

# **An Analysis on Myanmar's Border Trade Development with Neighboring Countries**

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## **Abstract**

Trade stands as an essential contributor for economic development of a country. Border Trade activities in Myanmar have been provided to national economic development as a part of national economic strategy. Border trade development will contribute not only towards the economic development of Myanmar but also towards poverty alleviation. The main objectives of this research are to explore the role of border trade in Myanmar's external trade, and to examine the pattern of border trade with neighboring countries between 1997 and 2012. This paper uses secondary data from reliable sources and the Gravity Model method. Results show that Myanmar's Border Trade development has apposite impact on the country's social and economic development. Nevertheless, Myanmar export products are low value added and import products are high value added. Even though these trade activities raise standards of living of the population in the area and encourage the government in developing border trade further, this study suggests that Myanmar needs to be more self-reliable and cooperate more economically. This implies that Myanmar needs to look for trading opportunities and measures for promoting trade and investing in infrastructures. This study encourages governments to reform not only rules and regulations concerned with border trade to promote trade value and volume, but also the infrastructure sector.

Key Words: Gravity Model, Pattern of border trade, value-added products

## **Introduction**

Trade contributes as an engine of growth for not only economic development of a country but also boosts up a greater living standard of human beings. While trade which is internal to a country is important, international trade too can occupy a crucial position in the economic development of a country as well as in the relations among countries. Border trade is as important as International trade. Border trade is the foremost activity among the trade activities of the country.

Many countries across the world engage in trade to attain the benefits from trade. Each country can get economic growth and development by promoting trade. But, the benefits from trade are not equally distributed due to the differences in efficiency, productivity, geographical location, and factor endowments. Trade between neighboring countries is effective for economic growth of these countries and for the promotion of the living standard of their people by fulfilling their needs.

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Border trade development will contribute not only towards the economic development of Myanmar but also towards poverty alleviation, at least around the areas close to the borders. Border area is very important not only for political reason but also for economic relations although border trade is a part of total external trade. Border trade gets a lot of income such as taxes, for commodities transaction, revenues for commodities export with Myanmar kyat and foreign exchange earnings.

Myanmar has a potential vast market and is a sub regional economic nodal link due to the fact of situating on the dynamic cross roads linking Southeast Asia, Western China (Yunnan) and India sub-continent. Myanmar conducted not only in trade with ASEAN which is the largest trading partner also conducted with other major trading partners such as Singapore, People Republic of China, Japan, Malaysia, India and European Union.

Myanmar has long boundaries with its five neighboring countries such as China, Thailand, Laos, India and Bangladesh in dealing with border trade activities. In the west, boundaries are demarcated between Myanmar-Bangladesh and Myanmar-India. In the west, Myanmar borders with China, Laos and Thailand. The boundaries are mostly physical in nature since they flow rivers, water divides and crests of mountain ranges. China and Thailand are important than other neighboring countries because of being large trade partners. As for Laos, not extend in trade relation with other neighboring countries due to mountainous area at the border. Having favorable condition in border areas with all neighboring countries, Myanmar has always been conducted border trade activities with neighboring countries.

Border trade was formalizing and border trade agreements with neighboring countries had been undertaken. The volume and value of trade were increasing gradually after formalization of border trade. Then, border trade posts were open in the respective trade routes. The patterns of border trade are varied according to the border routes. Thus, the development of border trade in different trade routes is necessary to study.

### **Objectives of the Research**

The main objectives of this research are:

- To explore the role of border trade in Myanmar external trade after formalization of border trade in early 1990s
- To examine the pattern of border trade with neighboring countries

### **Scope and Limitations**

The scope of this research is to analyze the development of Myanmar's border trade with neighboring countries in general and particularly with China and Thailand due to make most contributions in border trade value, based on secondary data during the period between 1997 and 2012.

### **Research Method and Technique of Data Analysis**

One of the major purposes of border trade development is to examine the pattern of border trade with neighboring countries. Therefore, to formulate a statistical methodology for assessment of the impact of trade flows on border trade of Myanmar

with neighboring countries through gravity model analysis based on the time series from 1997 to 2012. Recognizing the importance of international trade, the study attempted to analyze the trade patterns of china and Thailand based the gravity model, one of the most efficient models in explaining international trade.

Estimation of a gravity equation requires data on bilateral trade, GDPs, distances, tariffs and possibly other determinants of bilateral trade including contiguity (common border), common language, colonial ties, and exchange rates and so on. Additional relevant data can also be founded in the ADB, which currently include time series such as population, Openness, Gross Domestic Product (GDP), Exchange Rate, Distance and per capita GDP.

Recently, gravity model has been utilized intensively to explain bilateral trade flows between two countries which cannot be solved by other economic theories. In physics, according to Newton's universal law of gravitation, the gravitational attraction between two objects is proportional of their masses and inversely related to square of their distance. **The Gravity model of trade** in international economics predicts bilateral trade flows based on the economic sizes of (often using GDP measurements) and distance between two units. Statistical analysis can be used to predict trade flows between two counties. The model has also been used in international relations to evaluate the impact of treaties and alliances on trade and it has been used to test the effectiveness of trade agreements and organizations such as the North American Free Trade Agreement (NAFTA) and the world Trade Organization (WTO). The model was first used by Tinbergen in 1962 to analyze international trade flows. The basic model for trade between two countries (I and j) takes the form of:

$$F_{ij} = G \frac{M_i M_j}{D_{ij}^2}$$

Where F is the trade flow, M is the economic mass of each country, D is the distance and G is the constant. In gravitational model, bilateral trade between two countries is directly correlated to their respective GDPs and inversely proportional to the distance between them.

This approach has two major problems. First, it cannot be used when there are observations for which  $F_{ij}$  is equal to zero. Second, estimating the log-linearized equation by least squares (OLS) can lead to significant biases.

Timbergen is a Dutch economist who first applied gravity model to analyze foreign trade flows in 1962. In his model, while dependent variable is the trade flow between country A and B, GDP and geographical distance are independent variables. The final estimated results showed that as opposed to distance, the GDP variable has positive effect on the trade flow between two countries, which means countries with larger economic sizes and closer distance tend to trade with each other more.

Krugman and Obstfeld (2005) also utilizes gravity model for trade activities and they provides a common model as follow:

$$T_{ij} = A \frac{Y_i Y_j}{D_{ij}^2}$$

Where:

$T_{ij}$  is the total trade flow from origin country i to destination country j

$Y_i$ , are the economic size (GDP) of two country i and j

$D_{ij}$  is the distance between two country i and j

$A$  is a constant term.

With the use of a logarithmic transformation of both members, it results more linear in the form:

$$\ln T_{ij} = \alpha_0 + \alpha_1 \ln Y_i + \alpha_2 \ln Y_j + \alpha_3 \ln N_{it} + \alpha_4 \ln N_{jt} + \alpha_5 \ln D_{ij} + \alpha_6 \ln EX_{ij} + \alpha_7 \ln AM_{ij} + e_{ij}$$

Where:

$i = 1$  (Myanmar)

$j = 2, 3, 4, \dots$  (Partner countries)

$t = 2000, 2001, 2002, \dots, 2010$

$T_{ijt}$ : Myanmar's trade with country j in year t

$Y_{it}$ : Myanmar's GDP in year t

$Y_{jt}$ : GDP of country j in year t

$N_{it}$ : Myanmar's population in year t

$N_{jt}$ : Population of country j in year t

$D_{ij}$ : Distance in kilometers between Myanmar and country j

$EX_{ijt}$ : Exchange rate between Myanmar and country j in year t

$e_{ijt}$ : Error term

$D$  is the distance variable which is measured in term of great circle distance between Myanmar and its neighboring countries.  $AM_{ij}$  is a dummy variable assuming the value of 1 if Myanmar and its neighboring countries are ASEAN Member and 0 if Non-ASEAN Member.

Distance between Myanmar and its neighboring countries,  $D_{ij}$ , reflects trade barriers such as transportation cost, market access barriers, delivery time and so on.

### Exponential Trend

In an exponential trend, the trend value is changing at a constant rate from one period to another. This is in constant to a linear trend, where the trend value is changing by a constant amount. An exponential trend sometime is called a log-linear trend because it is a linear trend for the logarithms of the observations  $y_t$ . The observations  $y_t$  must be positive for  $\log y_t$  to be defined.

The fitted exponential trend function for the logarithms  $y_t$  of the observations is:

$$y_t = b_0 + b_1 x_t$$

Where  $y_t = \log y_t$

$$y_t = \log y_t$$

To obtain a trend value  $y_t$  for the original series, simply take the anti-logarithm of the logarithmic trend value  $y_t$ .

## Gravity Regression with Neighboring Countries of Myanmar

As for **China**, Population and Trade are negative relationship due to the fact that trade cannot rise as the amount of population increase and export price and quality probably. The rest coefficients are positive. Among variables due to t-test, GDP and Openness are significant at .01% level. The coefficient of multiple determination ( $R^2=0.969$ ) indicates that 96.9% of variation in Ln (trade) can be explained by the multiple regression model. Test Statistic F is significant at .01 % level. Regression equation is significant and good fit. P value (sig) = .000 > 0.01. Standard error of the 1.6% which is less than 10% and the model is good fit.

As for **Thailand**, Population and Trade are positive relationship. The rest coefficients are positive. Among variables due to t-test, GDP and Openness are significant at .01% level.

The coefficient of multiple determination ( $R^2=0.980$ ) indicates that 98.0% of variation in Ln (trade) can be explained by the multiple regression model. Test Statistic F is significant at .01 % level. Regression equation is significant and good fit. P value (sig) = .000 > 0.01. Standard error of the estimate 8.1% which is less than 10% and the model is good fit.

As for **India**, Population and Trade are positive relationship. The rest coefficients are positive. Among variables due to t-test, Openness is significant at .01% level and per capita GDP is significant at .05% level.

The coefficient of multiple determination ( $R^2=0.956$ ) indicates that 95.6% of variation in Ln (trade) can be explained by the multiple regression model. Test Statistic F is significant at .01 % level. Regression equation is significant and good fit. P value (sig) = .000 > 0.01. Standard error of the estimate 1.5% which is less than 10% and the model is good fit.

As for **Bangladesh**, Population and Trade are positive relationship. The rest coefficients are positive. Among variables due to t-test, GDP and Openness is significant at .01% level.

The coefficient of multiple determination ( $R^2=0.184$ ) indicates that 18.4% of variation in Ln (trade) can be explained by the multiple regression model. Test Statistic F is significant at .01 % level. Regression equation is significant and good fit. P value (sig) = .000 > 0.01. Standard error of the estimate 5.2% which is less than 10% and the model is good fit.

#### Gravity Regressions

Variables	China	Thailand	India	Bangladesh
(Constant)	-551.728	206050.078	8.123	126.018
Ln(Population)	86.810	-83217.527	.130	-35.162
Ln(GDP)	-.686	-6415.552	.060	2.338
Ln(Openness)	.583	359.363	1.230	2.101

Ln (Exchange Rate)	-	6321.074	.335	.708
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\*p<.05%, \*\*p<.01%

### Summary Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F
China	.984	.969	.952	.16645	56.375
Thailand	.990	.980	.960	230.81374	48.592
India	.978	.956	.911	.15194	21.571
Bangladesh	.429	.184	-.631	.52861	.226

a. Predictors: (Constant), Ln(Openness), Ln (Exchange Rate), Ln(Population), Ln(GDP)

### Trade Exponential

#### Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.992	.984	.983	.095

#### ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	7.969	1	7.969	879.843	.000
Residual	.127	14	.009		
Total	8.096	15			

#### Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Case Sequence	.153	.005	.992	29.662	.000
(Constant)	364.663	18.199		20.037	.000

The dependent variable is ln(trade).

According to the Table and Figure, the coefficient of determination is  $R^2 = 0.984 = 98.4\%$ . This means (98.4) percent of the variation in Y is explained by changes in time. Therefore, the higher by  $R^2$ , the more explanatory pour our exponential trend has. Moreover, it is found that the trend curve fits the past observations.

Further, this study forecasted the future value for trade by using fitted exponential trend. The forecast value for trade in 2013, 2014, 2015, 2016 and 2017 are (4912.56, 5725.27, 6672.44, 7776.31 and 9062.79). It is expected that trade value in Myanmar will increase in year by year.

### Brief Review of External Trade in Myanmar

After many years of highly inward looking policies before 1988, Myanmar adopted the market-oriented policy to shift into a free market economy in late 1988. Myanmar adopted a series of economic reforms which allowed the private sector a role in all sectors of the economy, particularly external trade, and encourage foreign investment. Both exports and imports grew rapidly in response to the reforms. The balance of payments had benefited from large receipts of royalties from oil and gas exploration and land lease payments from foreign hotel operations, increased foreign direct investment in extractive industries and hotel constructions, and a rise in receipts from tourism and private remittances. This was particularly evident in 1994-95, during which the overall balance of payments strengthened considerably.

**Table (1) Border Trade in External Trade**

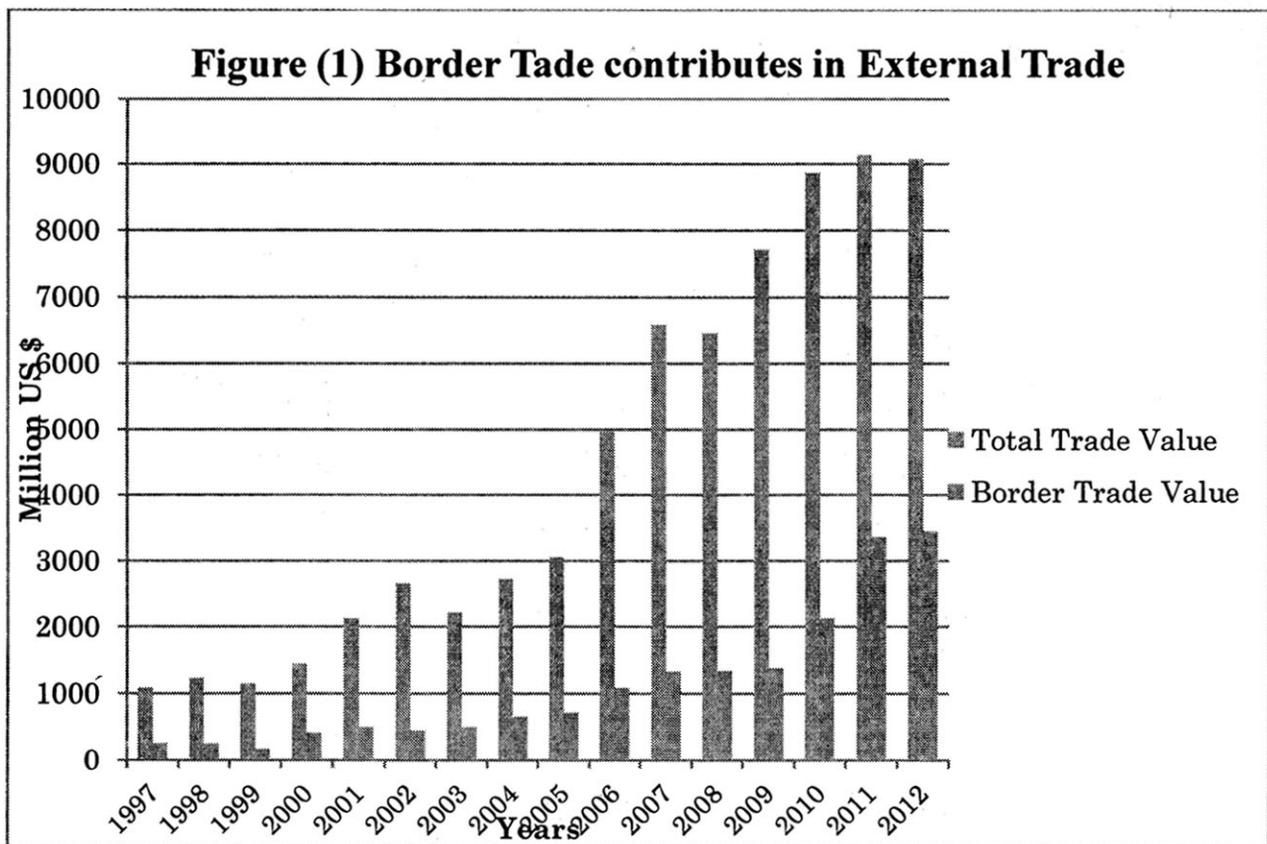
<b>Year</b>	<b>Total Trade Volume</b>	<b>Border Trade</b>	<b>% of Border Trade in External Trade</b>
1997	1086.89	257.66	23.71
1998	1228.03	246.46	20.07
1999	1151.04	170.92	14.85
2000	1447.38	411.74	28.45
2001	2123.37	497.44	23.43
2002	2661.57	444.36	16.70
2003	2216.92	501.16	22.61
2004	2732.08	656.61	24.03
2005	3057.31	716.66	23.44
2006	4968.23	1092.62	21.99
2007	6584.16	1329.50	20.19
2008	6464.72	1348.48	20.86
2009	7715.44	1383.67	17.93
2010	8861.01	2130.19	24.04
2011	9135.60	3368.73	36.87
2012	9076.18	3453.00	38.04

Source: Ministry of Commerce, Myanmar, 2013

Despite its move toward opening up and liberalization of the economy in the late 1980s, the inflow of foreign assistance from bilateral and multilateral agencies had been meager. By contrast, flows from the private sector have been relatively buoyant and have helped to finance the imports that have supported the growth in the economy in the last few years. Exports consisting mostly of primary products have registered only a modest rate of growth over the last five years. The onset of financial crisis in Asia in 1997 led to lightening of trade and exchange regulations and virtual drying up of new foreign private investment and stagnation of private transfers.

Myanmar's trading partners are predominantly Asian nations such as Singapore, China, Thailand, India and Japan. In 1990/00, 91.2 percent of its imports came from Asia, with only 6.5 percent coming from Europe and the United States.

Among the trade activities, Border Trade is one of the foremost activities of the country. In External Trade, Border trade increases from 23.71 percent in 1997 to 38.04 percent in 2012.



Source: Table ( 1 )

Border trade in external trade decreased 14.85 percent in 1999 because of affecting financial crisis among Asian countries in 1997, 16.70 in 2002 because of changing the rules and regulations concerned with border trade and 17.93 in 2009 because of experiencing World financial crisis in 2008.

### Cross-Border Trade with Neighboring Countries

Among the neighboring countries that shares land borders in terms of cross-border trade, investment, tourism, and labor cooperation, agreed programmatic economic

cooperation has been occurred within nearly one decade. Cooperation in trade (formal and informal), labor

**Table (2) Total Border Trade with Neighboring Countries**

Year	Total Border Trade	China	Thailand	Bangladesh	India
1997	257.66	145.81	83.86	22.25	5.74
1998	246.46	194.29	39.34	3.61	9.22
1999	170.92	96.39	43.70	8.55	22.28
2000	411.74	267.63	107.54	16.00	20.57
2001	497.44	276.35	170.59	19.37	31.13
2002	444.36	331.80	74.04	11.80	26.72
2003	501.16	387.12	78.57	10.28	25.19
2004	656.61	496.71	121.94	15.20	22.76
2005	716.66	481.36	199.02	15.41	20.87
2006	1092.62	749.76	300.23	15.77	26.86
2007	1329.50	977.43	304.74	14.83	32.50
2008	1348.48	986.60	327.35	9.88	24.65
2009	1383.67	1076.81	274.65	13.74	18.47
2010	2130.19	1800.30	299.08	16.45	14.36
2011	3368.73	2985.45	343.31	24.50	15.45
2012	3453.00	3110.90	574.16	13.00	38.00

Source: Ministry of Commerce, Myanmar, 2013

**Table (3) Export of Merchandise in External Trade**

(Billion US\$)

Year	2000	2005	2008	2010	2012
China	249.2	762.0	1430.7	1577.8	2048.8
Laos PDR	0.3	0.6	1.1	1.6	2.4
Myanmar	1.6	3.8	6.9	8.6	9.4
Thailand	69.1	110.9	177.8	195.3	229.5
India	42.4	99.6	194.8	216.2	293.2
Bangladesh	6.4	9.3	15.4	19.2	25.1

Source: Statistical Year book for Asia and the Pacific 2013/Economy/Pg-251

**Table (4) Import of Merchandise in External Trade****(Billion US\$)**

Year	2000	2005	2008	2010	2012
China	225.1	660.0	1132.6	1395.1	1818.1
Laos PDR	0.5	0.9	1.4	1.8	2.7
Myanmar	2.4	1.9	4.3	4.7	11.0
Thailand	61.9	118.2	179.2	182.4	247.6
India	51.5	142.9	321	322.7	489.4
Bangladesh	8.9	13.9	23.9	27.8	34.1

Source: Statistical Year book for Asia and the Pacific 2013/Economy/Pg-251

cooperation (legal and illegal), and tourism are impressive whereas cross-border investment has not yet existed. Border trade was informal, illegal trade or smuggling until 1988 when the SPDC took power. Sometime, that occurred as transit trade and barter trade. The Government tried to stop illegal trades and black market along border areas and began to launch legal trade along the border areas. The state leader guided strategies and tactics to implement legal border trade as prior national task. The Ministry of Commerce issued an order 1/88 which assigned Myanmar Export and Import Service (MEIS) to implement legal border trade and supervise border trade activities according to the guidance of state leader. This program was formalized when bilateral agreements were signed with the PRC and Thailand. Myanmar has normalized, legalized, and further liberalized trade with these countries. The positive impact of cross-border trade for Myanmar has risen substantially in employment and income and improvements in security, transportation facilities, and the social sectors in border regions.

In total border trade, the border trade of China is highest among the other neighboring countries because of being biggest trade partners. Thailand is second largest; India stands third and fourth is Bangladesh. China has favorable conditions concerned with border trade by processing highways, road transportation. Goods imports from China are familiar with Myanmar people and China imports are many varieties of goods such as machinery and accessories, electronic goods.

Thailand stands as second largest trade partner for Myanmar because of achieving location opportunities with border trade check points of Myanmar. India and Bangladesh have a little trade check points in border areas which are not much check points in China and Thailand.

### **Border Trade between Myanmar and China**

There are closer diplomatic, political and security ties between Myanmar and China since 1988 after the market reforms were initiated in the country. Economic relations between the countries have also grown quite strongly throughout the 1990s and to this present day, it has become stronger than before. Border Trade between Myanmar and China has long existed for many years with China involving the major role of a supplier of consumer and capital goods.

China is also an important partner in economic cooperation mainly in the areas of infrastructure and energy. In spite of the huge border trade and other economic cooperation from China, it failed to have a substantial impact on its broad-based economic and industrial development in Myanmar. China stands as a main partner in the economy nowadays. Since the Chinese economy is fast growing, strengthened economic ties with China is hoped to be quite instrumental in the future. If Myanmar is able to reaping the benefits from the border trade, there is a huge potential for economic growth.

Myanmar and China had good relations since the historical past. In fact, the close and cordial relationship has existed for many centuries. For Myanmar, China is important trading partner that occupies an important position in the external trade of Myanmar. China has occupied a high position mainly in terms of border trade throughout the years. Since the border trade between the two countries has increased volumes, it could no longer stand as illegal but rather was legitimized and formalized in 1988. China constituted 8.1 percent of total exports of the country to the rest of the world and 20.6 percent of its total imports from the rest of the world. China ranked first in the external trade of Myanmar in 1990. Trade with China has grown rapidly while the volume of external trade of Myanmar was comparatively small in relation with Thailand or Malaysia.

**Table (5) Top Ten Export Commodities permitted by Border Trade Points between Myanmar-China**

US\$ (in millions)					
2005-2006		2010-2011		2012-2013	
EX	Value	EX	Value	EX	Value
Mangoes	11.71	Maize	291.35	Rice	319.29
Frozen Fish	11.50	Green mung bean	84.21	Maize	171.21
Cashew Nuts	11.40	Water melon	63.24	Rubber	167.40
Yam tuber (dried)	7.24	Sugar	44.27	Beans	77.73
Cane	6.34	Rubber	35.91	Water melon	46.29
Water melon	6.12	Various kinds of Fish	22.17	Crab	20.06
Coffee mix	5.80	Cucumber	18.49	Sugar	9.88
Dried Plum	5.36	Dried Chilly	3.63	Beef meat (Frozen)	6.11

Green mung bean	4.49	Sugar cane	2.32	Sugar Cane	1.69
Cucumber	3.85	Rice bean	2.01	Wood	1.02
Total	73.81	Total	567.60	Total	820.68

Source: Department Of Border Trade,2014

In 2005-2006, mangoes are the largest export items to China (15.87%), frozen fishes are the second largest export items (15.58%) and cashew nuts are the third largest export items (15.44 %). In 2010-2011, maize is the largest export item to China (51%), green mung bean is the second largest export item (14%) and water melon is the third largest export item (11.14%). In 2012-2013, rice is the largest export item to China (38%), maize is the second largest export item (20%), and rubber is the third largest export item to China (20%). It is found that the first largest

**Table (6) Top Ten Import Commodities permitted by Border Trade Points between Myanmar-China**

US\$ (in millions)					
2005-2006		2010-2011		2012-2013	
IM	Value	IM	Value	IM	Value
Fertilizers	9.66	Fertilizers	155.38	Fertilizers	135.32
Car spare parts	6.68	Beans	40.41	Brand New Motorcycle	89.78
Cotton yarn	7.39	Seasoning powder	26.81	Seasoning powder	27.45
Ceramic ale	2.33	Iron pipe	23.41	Apple	14.31
Wax	1.89	Zinc Coated Iron wire coil	22.33	Orange	10.76
Glass sheet (Color)	1.62	Orange	17.47	Wax	4.84
Zinc coated iron wire coil	1.56	Apple	9.50	Synthetic cloth cotton	3.12
Office paper	1.54	Vacuum Flask	8.25	Milk powder	2.99
Medical instrument	1.52	Plastic Sheet/ Bag	6.99	Cement	2.50
Caustic soda	1.34	Cotton Fabric	1.05	Polyester Fabric	1.17
Total	35.53	Total	311.60	Total	292.24

Source: Department Of Border Trade,2014

and second largest shares of export items are primary food. But rubber's export share increased from (6%) in 2010-2011 to (20%) in 2012-2013 because government

encourages rubber plantation. In the mention period, rice becomes important export item in 2012-2013 and its share nearly (38%) in total export to China.

In 2005-2006, fertilizer is the largest import item to China (27%), car spare parts are the second largest export items (18%) and cotton yarn is the third largest export item (20%). In 2010-2011, fertilizer is the largest import item to China (49%), bean is the second largest import item (12%) and seasoning powder is the third largest import item (8%).

**Table (7) Myanmar-China Border Trade**

(US\$ Millions)

No.	Fiscal Year	Export	Import	Trade Volume	Trade Balance
1	1997-98	86.4	59.4	145.8	27.0
2	1998-99	94.9	99.4	194.3	-4.5
3	1999-00	96.4	94.9	191.3	1.5
4	2000-01	124.2	100.1	224.3	24.1
5	2001-02	133.1	100.1	233.2	33.0
6	2002-03	158.2	132.5	290.7	25.7
7	2003-04	177.3	163.8	341.1	13.5
8	2004-05	199.4	155.5	354.9	43.9
9	2005-06	313.2	203.1	516.3	110.1
10	2006-07	453.1	296.6	749.8	156.5
11	2007-08	555.4	422.0	977.4	133.5
12	2008-09	490.9	495.8	986.6	-4.9
13	2009-10	500.2	576.6	1076.8	-76.4
14	2010-11	937.8	862.5	1800.3	75.3
15	2011-12	1821.9	1163.5	2985.4	658.4
16	2012-13	1920.3	1190.6	3110.9	729.7

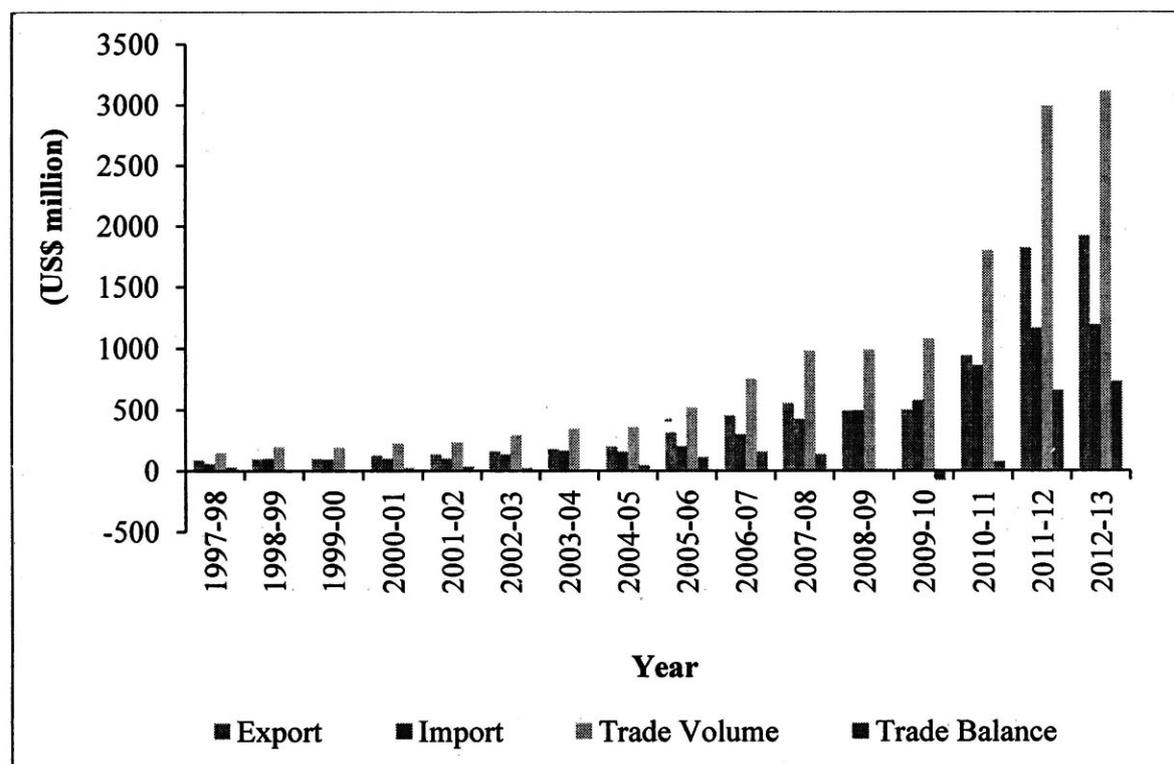
Source: Ministry of Commerce, Myanmar, 2014

In 2012-2013, fertilizer is the largest import item to China (46%), brand new motorcycle is the second largest import item (30%), and seasoning powder is the third largest import item to China (9%). During the study period, fertilizer is the largest share of import item to China because it is used to produce crops productivity. Brand new motorcycles become the second largest export item because government allowed to issues the license officially for imported cycle.

China is the most important trade partner of Myanmar due to the highest volume of trade among other border areas. According to official data from Ministry of Commerce, the total volume of border trade significantly increased from US\$ 145.8 million in 1997-98 to US\$ 3110.9 million in 2012-13. Myanmar had been enjoyed trade surplus in border areas in every year except 1998-99, 2008-09 and 2009-10. Myanmar suffered shortage in border trade due to world financial crisis during 2008.

The trade deficit in border area of China happened due to large import of machinery goods, import from China is greater than export goods from China, decreasing export goods from Myanmar.

**Figure (2) Trend of Myanmar-China Border Trade**



Source: Ministry of Commerce, Myanmar

China imports from Myanmar includes fish and fishery products, beans and pulses, fruits, paddy, maize, and rattan whereas Myanmar's import from China are raw materials (cotton yarns), manufactures (fertilizers, dry batteries, office paper, cigarettes, textiles), machinery and equipment (tractors, diesel engines, transformers, etc.), electronic and hi-tech items.

### **Border Trade between Myanmar and Thailand**

In 2005-2006, various kinds of fish are the largest export items to Thailand (66%), Crabs are the second largest export items (9%) and frozen shrimps are the third largest export items (8%). In 2010-2011, various kinds of fish are the largest export items to Thailand (54%), timber is the second largest export item (17%) and bean is the third largest export item (13%). In 2012-2013, various kinds of fish are the largest export items to Thailand (67%), bean is the second largest export item (11%), and prawn is the third largest export item to Thailand (9%). It was found that the largest share of export items to Thailand are the mostly fishery products Timber and rubber included the top four largest shares.

**Table (8) Top Ten Export Commodities permitted by Border Trade Points between Myanmar-Thailand**

US\$ (in millions)					
2005-2006		2010-2011		2012-2013	
EX	Value	EX	Value	EX	Value
Various kinds of Fish	69.76	Various kinds of Fish	65.00	Various kinds of Fish	105.68
Crab (live)	9.63	Timber	20.98	Beans	18.15
Frozen Shrimp	8.50	Beans	15.62	Prawn	15.50
Isinglass	7.09	Green mung bean	5.84	Rubber	11.34
Crisp of fish meal	2.58	Dried Chilly	3.45	Crab	7.71
Cuttle fish	1.72	Crab	2.52	Rice	5.69
Calendar with gold embroidery	1.51	Squid	2.35	Chilly	4.32
Myanmar snack	1.29	Onion	1.92	Coffee Mix	2.56
Beans & pulses	1.14	Office Paper	1.07	Salted fish	1.37
Coffee mix	0.91	Satted Fish	0.97	Squid	0.89
<b>Total</b>	<b>104.13</b>	<b>Total</b>	<b>118.75</b>	<b>Total</b>	<b>157.71</b>

Source: Department of Border Trade, 2014

**Table (9) Top Ten Import Commodities permitted by Border Trade Points between Myanmar-Thailand**

US\$ (in millions)					
2005-2006		2010-2011		2012-2013	
IM	Value	IM	Value	IM	Value
Poly ethylene resin	8.28	Diesel Oil	29.05	Diesel Oil	30.12
Tire & Tube	4.21	Cement	28.98	Cement	17.84
Poly propylene resin	4.02	Binder Lucite	16.14	Energy Drink	17.67
PVC powder	3.35	Motorcycle	21.27	Motor Gasoline	13.41
Household Medicines	3.34	Motor Gasoline	11.14	Brand new motor	11.57
Engine oil	2.33	Energy drink	6.10	Bicycle	3.01
Tinned evaporated milk	2.22	Unsweetened Evaporated Filed Milk	5.17	Refrigerator	2.52

Fertilizers	1.91	Ovatine malt milk	3.79	PVC Powder	2.11
Refrigerators	1.51	Fertilizers	2.49	Vegetable oil	1.44
Battery	1.28	PVC Power	1.65	PVC Pipe Fitting	1.11
Total	32.45	Total	125.78	Total	100.80

Source: Department of Border Trade,2014

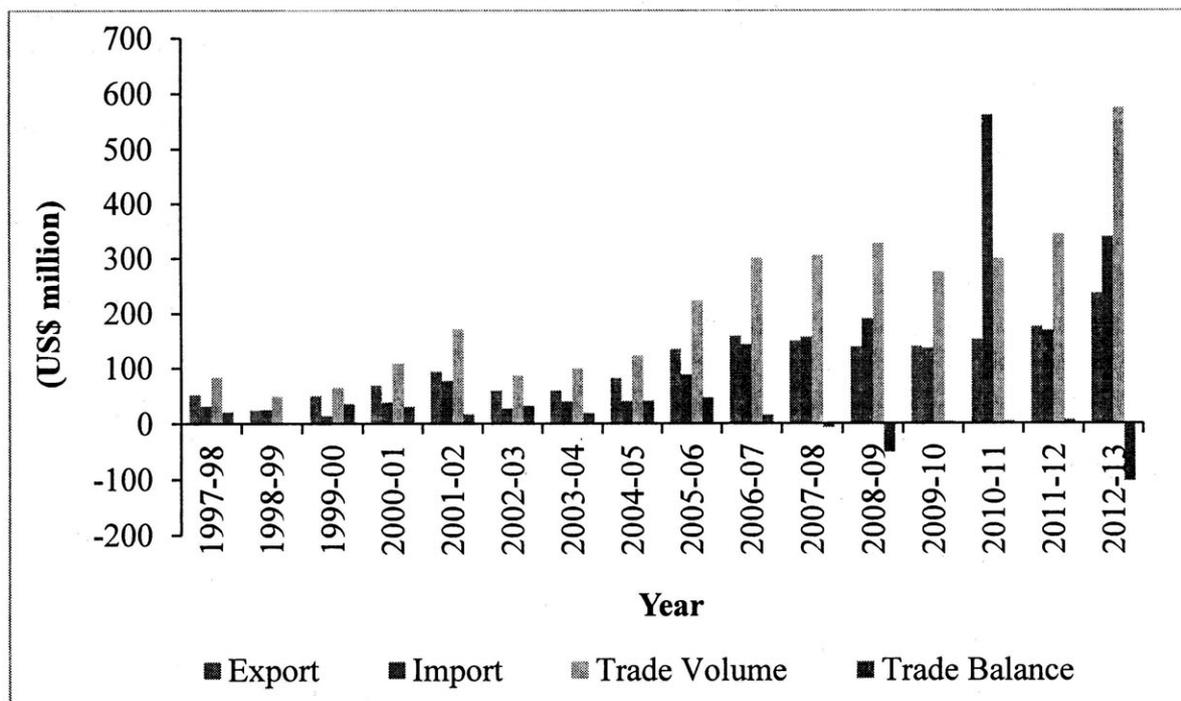
In 2005-2006, Poly ethylene resin are the largest import items to Thailand (25%),Tire & Tube are the second largest export items (12.9%) and Poly propylene resin are the third largest export items (12.3%). In 2010-2011, Diesel Oil are the largest export items to Thailand (23%),Cement is the second largest export item (23%) and Binder Lucite is the third largest export item (12%). In 2012-2013, Diesel Oil are the largest export items to Thailand (29%),Cement is the second largest export item (17%), and Energy Drink is the third largest export item to Thailand (17%). Because Vehicles, needs in Transportation, Construction and Industrial Sectors.

**Table (10) Myanmar-Thailand Border Trade**

(US\$ Millions)

No.	Fiscal Year	Export	Import	Trade Volume	Trade Balance
1	1997-98	52.1	31.2	83.3	20.9
2	1998-99	24.1	24.9	49.1	-0.8
3	1999-00	50.1	14.3	64.4	35.8
4	2000-01	68.9	38.5	107.5	30.4
5	2001-02	93.7	76.9	170.6	16.8
6	2002-03	59.4	27.1	86.5	32.3
7	2003-04	59.5	39.9	99.4	19.6
8	2004-05	81.7	40.5	122.2	41.2
9	2005-06	134.4	88.1	222.5	46.3
10	2006-07	157.7	142.6	300.3	15.1
11	2007-08	149.0	155.8	304.8	-6.8
12	2008-09	137.9	189.5	327.4	-51.6
13	2009-10	139.2	135.4	274.6	3.8
14	2010-11	151.6	561.7	299.0	4.2
15	2011-12	175.2	168.1	343.3	7.1
16	2012-13	235.6	338.6	574.2	-103.0

**Figure (3) Trend of Myanmar-Thailand Border Trade**



Source: Ministry of Commerce, Myanmar, 2014

According to the table, the export value in border trade between Myanmar and Thailand increased from US\$ 52.1 million in 1997-98 to US\$ 235.6 million in 2012-13. Import value increased from 31.2 US\$ million in 1997-98 to 338.6 US\$ million in 2012-13.

During period from 1997-98 to 2012-13, the trade value from Myanmar to Thailand increased from US\$ 83.3 million in 1997-98 increase to US\$ 574.2 million in 2012-13. Import is greater than export value in 2008-09, 2010-11 and 2012-13. The trade deficit in border area of Thailand happened due to large import of construction materials goods, import from Thailand is greater than export goods.

Thailand is a major trade partner for border trade with Myanmar. Myanmar imports animal and vegetable oils, footwear, organic chemicals, vehicles, knitted and crocheted apparel, electrical machinery and equipment, and plastics from Thailand. Thailand imports live animals, fish and crustaceans, edible vegetables, raw hides and leather, ore, slag and ash, oil seed, and machinery from Myanmar. The major exports and imports were dealt in border trade through Myawaddy, the largest border post on the Myanmar.

## **Conclusions and Recommendation**

Myanmar is dealing with other nations for rapid economic development and raises the standard of living of the people. Myanmar border trade was done since the time of ancient Burmese Kings. The government firmly believes that border trade will continue to develop as long as the nation's friendly ties with her five neighboring countries are further strengthening and prospering, the government has permitted the legal border trade. As border trade has relations with bilateral ties, officials gave a close supervision for mutually beneficial progress of the border trade. The legal border trade started in PRC in 1988. After that the border trade with Bangladesh, India and Thailand were extended simultaneously. Among the border trade routes, China (PRC) and Thailand are not only biggest trading partners in border trade but also in international trade. If trade points in respective border routes are materialized, it will contribute to the development of the border trade and to enhance the bilateral trade between them.

The DOBT has already opened (13) posts of border trade currently, which are providing one-stop-services for border trade matters in collaboration with various departments concerned. The ostensible purpose of the state is to promote border trade in a systematic manner. Therefore, the government is attempting to promote all border trade not only with China but also with Thailand, India and Bangladesh to compensate for the economic sanctions imposed by the West, and the Chinese border evidenced a most meaningful success. Accordingly, Myanmar's border trade has become the lifetime of its economy.

Economic and social conditions in border areas have improved according to government information because progress in border trade brought government investment in transportation facilities which lead to improvements in related sector. Myawaddy and Tachileik are now big towns with high-rise buildings, cinemas, casinos, water supplies and electricity; they were just a village and hamlet respectively before formalization of border trade. If border trade were developed, it should be fast flow of commodities and it contributed the price stabilities and smoothness of transport and communication throughout the whole of Myanmar, special efforts are needed to improve the communications and transport sectors.

The National Objective of Myanmar is "Building a Peaceful, new modern developed nation. To achieve the objective, Economic development is basic component with political stabilities and systematically developing the trade and economic relation with the neighbors. Myanmar border trade is a part of foreign trade. But trading is important role in economics, so Myanmar must be taking headed in border trade as national strategies.

With objectives of DOBT such as to promote border trade between the two countries, to get the revenue for the state and to enhance the smooth flow of commodities which is one of driving forces of economic development as an national strategy. And border trade and normal trade become more and more the nation's important sector.

Myanmar needs to extend on self-reliance basis, economic cooperation with friendly nations having common views in strengthening and developing the national economy. Hence, it is an important activity for Myanmar Border Trade Development to steer the national economic development in accord with the national goal. The development of border trade has been assigned an important role in striving for the development of the State and improvement of the national economy plays an important role in

maintaining friendly relation with neighboring countries and also helps border areas improve the all round development.

Apart from Trade, economic development rate will increase more rapidly if border trade zones can be established by future implementation of projects that provide having golden opportunities of the trade is situated on these projects such as East-West Economic Corridor, AH, TAR, and Silk Route. If the border trade is studied in the economic point of view, the following assumptions are received.

- Being able to export as the valued-added products after making the export-processing;
- Being able to the exports awaiting profitable price, being able to store and purchase the goods legally;
- Being able to get the trading opportunities more than the others who do not only the warehouse in carrying out the export-import activities;
- Inviting the traders from partner countries to the warehouse in Trade Zone;
- Being able to get their esteem on the activities, after the one's warehouse in the trade zone has legally bought the goods which are carried by the small traders in order to sell the neighboring country;
- For fishery products processors and exporters, having a chance to get high price with less damage and wastage by building the cool storages and storing the marine products in them within the Trade Zone; and
- Normally, having a chance to transport the goods in short times as the location of Trade Zone among the gates of Myanmar and neighboring border is a golden gate which is short cut way to Mandalay and Yangon.

Therefore, Myanmar needs to briefly put in place a profile of the socio-economic of the neighboring countries and to take stock of their ongoing trade to analyze the economic potential of Myanmar border trade. The government needs to promote on border trade in present, due to the government's initiative in constructing a network of modern roads and communication on both sides.

As opportunities and future prospect, due to border area offers economic opportunities, many migrant workers who work either in other neighboring countries or Myanmar can get employment opportunities. Myanmar has potential to further strengthen the existing friendship with neighboring countries by enhancing the smooth flow of commodities within ASEAN region. If Myanmar exports finished goods or value added products, she may gain positive trade balance. Best of technical know-how is indispensable in this respect.

As Challenges, Myanmar suffers trade deficit in some years because she is an exporter of raw materials only. Illegal cross-border logging, fishing and mining are thriving along with the smuggling of goods and human trafficking, unequal distribution of income among ethnic groups. There can be environmental deterioration due to illegal logging and mining. Social issues increase in crimes like corruption, robbery money laundering, drug abuse, drug trafficking, illegal immigration.

Government should promote value-added products and should reform not only rules and regulations concerned with border trade to promote trade value and volume. Government should increase more check points at each border trade of neighboring countries to develop potential trade and investment activities. Border areas are so large that is why there can be illegal border trade. Therefore, the government should formalize the border trade and monitor to flow of goods and service. The government

needs to promote on border trade due to the government's initiative in constructing a network of modern roads and communication on both sides. Border trade development will contribute not only towards the economic development of Myanmar but also towards poverty alleviation, at least around the areas close to the borders. Border area is very important not only for political reason but also for economic relations although border trade is a part of total external trade. Border trade gets a lot of income such as tax for commodities transaction, revenues for commodities export with Myanmar kyat and foreign exchange earnings. As the number of migrant workers increased, it needs to prevent human trafficking in border trade.

Myanmar has vast unexploited trade potential as weak trade with the industrialized countries. That is why border trade is essential and makes to improve and increase foreign exchange earnings. Myanmar should invest heavily in infrastructure and human capital, reforming its financial sector and the foreign exchange regime. Myanmar stands as a trading nation by the future adjustment of regional production and trade networks to a changing global economic environment. Challenges from competition within the region may pose hurdles to Myanmar's prospects from exclusive reliance on primary commodities and low-skill manufactured exports. Economic and political reforms will move forward and having favorable predisposition in the international trade and Myanmar is strategic geographical point for the entire region and nestled between the PRC and India which are border areas. This study researches on an econometric elaboration of Myanmar's trade structure and its prospects towards integration into the international markets. Asian countries experiences of achieving take-off can be applied as the role strategies for Myanmar to escape from deep stagnation

After the collapse of the socialist system in 1988, new military government introduced the market oriented economic system and enacted Foreign Investment Law. The economy achieved some significant progress within a few years; however, the vulnerable political conditions between the opposition group and the military government triggered additional sanctions from US and EU year by year. In addition, the hostile international pressures have been obstacles for the US and European investors; the strong ties with neighboring countries resulted which led Myanmar to heavily rely on disproportionate trade and investment patterns with Thailand, China, and ASEAN.

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