Effects of Exchange Rate Devaluation and Its Impact on Trade Balance in Ethiopia

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Abstract

This study seeks to assess the effects of exchange rate devaluation on trade balance of Ethiopia. The data use in this study was collected from the period 1976-2012. The variables included in the analysis of the study are real effective exchange rate (REER), real gross domestic product (RGDP), official exchange rate (OFF), parallel exchange rate (PARR), Trade liberalization (TL), export value and import value. In the study the augmented dickey filler test (ADF), cointegration and ordinary least square method (OLS) have been used. The unit root test confirms the stationary of all variables at first difference except for real effective exchange rate at the level. The result of Johansson test of co integration indicates the existence of three and four cointegrating equation in export and import equation respectively, confirming the long run relationship between the dependent and independent variables. Regression result indicates that RGDP, PARR and OFF have significant and positive impact on export and import. The premium has negative impact on both export and import and the export have highly significant and positive effect on import. The study recommended that since the economic variables; RGDP, official exchange rate, parallel exchange rate and premium are significant effect on the trade balance in the long run; the policy makers should considered the long run effects of those variables on the balance of trade.

Introduction

In today's world of scarce resource and unlimited wants, no nation can be self sufficient in the production and consumption of goods and service. The difference in resource endowments like climate, mineral, human resource, geographical situation among countries leads to trade through specialize in the production of goods and service.

> …it's the maximum of every prudent master of a family, never to attempt to make at   home what it will cost him more to make that to buy. The Taylor does not attempt to make his own shoes, but buy them from the shoe maker. The shoe maker does not his own clothes, but employees a Taylor. The former attempt to make neither the one nor the other, but employees these different officers……what is prudence in the conduct of every private family, can scarce be folly in that of a great kingdom. If a foreign country can supply as with a commodity cheaper than we can make it, better by it of them with some part of the produce of our own industry employed in a way we have some advantage (Smith, 1776).

Specialization in the production of specific goods and services creates the exchange of goods and services among the countries. Those international transaction and flows of goods and services is determined the demand and supply of foreign exchange rate that summarized in the balance of payment account. (Sprinke and Sawyer, 2003). Most economies of developing countries including Ethiopia strongly depend on agricultural sector. Their foreign trade is characterized by few agricultural products that depend on seasonal fluctuation in case there is environmental variability. These countries which are developing countries are suffered from balance of payment deficit.

Balance of payment of any country is a systematic   record of all economic transaction between the residents of the rest of the world, usually a year

(Mannur, 1995). Trade balance refers to the goods and services account of balance of payment (bop). Studies on the trade balance of countries shows that trade balance is largely affected by foreign exchange. Due to this response many developing countries follow devaluation as a policy measure for balance of trade deficit.

In the history of Ethiopian trade, starting from autocratic regime of Haile selassie up to the recent time the trade process pass in different situation. During three successive regimes in Ethiopia pre 1974, totalitarian derg period and post 1991 shows that the country's external trade policies are free trade, controlled trade policies and once again back to free trade policy(knife, 2001).

The exchange rate policy of Ethiopia before the 1990, in imperial and Derg regime can strictly be regarded as fixed exchange rate. Birr was pegged to the US dollar in early 1948. However, due to devaluation of the US dollar in 1971 and 1973 the exchange rate of birr against the US dollar was indirectly change by 7% and 11% respectively (Befikadu, 1995).The devaluation of Ethiopian birr (ETB) per US dollar officially began during the Ethiopian people revolutionary democratic front regime. Before that the country used to have a fixed exchange rate with a rate of 2.07 birr per us dollar. Some researches held during 1970 and 1980 shows that Ethiopian birr was overvalued leading to trade deficit (kidane, 1994). These over valuation of currency discourage export and encouraged import in addition with foreign exchange reserve shortage. Under the structural adjustment program with the support of international monetary fund and World bank. Under this program starting from 1992/93 the Ethiopian birr was devalued from 2.07 birr to 5 birr per US dollar in real terms. The devaluation of the birr continuously depreciating since 1994/95 and reach about 17.25 in 2011/12

with the objective of balancing external sector generally and improving current account balance specifically(knife, 2001).The predominance of external balance sectors as shown by trade balance has been in deficit over past decades. Recent data shows that the trade deficit of the country was birr 28.41 billion in 2005/06 and has become very wide after five years reaching 83.38 billion in 2009/10 which is unsatisfactory (ERCA, 2011)

Statement of the problem

The distribution of economic output was not evenly distributed among the world economies. The high income economies account for approximately 80% of the world output and low income accounts for approximately 3.2% of international trade. The middle income account 22.8% of world total trade and 17.5% of world production. Whenever the world production is under the hands of developed countries the rest remain importer of the product which enforced the developing countries to the policy measure (World Bank, 2002).

The developing countries economy were open to different economic problems like increase in current account deficit, continues decline of foreign exchange reserve and high inflation rate at home. To solve these problems some countries forced to the stabilization and structural adjustment programs with the support of international monetary fund and World Bank. The adjustment programs promote the substantial devaluation of nominal exchange rate. Standing with the objective of structural adjustment programs, Ethiopian government (1992/3-1993/4 like other developing countries applies the macro economic reform measures including exchange rate devaluation (African development bank, 2000). The Ethiopian birr was devalued by 59% in terms of dollar. The objective of devaluation, according to the transitional government was to improve current account balance (Getachew, 1994).

The marshal Lerner condition says that devaluation improves trade balance if the sum of elasticity of export and import is greater than one. Some economist argue that since developing countries like Ethiopia export agricultural product and import most industrial products, the sum is less than a unit. Most agricultural products are price inelastic that face lower price in terms of lower currency and they don't give an incentive to increase the volume of export. Strong interest on the debate on the effectiveness of "structural adjustment" policies in promoting equitable and sustainable economic growth in Africa is demonstrated by united state congress review adjustment, especially devaluation in relation with improving external balance (USA congress, 1989).

The increase in depreciation rate was expected to encourage the export sector and to come up with balance of trade. However, countries trade balance shows continuous trade deficit (MOFED, 2010/11) which shows the questionability of improving trade balance with the help of devaluation. Even though there is a controversy on the effects of devaluation on trade balance, the current government of Ethiopia used the exchange rate devaluation as a policy instrument in order to improve trade deficit of the country. In this study, at the presence of that hot controversy is that devaluation is the right policy instrument to solve the problem of trade balance is considered as a problem of study.

Objectives of the Study

The general objective of this study is to assess the effects of exchange rate devaluation on the trade balance of Ethiopia.

Specific objectives of study

- To identify the impacts of devaluation on the total value of export, import, and trade balance of trade of the country
- To test the long run relationship of RGDP and exchange rate variables with export and import.
- To explain and examine the response of trade balance for devaluation

Scope of the study

The devaluation of exchange rates has an effect generally on the economy of a country and balance of payment specifically. As far as this study is concerned, the researcher tries to see only its effects on current account balance of payment. Additionally the researcher uses the time series data which includes the period from 1982 to 2012 for analysis.

Significance of the study

The Ethiopian government has been implementing devaluation as the policy instrument to overcome the problem of trade deficit. Since the application of the policy instrument up to know the countries balance of trade runs under deficit. It's necessary to look at the great problems of the economy, hence this study will be important to give direction for further studies and suggest some recommendation for policy measures on the effects of exchange rate devaluation on the balance of trade.

Methodology of the study

Data source

A yearly data on Ethiopian trade on base year price are obtained from Ethiopian national bank, Ethiopian Central Statistical Agency and World Bank. The time series data's are collected on GDP, REER, official exchange

rate, parallel exchange rate, on export price, import price as well as on the openness of Ethiopian trade starting from 1976-2012.

Model specification for export and import function

Consider the following simple model of elasticity's.

$Y_i = AX_i^{b2}$ …………………………………………………..(1.1)

Let express the above equation 1.1 in log linier form

$Ln\ Y_i = LnA + B_1LnX_1 + B_2LnX_2 + B_3LnX_3$……………………………..(1.2)

Where Ln is the natural logarithm to base e

Let $LnA = LnB_0$

$LnY = LnB_0 + B_1LnX_i + B_2LnX_2 + B_3LnX_3$……………………………..(1.3)

In the log linear model the slope coefficient(B_i) measure the elasticity of dependent variable with respect to the explanatory variable(X_i), therefore it shows the percentage change in Y on a given percentage change in X or responsiveness of the dependent variable for the changing in the explanatory variable.

According to Elbadwise price model level is defined as a geometric weight of the price of non-traded goods and traded goods.

$P_t = (Pt)(ptNT)1 - \alpha$ …………………………………………(1.4)

$\qquad 0 < \alpha < 1$

Where α is the share of traded goods in total expenditure

$\qquad P_t$ = price at time t

Pt = price of tradable

PtNT =price of none tradable

Because of unavailability of non tradable data, we adjust the equation for only the tradable goods. The price of tradable goods can be defined as the geometric average of export and import.

$$PT=(PXT)^* \alpha +(P)*(MT)1- \alpha\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1.5)$$

Where PT= price of tradable at time t

PXT=foreign price of export at the time t

P*=foreign price of import at time t

Model specification for export

Export value is the function of GDP and domestic export price

$$X =f(GDP,PX)\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..(1.6)$$

Where X value of export

GPD=real GDP=Y

PX= domestic price of export

Hence the price of export in home markets can de defined as

$$PX=eot^{1-b}ept^bPXt(1-Xtx)\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1.7)$$

Where Px= price of export in home market at time t

Eot= the official exchange rate in terms of domestic currency per us dollar

Ept=the parallel exchange rate in terms of domestic currency per us dollar

Xtx= export tax at time t

LnPX=(1-B)Lneot +(B)ept+Ln P*Xi +(1-Xtx)…………………(1.8)

The model above is nonlinear but we can express it alternative form.

 LnPx =(1-β)Lneot+βLnept+LnP*Xi+Ln(1-txt)

    =Lneot+β (Lnept-Lneot)+LnP*Xi+Ln(1-txt)

    =Lneot+ β Lnprem+ LnP*Xi+Ln(1-txt)………………….(1.9)

The substituting the above equation (1.8) in the place of price of export in home market we can obtain that;

LOGX= β_o+ β_1LOGy+ β_2LOGeot+ β_3LOGpre+ β $_4$LOGpxt+ β_5LOG(1-pxt)+Ui

Instead of using import and export tax, the researcher use openness in terms of dummy variables, because of unavailability of data.

Since (1-txt) =openness

 LOGX= βo+ β1LOGy+ β2LOGeot+ β3LOGpre+ β 4LOGpxt+ β5LOGopen+Ui…(1.10)

In the above export model the GDP have positive relation with export value, but the effects of premium on export is negative, because higher premium implies large gap between parallel exchange rate and official exchange rate. In other words higher premium means over valuation of exchange rate, which discourage export, so premium has negative effect on the export value. Trade liberalization (openness) expects to have positive impact because it minimizes restriction of trades and increase export earnings.

 Model specification for imports

Import value is the function of total domestic production or GDP, domestic price of imports and export earnings.

$$M = f(p_m, GDP, X)\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(1.11)$$

Where; M = value of import

Y = real GDP

P_m = domestic price of import

X = value of export

Since the home price of imports can be defined as;

$$pm = eot^{1-\beta} ept^{\beta}(p^*_{mt})(1-tmt)\dots\dots\dots\dots\dots\dots\dots\dots\dots(1.12)$$

Where p_{mt} = price of import in home market at time t

B = the share of official exchange rate in determining the price of tradable good

Then since the model of home price of import is nonlinear first change it to the linear one as follows and substituting to the import model.

lnpm= (1- β)lneot+ βlnept+lnp*mt+ln(1-tmt)

lnpm= βlneot+ β(lnept-lnoet)+ lnp*mt+ln(1-tmt)

   = βlneot+ βlnprem+ lnp*mt+ln(1-tmt)…………………(1.13)

LOGM =β0+β1LOGY+β2LOGoet+ β_3 LOGprem+ β4 LOGpmt+ β_5 LOGX + β $_6$LOG(1+tm)+ Ui

The value of (1-tm) by openness

LOGM =β0+β1LOGY+β2LOGoet+ β3 LOGprem+ β4 LOGpmt+ β5 LOGX + β 6LOGopen + Ui………(1.14)

In the import model the relationship between GDP and import value is expected to be positive because as income increase consumption of good increases including imported goods, so the value the import increase. On the other hand openness or trade liberalization has positive effects because the reduction of import barriers increase import values.

Model specification follows that:-

▶ Firstly determining the stationary of the variables in order to see the variability among the variable and determining the order integration of the variables using Augmented Dickey Fuller test. Then if the variables are found to be integrated of the same order, apply the Johansen-Juselius (1990, 1992, and 1994) maximum likelihood method of cointegration to determine the number of cointegrating vectors in the case, we will apply Trace test and Maximum Eigenvalue test. In the analysis part the the Eangle and Granger test using stationary of error term at 1% level of significance shows the fast adjustment of short run to the long term. In the Johansen-Juselius method of cointegration if there is a mismatch between the result of Trace statistics and Maximum Eigenvalue we would stick to the results based on Maximum Eigenvalue test, which is usually preferred for trying to pin down the number of cointegrating vectors (Enders, 2004, p 354) as cited in Omar, etal (2007).

▶ On the other hand, if the variables are found to be integrated of different order, make them integrated of same order through differencing before determining the number of cointegrating vectors. For instance, if some variables are I(1) and some variables are I(2), we can first-difference I(2) variables in order to make them I(1),and then check for the number of cointegrating vectors. On the other

hand, if some variables (except dependent variable) are I(0) and some variables are I(1), ignore I(0) variables while conducting Johansen-Juselius (1990, 1992, 1994) maximum Likelihood method of cointegration. In case where the dependent variable itself is I(0) regardless of the order of integration of other variables, it is not possible to conduct co integration analysis, implying that there exists no long-run relationship among the variables. In this case, we can run OLS after differencing the I(1) variables. Exceptional in case of the effect is insignificant.

Cointegration

The extension of traditional approach to the modeling of short run disequilibrium in the partial adjustment model is Error Correction Model (ECM). The analysis of short run dynamics is often done by first eliminating trends in the variable, usually by differencing. The theory of cointegration developed in Granger (1981) and elaborated in Engle and Granger (1987) address this issue of integrating short run dynamics with long run equilibrium. A time series y_t is said to be integrated of order one or I(1) if Δy_t is stationary time series otherwise a stationary time series is said to be I(0). A random walk is the special case of an I(1) series because of y_t is a random walk, Δy_t is a random series or white noise is a special case of stationary series.

Result and Discussion

Descriptive Statistics

Figure 1 Shows trends during 1976-2012 in export, import and gross domestic product. A clear trend in export variable shows there is fluctuation in the variable, flat increment during liberalization and sharp rise after2010

is visible from figure 1.1(a). From figure 1.2(b) shows the import sharp rise from 1976-2012. The trends of gross domestic product show a low trend of increment during the period.

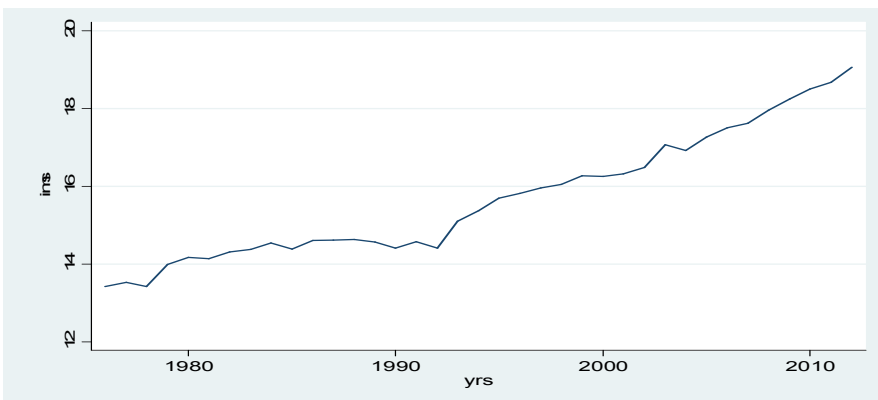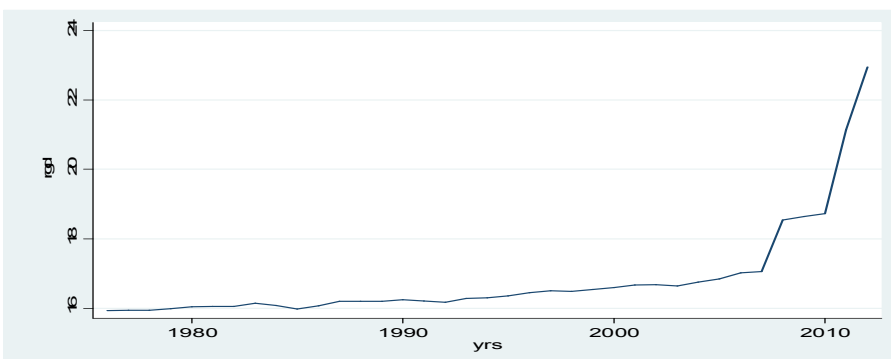Figure 1: Trends of Export

Figure 2: Trends of Import

Figure 3: Trends in Gross Domestic Product

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In the empirical analysis export and import are dependent variable except export value in the import model. The independent variable includes gross domestic product, real effective exchange rate, official exchange rate, parallel exchange rate, and premium and trade liberalization. The mean minimum, maximum and standard deviations are included in the table below.

Table 1: Descriptive Statistics of Series: 1976-2012

Variable	Obs	Mean	Std. Dev.	Min	Max
Year	37	1994	10.82	1976	2012
Ex	37	6.35	0.58	5.44	7.74
Im	37	6.81	0.70	5.83	8.28
Reer	37	2.13	0.12	1.93	2.40
Rgdp	37	7.27	0.52	6.92	9.49
Pre	37	0.18	0.17	-0.02	0.53
Off	37	0.65	0.33	0.32	1.25
Par	37	0.81	0.20	0.45	1.26
Tl	37	0.57	0.50	0	1

Unit Root tests

The time series under consideration should be checked for stationary before one can attempt to fit a suitable model. That is, variables have to be tested

for the presence of unit root(s). The stationary of the series can be tested by using an Augmented Dickey-Fuller test. The hypothesis to be tested is

H_o: the series is non stationary

H_1: the series is stationary

The null hypothesis on non stationary means that the error terms of the variable in the model is serially correlated.

Table 2: Unit root test results (At level)

Augmented dickey fuller test(ADF)

Variable	Intercept without trend	Intercept with trend	Conclusion
Export	0.65	2.94	-
RGDP	1.82	2.55	-
Official exchange rate	0.17	2.61	-
Parallel exchange rate	0.26	2.32	-
Premium	1.49	2.36	-
Reel effective exchange rate	10.90	11.19	I(0)
Import	1.34		-
Trade liberalization	1.12	1.83	-
5% significance level	2.95	3.544284	

The table above shows that the result for the unit root test conducted for the variable under this study. As we can see from the table almost all the variable are non stationary at the level except real effective exchange rate. For the real effective exchange rate the null hypothesis can be rejected and the alternative hypothesis accepted. As shown in the Table 1.3 GRGDP, export, import, official exchange rate, parallel exchange rate, premium and trade liberalization has stationary at the first difference.

Table 3: Unit root test results (after first difference)

Augmented dickey fuller test (ADF)

Variable	Intercept without trend	Intercept with trend	Conclusion
Export	8.07(9)	8.20(9)	I(1)
RGDP	3.87(9)	5.17(9)	I(1)
Official exchange rate	3.69	3.75(9)	I(1)
Parallel exchange rate	6.33(9)	6.54(9)	I(1)
Premium	7.65(9)	7.54(9)	I(1)
Import	6.67(9)7.19(9)	7.19	I(1)
Trade liberalization	5.92(9)	5.84	I(1)

5% significance level   2.948404   3.544284

Cointegration Analysis

According to the result from Augmented Dickey Fuller test the variables are integrated of order one, then we proceed to test for cointegration. Johansen (1995) cointegration test is applied at the predetermined lag. In these tests, Maximum Eigenvalue statistic or Trace statistic is compared to special critical values.

Table 4: Stationary of the residual

Augmented fuller test (at level)

U_t for	Intercept Without trend	Intercept With trend	Conclusion
Export model	-5.29(9)	-5.22(9)	I(0)
Import model	-4.10(9)	-4.00(9)	I(0)

According to the result obtained from stationary test of the residual the null hypothesis can be rejected the dependent and independent variables are integrated in both export and import model. The cointegration test using Johansson integration analysis, the Trace test and Maximum Eigen values implies there is three co integrating equation at 5% level of significance. It suggests the model converges to long run equilibrium relationship.

Export Regression Analysis

In the model the dependent and independent variable shares the common trends and the linear combinations cancels out the non stochastic in the both independent and dependent series. According to Wooldridge (2004) if the independent variable is strictly exogenous and the errors are homoskedastic, serially correlated and normally distributed the OLS estimators are also normally distributed (conditionally an explanatory variable) and the t statistics has an exact t distribution. From export model the official exchange rate and the other variables are highly correlated. In order to use the OLS we regress it separately on export value.

Regression 1

EX = 0.984 + 0.226631GDP-0.0052REER- 0.1192PEERM+ 0.064061PARALLEL+0.00824TL

   (0.015)   (0.468)   (0.000)   (0.028)   (0.413)

   R^2 =0.8823

In the estimated export model of the above none of the coefficient of the explanatory variable is found to be greater than unity, indicating low responsiveness of export increment to changes in these variables. The coefficient estimates of the variable GDP has positive relationships that are expected and significant at 5% level of significance. Holding other things remain constant a unit increment in RGDP , leads to 0.226 increase in export. The real effective exchange rate has negative relationship with export improvement.

 The coefficient estimate of the variable premium is expectable and negative relationship with the export and significant at 5% significant level of

significance. Holding other things remain constant a unit incensement in exchange or over valuation of exchange rate the export can be declined by 0.119 or 11.9%.Trade liberalization has insignificant effects it may be because of the in availability of data and replacing it with dummy variable.

The coefficient estimated of the variable REER and trade liberalization has negative and insignificant effect at 10% significant level and positive relation with export. Holding other things, remain constant as the parallel exchange rate increase by a unit the export can be improved by 0.064 units.

From the regression 1 the R^2 is 0.8823, which indicates that the explanatory variables includes in the study collectively explain about the 88.2% of the dependent export. The remaining percentages of variation in export are explained by variable which is not included in the regression. From the result, the F-test shows that the explanatory variables are jointly significant at 5%level of significance.

When the official exchange rate is separately regressed on export value:

Regression 2

$$EX = 1.093967 + 0.1059123OFF$$

$$R^2 = 0.8586 \qquad (0.000)$$

Holding other things constant a unit increment in official exchange rate increase an export by 0.15059 units and it is significant at 5% level of significance.

Import Regression

To keep the strict exogenity and error homoskedasticity, serial correlation and normality distribution the official exchange rate are regressed on the import value solely to the other variables.

Regression -3

IM = -3.36032+ 0.2479382RGDP- 0.1038103REER-

(0.051)   (0.256)

0.4817463PEERM+6.616565EXPORT+1.160039PARALL+0.1274313TL+Ui

(0.217)   0.006)   (0.004)   (0.319)

In the above import model all coefficients of explanatory variables are less than a unit except export and parallel exchange rate. The high coefficients of export show that import is highly sensitive for the small incensement of export. A unit increase in export leads to 6.616 unit increase in import. A unit increase in parallel exchange rate leads to 1.16 increase in import.

According to the estimated coefficient, the coefficient for GDP is positive and significant at 5% level of significance. Holding other things remain constant a unit increase in the GDP leads to 0.2479 increase in import. The REER and trade liberalization has insignificant effects on the dependent variable. The estimated coefficient of premium is negative and significant at 10% level of significance. A unit increase in the premium leads to 0.48 fails in the import.

The F-test shows that the explanatory variables jointly explain the dependent variable and highly significant at 5% level of significance. The R^2 value of 0.949 means that about 94.9% of the explanatory variables. The tests show that absence of heteroskedasticity, presence of normality in the error term and absence of functional problem.

The separate regression of the parallel exchange rate and official exchange rate on import are presented below.

Regression 4

IM = 4.9924+1.444876OFF+1.119406PARALLEL

R^2 =92.7   0.000   0.000

The estimated coefficient of the official exchange rate and parallel exchange rate are positive and significant at 5% level of significance. Both the coefficient of official and parallel exchange rate is greater than a unity implying high responsive of import for small changes of official exchange rate and parallel exchange rate. Holding other things remain constant a unit increase in the official and parallel exchange rate leads to 1.444876 and 1.119406 increase in import respectively. As seen from regression 3 above the effects of official exchange rate on import is greater than its effects on export, showing that Ethiopian export is price inelastic than import.

Conclusion and Recommendation

Conclusion

The time series data of 37 observations from 1976-2012 was analyzed. The variables included in the model are real effective exchange rate, real gross domestic product, official exchange rate, parallel exchange rate, trade liberalization, export value and import value. In the study the Augmented Dickey Fuller test (ADF), Cointegration and Ordinary Least Square method have been used. The ADF test confirms the stationary of the variable and the stationary test of residual shows the level of stationary of the error terms. The major findings of the study results from analysis are presented as follows;

- The augmented dickey fuller shows all variables are stationary at first difference except real effective exchange rate at the level. The stationary of the residuals at the levels shows the dependent variables are cointegrated in the long run with the explanatory variables.

- The result obtained from Johansson test of co integration indicates the existence of three cointegrating equation, confirming the long run relationship between the variables.

- The regression result of the export model indicates that RGDP, PARR and OFF have significant and positive impact on export. The change in OFF have long run positive impact and explains 88.2% of export independent to other variables. All variable except OFF collectively explain 88.2% of export and the F-test shows the variables are jointly significant at 5% level of significance. The premium has negative impact on export. The coefficient of explanatory variables of export shows that low responsiveness (inelastic) of export to changes in the exchange rate variables.

- The regression result of import model shows that RGDP, PARALLEL and export have significant and positive impact on import. The coefficient of OFF and PARRALLEL are greater than one and highly significant. It shows the import has highly elastic to change in exchange rate variables.

Based on the finding it can be concluded that since the Ethiopian export has low response for exchange rate rise when compared with import, the increase in domestic currency is   not sufficient to improve the trade balance.

Recommendation

- The export responsiveness to exchange rate change is low when compared to import of the Ethiopia. Increasing the export volume through decreasing the domestic price of the product to improve the trade balance leads to the inefficient use of the resource. So in order to rise the country's export at the expense of import the government should be encouraged and subsidized the infant industries of the countries in terms of education especially research and development.

- The Ethiopian export has a very narrow base that easily vulnerable to different shock. So export diversification and exporting finished product should be the right decision to improve the trade balance.

- The Ethiopian export sectors are various problems that affect its competitiveness in the international market like low quality product and in adequate service delivery, low investment in exported product, lack of marketing knowledge and skills and high transaction cost. In order to solve those problems the government should be invested in research and development more and more.

- The Ethiopian export commodities has characterized by primary products that are vulnerable to the small shocks in the world commodities price. It should be essential to promote small and micro enterprise and medium scale enterprise that are the source for manufacturing industries to raise the export commodities of the industrial products.

- The economic variables like RGDP and official exchange rate have a significant effect on the trade balance in the long run. When the government takes a policy action on this variable they should be considered the long run effects of the variables in the external sector specially trade balance

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