMS countries had been increasing throughout the studied period (1981 – 2010).

The study uses a geo-economic concept of geography international economics known as the Gravity Model to describe the forms and trends of the international commerce between Thailand and other GMS countries.

The results show that apart from economic variables of the partnering countries (such as real GDP, tariff rates, and burdens of customs procedure), the trade structures are also affected by the distance as well, and might include the customer's preferences

The second section is an application of an econometric model known as Autoregressive Integrated Moving Average (ARIMAX model) to define indicators of foreign direct investment of two countries.

The results have shown that:

1. The ARIMAX model can describe and predict the volume of foreign direct investment in Thailand better than the model without the indicator (ARIMA) within the studied period.

2. The purchasing demands could be measured with GDP per capita. The business running cost measured by real interest rate could be used as indicator for foreign direct investment while investors prioritize the country offering freedom of investment and the saving of business running cost measured by the openness of the country.

3. Openness of the country has higher marginal effect than any other indicator and can be used to explain Vietnam's higher volume of foreign direct investment in 1988 – 2010 comparing to Thailand. This conclusion is drawn from the fact that Vietnam adopted investment-friendly policies (DoiMoi (1986) and Vietnam's first investment bill (1990)) after Thailand did.

4. Even though the country's real GDP cannot indicate the foreign direct investment, however, the foreign direct investment can indicate the country's real GDP. This conclusion complies with those of the studies done by Cooper (2002) and Sufian and Sidiropoulos (2010). Thus, the policy makers of both countries tend to keep the foreign investment-friendly policy in the future.

5. In Vietnam's case, the exchange rate can be an indicator of investment as it can be used as production base for exportation with relatively lower cost than Thailand.

6. If the economic structures and investment policies of Thailand and Vietnam do not change drastically in the future, the prediction of foreign direct investment will be equivalent to both countries in the first quarter of 2012. The model's accuracy should be improved if the future study can take policy-factor into account. However, an extended period of study and continuous set of data might be needed.

The third section of the study shows that from the late 1990s', the world has given more significance to economic communitizing, both in the regional and sub-regional levels, for its ability in trade creation. There has been more support in commerce, less tax and non-tax barriers, less discriminations and regulations, all of which reduce the complication in customs procedures between the countries within the communities, such as ACMECS.

After many agreements of economic cooperation, Thai investors have had great opportunities to invest in Cambodia in many fields including: infrastructures, tourism, drinking water and beverages, garments, and medical services due to Cambodia's demands being higher than its capability of production. Thailand is advantageous in terms of capability and potential in these areas.

However, there are still many significant hurdles that obstruct the full cooperation between the two countries as could be seen from a number of projects between Thailand and Cambodia within the ACMECS agreement that have been postponed or cancelled. It is advisable that Thailand should prioritize in Cambodia's human resource development and infrastructure development to minimize the major causes of cooperation failures.

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