The Border Trade on Economic Growth in Myanmar

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Abstract

After adoption of market-oriented economic system in 1988, trade sector grew rapidly. Trade including border trade is one of the important sectors for the economic growth of Myanmar. The paper examines the influence of border trade on economic growth of Myanmar over the period 1990-2014. The variables used in the studies are GDP, Export, Import and Exchange rate of Myanmar from 1990 to 2014. Augmented Dickey-Fuller (ADF) unit root test, Johansen cointegration test and VECM (Vector Error Correction Model) are used for exploratory data analysis and descriptive analysis which includes cross-border trade of Myanmar with neighboring countries is also discussed. Except border import, the results state that border export, exchange rate and economic growth has relationship in the long run and no positive significant relationship in the short run. Border export did not have significant effects on economic growth. The results conclude that for the period 1990-2014, border trade did not have a significant effect on economic growth of Myanmar.

Key words: Myanmar, Border export, Border import, Exchange rate, GDP

1. Introduction

Trade is an important stimulator of economic growth and it began the exchange of food and raw material among the primitive society. Theoretically, trade is regarded as the engine of growth. It is widely accepted that international trade and economic growth are positively and significantly related. Trade takes place within country and between countries not only because of differences in prices of trade goods but also lack of certain commodities. Generally, there are normal trade and border trade. Practically, various forms of trade such as formal or official border trade, informal border trade, illegal border trade (smuggling), transit trade and barter trade are consisted in border trade (Than M., 2005). In this research, only formal border trade is focused.

Since 1970s the world economy has been characterized by rapid structural changes. Most countries including developed and less developed have oriented developed strategies to improve their economic growth performance and to integrate their economy with the world economy. The use of import substitution policies in many of the developing countries in the 1950s, 1960s and 1970s have not achieved much success while some countries adopting export substitution policies have attained high rate of economic growth. Many developing countries adopted more open trade policies since 1980s and started experiencing high economic growth by participating in international trade. The Republic of the Union of Myanmar is not only situated at the tri-junction of Southeast Asia, South Asia and East Asia but also on Asian Highway Routes and it can make Myanmar possessing geographic advantage for cross-border Trade.

Geographically, Myanmar shares borders with the Republic of India, The People's Republic of Bangladesh in the West, with The People's Republic of China in the North, and with Lao's Democratic Republic and Kingdom of Thailand in the East and it is also the largest country in mainland Southeast Asia, stretching over 2000 km from north to south. Lao PDR and Myanmar do not share a land border; cross-border economic relations between the two are nonexistent. During the post independent period (1948-1962), Myanmar Border Trade was not developed due to the political instability and insurgency of frontier areas. People who live near both side of the border which means private or individual traders carried out trade activities. People imported goods for their own use. There were also importing illegal goods and roads facilities was poor. The Revolutionary Council came into power and trade sector was nationalized and restructured in 1962. Myanmar national border has been closed for all practical purpose throughout its socialist period (1962-1988). The state monopolized foreign trade and state-owned corporations managed all foreign trade activities. Therefore, this led to encourage illegal border trade which created black market, and goods (consumer goods

and essential goods) were imported by illegal channels. As a result, tax revenue from border trade was also not received for the country.

After many years of highly inward-looking policies before 1988, Myanmar adopted market-oriented policy to more itself into a free market economy in the late 1988. A series of economic reforms was adopted in Myanmar since 1988. Myanmar border trade agreements were signed with Bangladesh, India, and China in 1994 and with Thailand in 1996. After many years of inward looking policies, Myanmar adopted a series of economic reforms which allowed private sector participation in all sectors of the economy, particularly external trade and encourage foreign investment. Private sectors activities have dominated international trade. Both export and import grew rapidly in response to the reforms (Hlaing, 2014). Myanmar border trade agreements were signed with Bangladesh, India, and China in 1994 and with Thailand in 1996. China performed as the largest border-trading partner followed by Thailand, Bangladesh, India and Laos respectively (Hlaing, 2014). Fifteen border posts have been opened up at various border routes such as Myanmar-China, Myanmar-Thailand, Myanmar-India and Myanmar-Bangladesh for trade facilitation since 1996. Among them, the Myawaddy (Thailand border) and Muse (China border) are the busiest.

No	Post Name	Border Route	Date Opened
1	Muse (105Mile)	Myanmar- China	12.1.1998
2	Lwejel	Myanmar-China	23.8.1998
3	Laiza	Myanmar-China	1.5.2000
4	Chinshwehaw	Myanmar-China	19.10.2003
5	Tachikleik	Myanmar- Thailand	16.3.1996
6	Kawthaung	Myanmar-Thailand	1.6.1996
7	Myawaddy	Myanmar-Thailand	16.9.1998
8	Myeik	Myanmar-Thailand	1.7.1999
9	Na Bu lal	Myanmar-Thailand	29.3.2012

Table 1	Border	Trade	Posts
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10	Maw Taung	Myanmar-Thailand	8-5-2013
11	Mesat	Myanmar-Thailand	1-6-2014
12	Ta Mu	Myanmar-India	12.4.1995
13	Rhi	Myanmar-India	10.12.2003
14	Maungtaw	Myanmar-Bangladesh	5.9.1995
15	Sittwe	Myanmar-Bangladesh	11.12.1998

Source: Ministry of Commerce, Union of the Republic of Myanmar

Border trade is undertaken by the department of border trade under the ministry of commerce. The department of border trade has authority to issue export and import licenses for cross border area. Trade policy in Myanmar is characterized by the coordination of two fundamental aspects. The objectives of Trade policy are to implement trade policy systematically in accordance with market oriented economic policy, to produce value added products from primary goods to increase the productivity for export market, to carry out the promotion of trade not only through normal trade but also border trade, to help and facilitate the export and import business. Myanmar's export policy is to export all exportable surpluses and to diversify foreign markets by using natural and human resources and to promote export of traditional and value-added products. Import policy of Myanmar is to import the given priority commodity such as capital goods required by the state, raw materials for production and the goods supporting public health and export promotion.

2. Literature Review

Jamal Bouoiyour (2003) investigated short run and long run causality of trade and GDP growth in Morocco. In this research the author used cointegration, Granger causality test and VEC Model to examine the relationship between trade and economic growth of Morocco. The results found that import and export Granger caused GDP and import Granger causes exports. Moreover, the foreign sector (export and import) causes economic growth in Morocco. **Saibu Muibi Olufemi (2004)** use Johansen cointegration test, Vector Error-Correction model (VECM), Granger-causality procedure to investigate the long run relationship between economic growth openness and to

examine the causal relationship between economic growth and openness. The results showed that economic growth and openness variables are co-integrated for Nigerian economy and the results also suggested that there was only unidirectional causality from trade openness to economic growth. Mengli Zhang, Kunchon Wattanakul, Nisit Panthamit, Chukait Chaiboosri (2012) studied the relationship between border trade and economic growth of Yunnan Province, China and Greater Mekong Sub-region (GMS) countries. The variables used in this research are Gross Domestic Product (GDP), Export and Import. Panel data unit test, Cointegration test, Granger Causality test and Error Correcting Model (ECM) were used to analyze the relationship between border trade and economic growth. The results showed that border trade and economic growth of Yunnan and GMS countries is co-integrated each other. Export has a positive effect on economic growth between Yunnan and GMS countries but import has a negative impact on economic growth. The results of granger causality and ECM suggested that import has one-way granger causality relationship with economic growth. Mustafa Kahya (2011) analyzed the relationship between foreign trade and economic growth in Turkey over the period 1980-2009. The variables that are included in this research are GDP, export and import. To examine the relationship between foreign trade and economic growth, VAR and VEC models are used. The results showed that during the period 1987:1-2007:3 imports was one of the significant factors of economic growth in Turkey but export did not have important impact on economic growth. The results also showed that export growth was affected by economic growth which means growth led export. Yu Yu Naing (2010) examined Border Trade pattern in Myawaddy Township, Kayin State, Myanmar. In this research the author explores the characteristics and legal cross-border imports and exports of Myawaddy and the pattern of traded good through Myawaddy convey to final consumers in Myanmar.Descriptive statistics method is used in this research. The results show that the role of border trading companies and transportation were significant trade facilitation in cross-border trade at Myawaddy. Moreover, to overcome the difficulties such as import restriction, financial problems and high taxes which discourage the traders to participate in border trading, the traders have been participating to cross border trade. Tin Maung Maung Than (2007) studied Myanmar's foreign trade under military rule: pattern and recent trends. Descriptive statistics is used to examine and explain about Myanmar's foreign trade

under the military rule. Market-oriented reforms were adopted after the military took power in 1988 and the military government has encouraged the private sector to participate in foreign trade for promoting external trade in the economy. As a result of policies changes, imports are the significant source of government revenues via custom duties. This paper suggests that to upgrade the role of trade as an engine of growth, the government's rule and regulation should be streamlined. Toshihiro Kudo and Fumiharu Mieno (2007) studied Trade, Foreign Investment and Myanmar's Economic Development during the Transition to an Open Economy. This paper explains the volume of Myanmar's external trade increased after the adoption of open-door policy during 1990s to 2005. The authors used descriptive statistics method to analyze the impacts of foreign trade and FDI on Myanmar's economy. Import grew faster than export in the 1990s. It caused trade deficit and thereby faced the problem of currency shortage. Due to the emergence of new export commodities, Myanmar's external has improved since 2000. Increasing trade volume, Myanmar strengthened its trade with neighboring countries such as Thailand, India and China. Foreign direct investment contributed more to the growth of domestic and energy sectors than export-oriented manufacturing. FDI and external trade has not contributed to economic growth significantly.

3. Methodology

Theoretical model used to find out the contributions of border trade to economic growth can be specified as a simple model:

GDP = f(EXP, IMP, EXR)

(1)

GDP is Gross Domestic Product, EXP is border exports, IMP is border imports and EXR is exchange rate. In the model, GDP is a function of exports, imports and exchange rate. Besides exports and imports, consumption(C), investment (I) and government spending affect GDP. In this research, it is mainly to examine the about the causality of border trade and economic growth and the factors such as consumption (C) and investment (I) are not included in the model.

A sets of times series econometrics such as Augmented Dickey Fuller (ADF) unit root test, Johansen co-integration test and Vector Error Correction (VEC) models are used

in to examine the relationship between GDP, border exports and border imports and exchange rate. By using the first-difference transformation in order to tackle the non-stationary issue, the variables can be made stationary. If there is co-integration between the variables, an error-correction term must be added to the VAR in order to appropriately identify the causalities (Engle & Granger, 1987). This extended VAR model is called the Vector Error-Correction Model (VECM). In the VECM, the lagged variables are said to estimate the short-run effects between the variables (Granger-causality), while the error-correction term captures a further adjustment process - one that brings the variables back to their long-term path. In fact, co-integration is a stronger proposition than causality. Co-integration between two or more variables is sufficient.

3.1 VEC model

The vector error correction model (VECM) is designed to estimate the dynamic adjustments of the first difference of variables. But it is important to note that the VECM can be used only if the variables used in the system are found to be co-integrated. A simple VEC term can be expressed as:

$$\Delta y_t = \beta_{y0} + \beta_{y1} \Delta y_{t-1} + \dots + \beta_{yp} \Delta y_{t-p} + \gamma_{y1} \Delta x_{t-1} + \dots + \gamma_{yp} \Delta x_{t-p}$$
$$-\lambda_y (y_{t-1} - \alpha_0 - \alpha_1 x_{t-1}) + v_t^x, \qquad (2)$$
$$\Delta x_t = \beta_{x0} + \beta_{x1} \Delta y_{t-1} + \dots + \beta_{xp} \Delta y_{t-p} + \gamma_{x1} \Delta x_{t-1} + \dots + \gamma_{xp} \Delta x_{t-p}$$

$$-\lambda_{x}(y_{t-1} - \alpha_{0} - \alpha_{1} x_{t-1}) + v_{t}^{x}, \qquad (3)$$

3.2 ADF unit root test

Before carrying out an analysis using time series data, unit root test must be conducted. Dickey Fuller (DF) tests (1979) and Augmented Dickey Fuller (ADF) test can be used for unit root test. The unit root test is conducted on all the variables purposely to determine whether the variables were stationary or not and determine the order of integration (the stationary level) using the Augmented Dickey-Fuller (ADF) test. It is only temporarily out of equilibrium and is called stationary in I (0). However, a time series, that has to be differenced before it is stationary, has an infinite variance. The series is stationary at a higher order I (d), e.g. I (1) series is stationary at first difference.

Dickey-Fuller (DF) test (1979) referred to .a unit root test. There are two hypotheses in unit root test.

Null hypothesis : There is unit root and time series is non-stationary.

Alternative hypothesis : There is no unit root and time series is stationary.

There are three versions of ADF which can be used to analyze the stationary property of a series.

1. Test for a unit root

$$\Delta y_t = \varphi^* y_{t-1} + \sum_{i=1}^{p-1} \varphi_i \ y_{t-i} + u_t \tag{4}$$

2. Test for a unit root with constant

$$\Delta y_t = \beta_0 + \varphi^* y_{t-1} + \sum_{i=1}^{p-1} \varphi_i \ y_{t-i} + u_t$$
(5)

3. Test for a unit root with a constant and deterministic time trend

$$\Delta y_t = \beta_0 + \beta_1 t + \varphi^* y_{t-1} + \sum_{i=1}^{p-1} \varphi_i y_{t-i} + u_t$$
(6)

Where,

$$y_t$$
 = the value of a variable at time period t
 Δy_t = $y_t - y_{t-1}$
 β_0 = a constant term
 t = a linear time trend
 u_t = an error term

In order to test the presence of unit root, it is needed to calculate T statistic, $\tau = \frac{\varphi^*}{\sqrt{var(\varphi^*)}}$ and then compare this result to the corresponding critical value at different significant level (Xu, 2012).

3.3 Johansen cointegration test

Economic theory often suggests that certain pairs of economic variables should be linked by a long run economic relationship. Consider two variables Y as dependent variable and X as explanatory variable, for a simplicity without a constant. Contegration test are very flexible and statistical method that only reveals possible existence of long term variable whether the actual mechanisms linking the variables together. Cointegration may be caused by any type of cross effects between trade and growth. With time series many macroeconomic variables will be potentially affected by a stochastic trend by a non-stationary process. In this case, cointegration analysis is necessary for the first step before undertaking any further econometric regressions (Granger and Newbold-1974).To test for the number of cointegrating relationships using VECM, Johansen test can be used.

Johansen cointegration test can be expressed as follows:

$$y_{t} = \alpha_{0} + \sum_{i=0}^{n} \alpha_{t-1} x_{t-i} + \sum_{j=1}^{m} \beta_{t-j} y_{t-j} + \epsilon_{t}$$
(7)

3.4. Impulse response function

We use impulse response function to find out the effects of over time of economic policy. When all others variables are constant, the impulse response function will illustrate the response over time of each variable in VEC model. According to the lag length of the VECM model and the variable numbers, we can define the number of impulse response function. When we multiply the lag length and the number of variables, the result is equal to the numbers of impulse response function.

4. Data

The research investigates the secondary data of Border Trade of Myanmar over the period of 1990-2014. According to the availability of data, data are based on a panel of 25 years of Myanmar's border trade. Border export and import data used in econometric models are collected from Ministry of commerce, Department of Border Trade of Myanmar and statistical yearbooks of Myanmar which are published by the Ministry of

National Planning and Economic Development Central Statistical Organization of Myanmar. They can provide sufficient level of information and data on accounts of national foreign trade (border trade) statistics of Myanmar. GDP data is collected from United Nations Conference on Trade and Development (UNCTAD) and exchange rate data is collected from CIA World Bank, World Bank and IMF.

5. Results

5.1 Empirical results

In this research, three methods such as ADF unit root test, Johansen cointegration test and VEC estimation are used. The results are as follow:

Variable	ADF test	5 %	10%	Deterministic	lag	Results
	Statistics	Critical	Critical	Resgressors		
		value	value			
LnGDP	1.005379	-2.991878	-2.635542	constant	5	Non-
						stationary
LnEXP	0.656636	-2.991878	-2.635542	constant	5	Non-
						stationary
LnIMP	0.320728	-2.991878	-2.635542	constant	5	Non-
						stationary
LnEXR	-2.034106	-2.991878	-2.635542	constant	5	Non-
						stationary
dLnGDP	-3.744977	-2.998064	-2.638752	constant	5	Stationary
d LnEXP	-3.481938	-3.004861	-2.642242	constant	5	Stationary
d LnIMP	-5.826690	-2.998064	-2.638752	constant	5	Stationary
d	-3.270277	-2.998064	-2.638752	constant	5	Stationary
LnEXR						

Table1. Augmented Dickey-Fuller unit root tests results

Source: Calculated

The results of Augmented Dickey-Fuller unit root tests are shown in Table 1. At the beginning levels, null hypothesis is not rejected because four variables such as lnGDP, lnEXP, lnIMP and lnEXR are not stationary at level in testing with constant/trend. In order to see whether the variables are stationary or not at first difference level, first difference is needed to take. After taking first difference, null hypothesis is rejected and the results mentioned in the table indicate that all series are stationary.

It is sure that all the variables are stationary at first difference level I (1). Based on the results, VECM model can be carried out. For this analysis, according to the Likelihood-Ratio Test and Akaike's Information Criterion (AIC), the number of lags is defined as one. The decision of the lag length for the VECM model is shown in Table 2. For our model, we use only one lag for our model suggested by both LR test and AIC test.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-58.05971	NA	0.003314	5.641792	5.840163	5.688522
1	34.96151	143.7601*	3.11e-06*	- 1.360138*	- 0.368281*	-1.126486*
2	50.01850	17.79462	4.03e-06	-1.274409	0.510933	-0.853836
3	64.08274	11.50710	7.93e-06	-1.098431	1.480397	-0.490937

Table2. Defining the number of lags for the model

Source: Calculated

In order to see the long run relationship between GDP, export, import and exchange rate, we do VEC estimation. Before doing VEC estimation, cointegration analysis is needed to check whether the variables are cointegrated or not. Johansen cointegration test for time series of ln GDP, ln EXP, ln IMP and ln EXR is run with one lag. The following table 3 shows the results of the Johansen cointegration test.

Hypothesized of Eigen value		Trace statistic	5% critical value
No. of CE			
0	0.694494	51.28656**	47.85613
1	0.532590	24.01324	29.79707
2	0.242075	6.520641	15.49471
3	0.006316	0.145720	3.841466

Table3. Johansen Cointegration Test results

Source: Calculated

From the table, the result shows that trace test is statistically significant to reject the null hypothesis of r = 0 at 5% significance level. Therefore, there is only one long run cointegration relationship between GDP and it determinants.

Table 4 Normalized cointegrating coefficients

Normalized cointegrating coefficients							
lnGDP	lnexport	lnimport	lnexr	Constant			
1	0.2427	0.6233	0.1474	-5.409723			
p-value	0.0002	6.7320	0.0029				
S.E	0.0553	0.0549	0.0442				

Source: Calculated

Table 4 presents long-run results of VEC estimation. According to the table, the equation is the following:

Ln GDP = 0.2427 lnexport + 0.6233 lnimport +0.1474lnexr + 5.4097

We see that border export, exchange rate and GDP is significantly correlated whereas import is not significantly related with GDP. From above equation, it represents that if border export increases 1%, the GDP would increase 0.24% and if exchange changes 1% GDP would increases 0.14% in the long run.

If long-term equilibrium with cointegrating error is analyzed, then our equation is Ln GDP = $0.2427 \ln export + 0.6233 \ln import + 0.1474 \ln exr + 5.409723 > 0$

In this case, in order to see the deviations from cointegrating values the cointegration equation 1 values of variables is needed to see. We can see correction error for ln GDP, ln export, ln import and ln exchange rate. The correction error for ln GDP is not statistically significant at 5% level and it is -0.18. That is, yearly negative adjustment of lnGDPt will not deviate from its cointegrating value at the level of 0.18% of lnGDPt-1. We see that correction error for ln Export is not statistically significant, which means that accumulated export will not react to cointegrating error and correction error for ln Import is 1.1 and statistically significant. This means that yearly positive adjustment of lnImportt will be about 1.1% of deviation of lnImportt-1 from its cointegrating value. Correction error for ln exchange rate is 0.65and statistically significant. For as a whole, if we consider the long-run relationship as broken, we would say that while the GDP level and export level never adjust error but import and exchange rate are against error by adjusting.

		Coef	Std.err	T-test	P-value
	Ln GDP(-1)	0.1695	0.1978	0.8571	0.4002
	Ln Exp(-1)	-0.0061	0.0941	-0.0654	0.9484
D ln GDP	Ln Imp(-1)	0.1694	0.1056	1.6034	0.1224
	Ln Exr(-1)	-0.2862	0.1643	-1.7408	0.0950*
	constant	0.1009	0.0474	2.1278	0.0442
	Ln GDP(-1)	-0.4298	0.5615	-0.7654	0.4518
	Ln Exp(-1)	-0.1459	0.2672	-0.5458	0.5904
D ln EXP	Ln Imp(-1)	0.0654	0.3000	0.2180	0.8293
	Ln Exr(-1)	-0.0128	0.4667	-0.0274	0.9783
	constant	0.2383	0.1345	1.7709	0.0898
	Ln GDP(-1)	-0.3025	0.5765	-0.5249	0.6047
	Ln Exp(-1)	0.0165	0.2743	0.0604	0.9523
D ln IMP	Ln Imp(-1)	0.1675	0.3080	0.5440	0.5916
	Ln Exr(-1)	0.1234	0.4791	0.2578	0.7989
	constant	0.2035	0.1381	1.1104	0.2783
	Ln GDP(-1)	-0.2753	0.2439	-1.1284	0.2707
	Ln Exp(-1)	0.0262	0.1161	0.2262	0.8230
D ln EXR	Ln Imp(-1)	-0.4311	0.1303	-3.3070	0.0030*
	Ln Exr(-1)	-0.1025	0.2028	-0.5054	0.6180
	constant	0.2035	0.0584	3.4804	0.0020

Table5. Vector Error Correction estimation short run results

Source: Calculation

The above table shows the short run results of error correction estimation. According to the estimation results the current GDP growth rate not significantly depends on the level of GDP, export, and import in the previous period but exchange rate negatively affects GDP and this means that 1% a change in exchange rate in the previous period causes 0.28% of current GDP to decrease. The current export does not depend on the level of GDP, export, import and exchange rate in the previous period.

Furthermore, the current import not significantly depends on the level of GDP, export, import and exchange rate in the previous period. Although the current exchange rate negatively affects import in the previous period, the current level of exchange rate does not depend on the previous period of GDP, export, and exchange rate. In this results, 1% increases of import causes 0.43% of a change in current exchange rate to decrease. To summarize the short run VEC estimation results, the short-run GDP depends only negatively on exchange rate in the previous period. The level of import in the previous period negatively affects on Exchange rate and the short run export and import does not depend on the level of GDP, export, import and exchange rate in the previous.



5.2 Descriptive analysis

In this section, cross border trade of Myanmar with neighboring countries and border trade pattern are also discussed.

Myanmar shares border with China, Thailand, India, Bangladesh and Laos. The total length of border is 6159 kilometers. Among trading partners, although Myanmar shares border with PRC (Yunnan Province), Lao PDR and Thailand, Myanmar and Lao PDR do not share a land border and therefore border economic relations between the two are almost non-existed. Until 1988, border trade was informal and illegal trade were smuggling between Myanmar and neighbor countries. Cross border trade between Myanmar and its neighboring countries was formalized in 1988 when Myanmar Export and Import Services (MIES) signed an agreement with a state-owned trading company of Yunnan Province in China. In order to eliminate illegal border trade, it has been normalized with neighboring countries. To develop and strengthen trade relations with neighboring countries by employing export promotion and expansion strategies is the policy of border trade in Myanmar (Naing, 2010). In terms of cross-border exports, Muse, Myawaddy, and Kawthaung also play significant roles (Aung, 2009). Border trade agreement was subsequently signed with Bangladesh, India and China in 1994.

For the transactions of goods between Myanmar and its neighboring countries, there are official border trade points with full facilities of the procedures. For the transactions of border trade, US Dollar, Chinese Yuan, Thailand Bath and Indian Rupee are used. Except Laos, Myanmar had opened the respective border trade points in border areas. Border trade activities are supervised by Department of Border Trade which was established in 1996 under the guidance of the Ministry of Commerce (Than, 2005). The main objectives of border trade are as follows;

- To further strengthen the existing friendship between the two countries
- To promote border trade between the two countries, putting it in line with normal trade
- To get reasonable revenue for the State
- To facilitate private business activities there by allowing them to acquire reasonable profit

- To enhance the smooth flow of commodities

There are fifteen border trade points which has been opened and operated currently and they are the following.

- Myanmar-PRC border: (i) Muse (mile 105), (ii) Lwejel, (iii) Laiza, (iv)
 Kanpeiktee, (v) Chinshwehaw.
- Myanmar-Thai border: (i)Tachileik, (ii) Kawthaung,(iii) Myawaddy, (iv)
 Myeik (FOB),(v) Maw Taung (vi) Mese
- Myanmar-India border: (i) Tamu, (ii) Rhil.
- Myanmar-Bangladesh border: (i) Maungtaw, (ii) Sittway (FOB).

6. Conclusion

This paper studies to investigate and find out how border trade affects to economic growth in Myanmar over the period 1990-2014. VEC estimation results represent that except border import, border export, exchange rate and economic growth has relationship in the long run but there is no significant positive relationship between border trade and economic growth in the short run. It means that border trade cannot generate a significant effect to economic growth. Therefore, the first hypothesis, border trade affects the economic growth of Myanmar over the year 1990-2014 have to be rejected and we can accept the alternative hypothesis, over the year 1990-2014, border trade does not affect on economic growth of Myanmar.

The second hypothesis is that border export is the factor which leads the economic growth of Myanmar compare with import. Long run results of VEC estimations show that there is significant effect of border export on economic growth of Myanmar and no significant in the short run. Therefore, we do not accept the second hypothesis and reject it. Exchange rate affects economic growth of Myanmar during 1990-2014 is the third hypothesis which is accepted because VEC estimation results for short run and long illustrate that exchange and economic growth has relationship but negatively in the short run. In this case, there are appreciation and depreciation in exchange rate. In theoretical if exchange rate appreciation, export decreases and import increase but the items such as rice, gas, and raw materials which are essential for consumption and production may not be changed because of price inelastic demand.

The results are (1) border trade was not the significant determinant of the economic growth in Myanmar during the period 1990-2014 (2) border export did not affect on the economic growth and (3) exchange rate and economic growth has relationship. To promote external trade (border trade), this result may be useful for the policy makers to make sound decision. Although the export of Myanmar border trade has been increased, the main export of Myanmar's long term border trade relations with neighboring countries is primary products and imports are intermediate and capital goods. Changing investment and technology transfer into Myanmar could produce and export value-added products and it can increase exports value. The second one is that besides producing value added products, infrastructure development is also essential and it is one of the factors which can support to increase border trade. For the policy makers who make decision for promoting foreign trade including border trade should try to consider these two factors for economic growth.

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