

# **The Impact of Exchange Rate on the Trade Balance of Myanmar**

## **ABSTRACT**

This analytical paper investigates how the exchange rates influence the trade balance of Myanmar. The major objectives of this paper are to analyze the different impacts between currency depreciation and appreciation on the trade balance of Myanmar and what are the other factors that influence the trade balance of the country. In this study, the Switching Regression Model was used to estimate the appreciation and depreciation of currency reaction to the trade balance of the country. The study using time series data from 1988 to 2015 and estimating trade balance as a function of the exchange rate. In Myanmar, the official exchange rate has been fixed at the rate varying in the range between slightly below 6 kyats and 8 kyats to the USD for the past three decades, while the black market exchange rate was varying around over 100 times the official rate before adopting managed floating rate system therefore under this exchange rate regime, reference rate is determined between Central Bank of Myanmar and authorized dealer banks. The result which analyzed by switching regression model find out the market exchange of currency depreciation did not significant effect on the trade balance of Myanmar, this means currency depreciation does not improve the trade balance. If the currency appreciation, the trade balance may reduce.

*Key words:* trade balance, exchange rate, depreciation, appreciation, Switching Regression Model, Myanmar

## **1. Introduction**

The exchange rate is one of the critical indicators of the country, because it has a powerful influence on a country's activity of foreign trade development. Therefore, it is no need to be doubt that the changing of the exchange rate has a permanent effect on trade balance. In the globalization world, international trade becomes more important in every economy. And there are various problems that all the multinational enterprises must face. The economy can affect by the changes in exchange rate, either positively or negatively.

When consider about the changing of exchange rate, it can be divided tow condition, one is currency depreciation and another one is currency appreciation. Currency depreciation may have enormous impacts on the trade balance but the impact may alter, perhaps due to disparate level of the country's economic development. One of the conspicuous impacts describe that real depreciation induce to increases the trade balance in the long run. Depreciation may improve the trade balance in to two different ways of channels.

Firstly, the quantity of export will increase. In the case of currency depreciation of the currency, the price of domestic goods is cheaper than foreign goods when compare these two prices, therefore the country export is become more competitiveness. Secondly, on the other hand, the quantity of imports will decreases, because when compare domestic and foreign price the import for the country is more expensive as a result of currency depreciation. But the export and import may not be reactive at beginning period of the depreciation. Therefore, in the short run the value of export is decrease and the trade balance may deteriorate and after some period time, in the long run, it may be improved.

In Myanmar, the multiple exchange rate regimes which involved the official exchange rate that operated in public sectors and the market exchange rate that operated in private sectors trade of the country was activate for a long time. At that time, in the country there has been an enormous use of informal exchange rate by the private sector agent produced various kinds of distortions in the country in several years over decades.

To solve that problem Myanmar government reformed the unification of that multiple exchange to be benefit from more effective and productive allocation of resources. Until 2012 Myanmar adopt the fixed exchange rate system with official rate 6 Kyats per Dollar and after 2012 the government derestrict the financial system and adopted the manage floating exchange rate system. After this the Myanmar currency depreciates by the time. There is the reason why the author wants to study on the different impacts between appreciation and depreciation on the trade balance.

The military government of Myanmar, from 1988 to 2011, regulated various administrative controls on foreign trade and foreign exchange rate system, which forced to appear peculiarly dual exchange rate regime: an official exchange rate in the public

sector like SEEs and an unofficial market exchange rate in the private sector of the country. In 1977, the official exchange rate was fixed at 8.50847 kyat per special drawing right (SDR) of the International Monetary Fund (IMF), and thus had been fixed for more than 30 years. (Kubo, 2012) In contrast, the parallel market rate has depreciated inveterate in the past as a result of unstable and poor macroeconomic performance.

In 2006, the market exchange rate which conducted in public sector agents has appreciated sharply against the US dollar. In nominal terms, the exchange rate of the kyat per US dollar appreciated to 850 kyat in 2011 that is serious difference from official rate of 5.39 at that year. So it can be seen that the informal market exchange rate is more than over 140 times when compare official exchange rate. According to Gelb (1988), who analyze the impact of oil price shocks on six oil-exporting developing countries, the most severe real appreciation between 1973 and 1984 was in Nigeria; the appreciation of that country of over 11 years was 187 per cent. When make the comparison of that country result show that the official exchange rate appreciation experienced in Myanmar has been inordinately high. Most of the empirical studies on exchange rates have expressed that inappropriate and unstable exchange rates deteriorate growth in trade balance.

The first feature was administrative controls on the foreign exchange rate and therefore the trade sector separated the foreign exchange market into the public and private sector. Different exchange rates were activated in different separated sectors and these conditions lead to inefficient allocation of resources the economy. The other feature of the pre-reform condition, there was no formal institution for exporters and importers to convert currencies in the private sector, that condition led these two groups to interact in a parallel market, where exchange rates expose high volatility. It means the black market was arisen in that decades to convert currencies with depreciate exchange rate than official exchange rate.

Myanmar has had no appropriate monetary policy framework because it lacks the necessary instruments and institutions. According to the suggestion from IMF, the Central Bank of Myanmar (CBM) was created the process of an interbank money market. More essentially, the CBM prevail as a department within the Ministry of Finance and Revenue and deficiency the operational autonomy necessary to manage

monetary policy in a modern market economy. The new government, Thein Sein, was received advice from the IMF on the implementation of a new Central Bank Law. Three essential functions of the CBM will be launch (1) an efficient payment system, (2) effectively supervise and regulate the banking system, and (3) manage the country's foreign exchange reserves.

An appropriate foreign exchange rate regime is essential for trade and investment. In Myanmar, the decades-long multiple exchange rate was finally unified in April 2012. In that year, April 2012, the exchange rate unification conducted by the Central Bank of Myanmar (CBM) operate an "auction" each morning among 17 of Myanmar's banks to determine the reference rate for the Myanmar kyat (MMK) against the US dollar. Once set, other banks and money changers are allowed to exchange the kyat within a band of increase or decrease 0.8 percent above or below the reference rate. Consistent with the rationale of a managed float, the CBM maintains that it will not intervene in the foreign exchange market to achieve any particular rate, but only when it perceives the market for the kyat has become disorderly or divorced from (unspecified) fundamentals.

The most significant economic policy adopted by the new government was the overvalued official exchange rate in effect since 1977 moved to a managed float on April, 2012. In the performing of the reform period the IMF support crucial technical advice in implementation of this movement, which was preceded in 2011 by giving license to seventeen private banks to open "money changer counters" for retail transactions.

When overviewing the exchange rate history of Myanmar, it can be seen the exchange rate of Myanmar face mostly depreciation. According the theory the country that depreciation in exchange rate may improve the country trade balance. The exchange rate and trade balance of Myanmar can be shown by the figure as follow.

**Table 1** Exchange Rate and Trade Balance of Myanmar

Year	Exchange Rate	Market exchange rate	Export*	Import*	Trade balance*
2001	6.39	616.07	2358.02	2849.27	-491.25
2002	6.39	921.14	3014.72	2323.84	690.88
2003	6.39	966.57	2458.39	2069.72	388.67
2004	6.39	988.57	2355.48	2173.93	181.55
2005	6.39	1060.27	3776.45	1908.13	1868.32
2006	6.39	1270.38	4539.12	2538.21	2000.91
2007	5.74	1272.17	6252.69	3246.61	3006.08
2008	5.48	1045.00	6882.19	4256.23	2625.96
2009	5.45	1063.60	6661.54	4347.62	2313.92
2010	5.54	973.40	8661.08	4759.66	3901.42
2011	5.39	980.00	9238.04	9018.97	219.07
2012	851.58	859.66	8876.91	9181.4	-304.49
2013	966.75	967	11232.8	12042.5	-809.7
2014	997.83	1003.08	11204	13759.5	-2555.5
2015	1,025.00	1036.01	12523.7	16633.2	-4109.5

**Source:** Central Statistical Organization (CSO) Myanmar, DCCA.\* million in US

dollar, \*\*Kyat per US dollar

Table 1 shows the exchange rate and trade balance from 2000 to 2014, in Myanmar. In the early time the official exchange rate of Myanmar has been only round about between 5 Kyats and 7 Kyats per dollar. After 2012 the new government of

Myanmar adopted manages floating exchange rate system, therefore the exchange rate become consistence rate compare with the market rate.

This research aims to study how the real exchange rate effects trade balance (how the currency appreciation and depreciation will affect the trade balance) of Myanmar. There are many studies which analyzes the long run relationship and short run relationship between real exchange balance and trade balance. But there was no studies which examine the effect of currency appreciation and depreciation on the trade balance of the country by using Switching Regression Model. Therefore, this stud try to find out the effect of exchange rate on trade balance by using Switching Regression Model and can also provide the sustainable economy of Myanmar by conducting the appropriate exchange rate regime policy.

### **1.1 Purpose of the Study**

The objective of this paper is to study the impact of exchange rate on trade balance in Myanmar. The main objectives of this paper is

- to study the different impacts between appreciation and depreciation on the trade balance.

### **1.2 Advantage of the Study**

The study will investigate:

- whether the depreciation of exchange rate has a favorable impact on trade balance or not in Myanmar.
- how exchange rate effects on Myanmar trade balance and
- how the country experience under fixed and manage float exchange rate in the country.

### **1.3 Scope of the Study**

This research paper studies the period of 1990-2014 of the annual reports of Myanmar. Most of the data used in this research are secondary data. The variables used in this research are trade balance, exports, imports, and exchange rate. Based on the availability of data and regarding the methodology section, yearly data from 1985 to

2014 are collected. In order to increase robustness of the study, data are collected from IMF and WTO.

## **2. Review of Empirical Literature**

### **2.1 Understanding of Foreign Exchange Market in Myanmar before 2011**

In 1988, after abolished of the socialist economic system, the market oriented economic system was adopted in the country. In Myanmar, the multiple exchange rate system was took place the last several years because of the fixed exchange rate system of government policy was not activated in the private sectors. Foreign exchange transaction was controlled by the government, under that controlled the exchange rate regime of the country was separated in to two regimes: official rate and market rate. Among these two kinds of exchange rate, the official exchange rate which determine by government was activated only on the public sectors like state economic enterprises. The state economic enterprises were obligated to hand over all of that the official rate. On the other hand, the import of state economic enterprises were managed by the foreign exchange budget of the central government, therefore permission from the Ministry of Finance and Revenue was required for expenditure on foreign trade.

In the private sector, no importers used the official exchange rate in conducting the economic activities, which is seriously overvaluing against the U.S dollar. This is the main reason why the black foreign exchange market arose in Myanmar. According to the government regulation, in private sectors the Myanmar citizens was prohibited from holding foreign currency, instead of it they can be withdraw only the foreign exchange certificates in the form of foreign currency deposits.

According this circumstance, the market of foreign exchange was separated between the private and public sectors. There was no foreign exchange flowed from public sector to private sector, whereas the public sector could deviate private sector foreign currency deposit to its budget, this incentive the government to controls on the private sector. The segmented foreign exchange market structure expressed that the

parallel market exchange rate was influenced by the supply and demand of the private sector.

In 1997, the export first and import later was adopted and the private sector was significantly controlled by the government. Therefore, all the export and import by the private sector had been needed licenses. The government issued the import licenses and that license applicants have adequate export tax subtracted export earnings to cover the import bill. In 2002, the rigorous practice of the export first policy, if there was without foreign currency deposits the import impossible.

In the parallel market, there were two typical types of foreign exchange. The first one is the export earnings in the form of foreign currency deposits with verification of export tax payment. The other is informally held foreign exchange, in the case of illegal export revenues and informal payments.

## **2.2 Exchange Rate Reforms under New Government**

The series of reforms on exchange rate policy was operated under the new government starting in the late of 2011. In this reform, the Central Bank allowed some private commercial banks to operate legalized foreign exchange counters. At that counters retail customers of foreign exchange could purchase and sell foreign exchange with these licensed banks. However, there were unexpressed dominate by the Central Bank of Myanmar in purchasing and selling rate and there were some notice on the foreign exchange counters. Moreover, another important case is the Central Bank placed limits on the amount of foreign exchange which a customer could sell and purchase at the counters. Above the amount of limits, a customer has to exhibit a document verifying the source of selling foreign exchange or the purposed use of buying foreign exchange. The transactions at the foreign exchange counters include kyats and cash of US dollars, the amounts of transactions are inescapably limited by the availability of cash of the counters.

In April 2012, the government has affected certain reform steps to unify the multiple exchange rates into a single rate in the country, by replacing the official fixed exchange rate with a managed float through foreign exchange auction market under supervision of the Central Bank of Myanmar. Under the foreign exchange regime, the reference rate is deliberated in the auction mechanism. The Central Bank of

Myanmar released licenses to perform international banking to a number of private banks. Consequently, the variation between the reference rate and the informal market rate has decreased significantly.

On the one hand, the CBM declaring the reference exchange rate to the public, and on the other hand the auction of foreign exchange with private commercial banks. The selling and purchasing rates at the legal foreign exchange counters have to be within a mandated band from the reference rate.

The new government has enforced a stepwise reduction of the limitations on imports since 2010. Moreover, the export first policy is abrogated in April 2012, import licenses are procurable with non-export earning US dollar lifted at the foreign exchange counters of with the informally held foreign exchange

To clarify what has changed and what has not changed after the series of policy reforms, in the case of changed, firstly, the official exchange rate in the public sector have been devalued to the central bank reference rate. Regarding in the case of unchanged, the mass of the foreign exchange transactions in the private sector are still negotiated transactions between buyers and sellers, and they are yet to be replaced with bank intermediation. Export earnings mostly persist as the assets of exporters. They are not sold to the banks; therefore, the central bank cannot absorb foreign exchange from that source. The central bank auction and the open market of the private sector are still fragmented.

Moreover, a new Foreign Exchange Management Law was passed by the parliament in August 2012. By this law, all restrictions on current payments and transfers for foreign transactions were clearly lifted. The CBM also declared a redemption plan for the foreign exchange certificates, which were generated as temporary vehicle for the accessible use of foreign currency under previous strict control mechanism.

According to these reform steps, the pressure on appreciation of exchange rate is now constrained and the market exchange rate has been stable around the reference rate. The central bank will perform additional steps to facilitate the smooth functioning of the formal foreign exchange markets, entitling private banks to extend foreign exchange operations and services at per state banks. Although the central bank is endeavoring for establishing an interbank foreign exchange market, the market is too little for the market intervention to be impressively performed.

### **2.3 Review of Relevant Literature**

There are many studies on the impact of exchange rate on trade balance for developing countries which come to various conclusions. The major facts of the studies are summarized clearly as follow:

#### **Summary of Literature Review**

Author(s)	Topics	Variables	Using Model	Results
Pavle Petrović, Mirjana Gligorić	Exchange Rate and Trade Balance: J- curve Effect	trade balance, real exchange rate, GDP	Johansen's Cointegratio n Analysis, ARDL, ECM, VAR	a RER depreciation has a significant positive long run impact on the TB in Serbia and short run movements and indicate the existence of the J-curve effect.
PHAM THI TUYET TRINH	The Impact of Exchange Rate Fluctuation on Trade Balance in Short and Long Run: Vietnam	trade balance, real effective exchange rate, domestic output, foreign output	Autoregressi ve distributed lag (ADRL), Error correction model (ECM)	RER have positive impact on TB in the long- run, Depreciation can lead to improvement of TB improve and an appre- ciation can lead to deterioration of TB. There exists impact of RER on TB in short-run.

## **Summary of Literature Review (Continued)**

Author(s)	Topics	Variables	Using Model	Results
Dr. Keshab R.Bhattarai, Mark K. Armah	The Effects of Exchange Rate on the Trade Balance in Ghana: Evidence from Cointegration Analysis	Real Export, Real Import, Real Exchange Rate, Real GDP, Foreign price, Domestic price, nominal exchange rate	Cointegration, Engle-Granger, Error-Correction Model(ECM), Vacor Autoregressive Model (VAR)	For improved balance of trade in Ghana, coordination between the exchange rate and demand management policies
MUHAMMAD SHAHBAZ, ABDUL JALIL, FARIDUL ISLAM	Real Exchange Rate Changes and the Trade Balance: The Evidence from Pakistan	Trade balance, ratio of real exports to real imports, realexchangerate,	Auto Regressive Distributed Lag (ARDL) approach	a long-run relationship between the series exists, and coefficient of elasticity is negative and statistically significant, which does not support for the J-relation.
IRINA TOCHITSKAYA	The Effect of Exchange Rate Changes on Belarus's TB	nominal exports, nominal imports, real domestic incomes, real foreign incomes, a REER	Unit Root Tests, ADF, ARDL, VAR	a real effective depreciation can improve the trade balance in the short run.

### **3. Method, Data and Model**

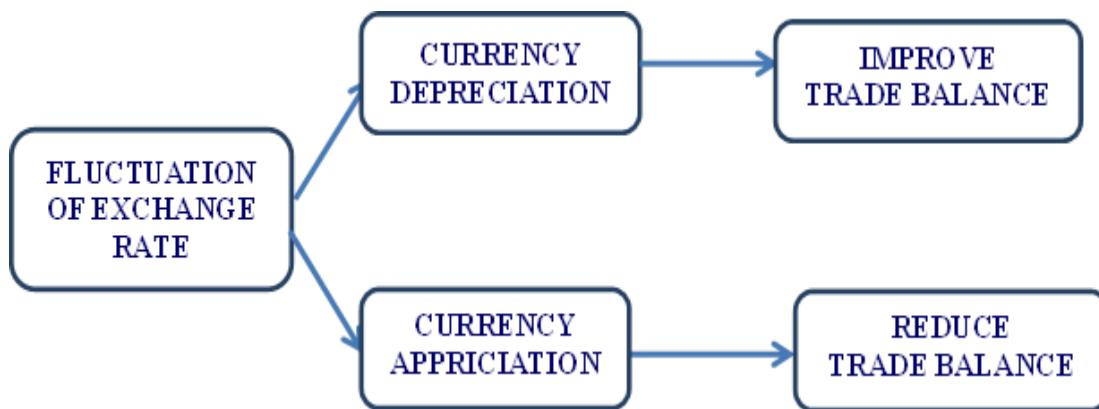
#### **3.1 Conceptual Framework**

From many analyzing model which relevant the relationship between exchange rate and trade balance of the country, this paper studies the relationship by using Switching

Regression model. Theoretical framework for the function of trade balance and exchange rate of Myanmar can be depicted as the following:

$$TB = f(MER, GEX, GIM) \quad (3.1)$$

The conceptual framework of the study: the trade balance in the equation is the explained variable for the study and which may be affected by the fluctuation in exchange rate. The conceptual framework of the study can be illustrated by the following figure.



If the currency depreciation, mean the domestic goods and services is cheaper than foreign goods and services, export is greater than import and the trade balance will improve. If in the case of currency depreciation, it may have the opposite effects on trade balance.

The other variable GDP can also be effects on trade balance by two ways. GDP can also improve and worsen trade balance. If GDP increase, means the country national income incense, therefore the country may import more. If they import more capital goods, the country can improve the productivity and can enhance the export and the trade balance will improve. But if the country import consumptions goods more the import will greater than export and the trade balance will decline.

The impact of exchange rate (market) on trade balance will be examined in two ways: exploratory data analysis and descriptive analysis. The first section deals with the data running and data analyzing by using Simple Switching Regression model to find out the relationship between currency appreciation and depreciation with trade balance. The facts that how exchange rate affected the trade balance, how currency

appreciation influences the trade balance and how currency depreciation intent the trade balance of Myanmar will be discussed based on the empirical results. In the second section, the relationship between the economic growth and foreign trade will be discussed by using descriptive statistics.

### **3.2 Data Collection**

All the data to be used in econometric models are taken from International Monetary Fund (IMF), World Trade Organization (WTO), Central Statistical organization of Myanmar, Central Bank of Myanmar web pages, and official data from ministry of commercial for the reliability and robustness of the study. They can provide sufficient level of information and data related with trade balance and exchange rate statistics of Myanmar.

Regarding the methodology section, trade balance, market exchange rate, export and import data are required for doing Switching Regression model estimation and causality analysis among these four variables. In order to increase the soundness of this analysis, sufficient time series data on Trade Balance, Market Exchange Rate, Export and Import are needed. For this reason, annual data of Trade Balance, Market Exchange Rate, Export and Import are taken from 1986 to 2015.

### **3.3 Data Description**

The following table presents the descriptive statistics of the data used in this study.

Descriptive Statistics of the variables

Variables	Observations	Mean	Standard Deviation	Minimum Value	Maximum Value
GTB	29	0.200388	2.383778	-5.128312	9.290939
GMER	29	0.141473	0.261223	-0.178569	1.137021
GEX	29	0.128484	0.250543	-0.590200	0.603261
GIM	29	0.142439	0.383118	-0.673459	1.392437

**Source:** Calculated result by author

### 3.4 Test Unit Root Test (ADF)

The study need to test unit root test first to know the variables are stationary or nonstationary. Before doing Switching Regression estimation, it should be tested whether variables are stationary or not, because in order to analyze the impact of currency depreciation and appreciation on trade balance, the data have to be stationary if the test result is not stationary the data need to change to stationary by taking log. For testing this, ADF unit root test can be applied as the following:

Design for Unit Root Test with Dickey-Fuller

Unit Root Test	DF Unit Root Test
Null Hypothesis: H0	Time-Series is stationary.
Alternative Hypothesis: H1	Time-Series is non stationary.
Statistic test	t-Statistic
Prob. <0.1	0.00 – 0.10

**Source:** Author

Dickey and Fuller regression equations were considered to test whether there is a unit root as follow

$$\Delta GTB_t = \alpha + \beta_t + \theta GTB_{t-1} + \sum_{i=1}^{\rho} \phi_i \Delta GTB_{t-i} + \varepsilon_t \quad (3.6)$$

$$\Delta GMER_t = \alpha + \beta_t + \theta GMER_{t-1} + \sum_{i=1}^{\rho} \phi_i \Delta GMER_{t-i} + \varepsilon_t \quad (3.7)$$

$$\Delta GEX_t = \alpha + \beta_t + \theta GEX_{t-1} + \sum_{i=1}^{\rho} \phi_i \Delta GEX_{t-i} + \varepsilon_t \quad (3.8)$$

$$\Delta GIM_t = \alpha + \beta_t + \theta GIM_{t-1} + \sum_{i=1}^{\rho} \phi_i \Delta GIM_{t-i} + \varepsilon_t \quad (3.9)$$

From above equation  $\alpha$  is constant (drift),  $\beta_t$  is deterministic term (time trend) and the parameters that are in the interest of all the equation  $\theta$  is. That is, if  $\theta = 0$ ;  $X_t$  is unit root by comparing statistics t (t-statistic), calculated with the appropriate values that are in the table.

### Dickey-Fuller unit root tests results

Variable	ADF Test statistics	Critical value at 5%	Critical value at 10%	Deterministic Regressors	Lag	Results
GTB	-4.913946	-2.971853	-2.625121	intercept	6	Stationary
GMER	-4.077696	-2.971853	-2.625121	intercept	6	Stationary
GEX	-5.506281	-2.971853	-2.625121	intercept	6	Stationary
GIM	-6.783139	-2.971853	-2.625121	intercept	6	Stationary

Source: Calculation, at level

According to the tested data result, as shown in Table 4.1, all variables, GTB, GMER, GEX, GIM are stationary at level in testing with intercept. However, in testing with neither intercept nor trend, null hypothesis can be rejected for all three time-series, which means that all the variables are stationary at level in testing with either intercept or trend. The time-series data of GDP is significant at five percent critical level.

### 3.5 Estimation of Switching Regression Model

Switching regression model is a model that consists of two scenarios, hypothetical. In both scenarios, as follows:

$$\text{Currency Appreciation 1: } TB_{1i} = \beta_1 MER_{1i} + u_{1i}, \text{ if } \gamma' z_i \geq u_i \quad (3.10)$$

$$\text{Currency Depreciation 2: } TB_{2i} = \beta_2 MER_{2i} + u_{2i}, \text{ if } \gamma' z_i < u_i \quad (3.11)$$

$$u_i \sim (0, \sigma_i^2), u_{1i} \sim (0, \sigma_{1i}^2), u_{2i} \sim (0, \sigma_{2i}^2)$$

where,  $TB_{1i}$  is trade balance based on the time series data at the currency appreciation.

$TB_{2i}$  is trade balance based on the time series data at the currency depreciation.

$MER_{1i}$  is the market exchange rate of time series data at the currency appreciation.

$MER_{2i}$  is the market exchange rate of time series data at the currency depreciation.

$\beta_1, \beta_2, \gamma$  is the parameter value.

$u_i, u_{1i}$ , and  $u_{2i}$  are the value of the variable error is random.

Assumption that the  $u_i$  have a relationship with  $u_{1i}$  and  $u_{2i}$ , this model is called the Switching regression models by switching to a group is defined within the structure of the models (regression model with endogenous Switching).

#### Switching Regression Model estimation results

		Coef.	Std.err	z-test	P-Value
Regime 1	GMER	-26.40294	6.023651	-4.383213	0.0000
	GEX	26.53337	3.515041	7.548524	0.0000
	GIM	2.040663	1.756246	1.161946	0.2453
	Constant	-4.512489	1.247411	-3.617483	0.0003
Regime 2	GMER	-0.782448	0.729458	-1.072644	0.2834
	GEX	-2.186205	0.916216	-2.386123	0.0170
	GIM	4.133699	0.824671	5.012546	0.0000
	Constant	0.232435	0.227835	1.020191	0.3076
Common	LOG(SIGMA)	-0.271772	0.164038	-1.656765	0.0976
Probabilities Parameters	P1-DUM	-1.905686	0.770833	-2.472242	0.0134

Source: Calculation

In table 4.2, Region 1 is described the result of currency appreciation impact on trade balance, according from those empirical result it can be seen that when market exchange increase 1 % the trade balance of the country will reduce with 26.40%. Moreover, to be explained clearly, among 29 observations the country face currency appreciation like

year of 2012, in one year we have 12 month from January to December among this 12 months currency may fluctuate month to month or day to day but in sum up of the year currency face appreciate, for that year when growth rate of market exchange increase (case of currency appreciation) 1 % the trade balance will reduce with the amount of 26.40 %. In region 1 the market exchange rate is significant. This mean that the hypothesis cannot be reject and the currency appreciation can reduce the trade balance of the country. When the export increase 1 %, the trade balance of the country increase by 26.53 % and when the import is increase 1 % the trade balance will increase by 2.04 %.

In the case of Region 2 there is described the result of currency depreciation impact on trade balance, according from those tested result it can be seen that when market exchange increase in 1 % the trade balance of the country, Myanmar, will reduce with 0.78 % instead of improve the balance of trade. Additionally, to be explained more clearly, when the country face currency depreciation like year of 2013, in one year from January to December the currency may depreciate or appreciate over the time but in sum up of the year the currency face depreciation, for that year of depreciation when growth rate of market exchange increase 1 % the growth rate of trade balance will reduce with the rate of 0.78 % instead of improve trade balance. In the region 2 the market exchange rate in not significant. This means that the hypothesis of the study can be rejected and the currency depreciation may not improve the trade balance of the country. When the exports increase 1 % the trade balance reduces by 2.19%.

#### **4. Conclusion**

The main objective of this study is to examine and find out the impact of exchange rate on trade balance of Myanmar over the period of 1986-2015 primarily with the empirical analysis and general descriptive statistics. The data set employed in this study is secondary data of trade balance (TB), Export EX) and Import (IM), these three variables are used into value in US dollar million term and market exchange rate (MER) and official exchange rate (OER) of Myanmar during the period 1986-2015 are used into kyat per dollar term respectively.

This study adopt two main methodological approaches in order to find out the appropriate answers to the research problem. Firstly, econometric methods such as Dickey-Fuller unit root test, Augmented Dickey-Fuller unit root test, and Switching Regression molel. Empirical results are mainly based on the above econometric methods. Secondly, exchange rate of Myanmar during the period of befor 2012 and after 2012 under new government 1995-2015 is analyzed by using descriptive analysis.

The results of this study is somewhat contrary to conventional belief that exchange rate has significant impact on the trade balance of Myanmar. Exchange rate does have positive impact on trade balance in the long-run, indicating that, a depreciation can lead to improvement of trade balance improve and an appreciation can lead to deterioration of trade balance. But in Myanmar after 2011 although the exchange rate is depreciate the trade balance did not improve at that year and the trade balance face deficit. Currently, depreciating real exchange rate to improve trade balance cannot take much effect.

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