Estimating Long-run Trade Elasticity in Pakistan: A Co-integration Approach

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Abstract
The analysis of this study is to monitor the effect of currency depreciation on trade elasticity, using co integration technique of ARDL. The Robust ARDL structure has been used to format the bound testing approach to co-integration model and error correction model. The bound test holds that there exists a long term stable relationship between BOP and its determining factors. The real GDP makes the balance of payment positive, both in long and short run. The study is based upon time series data (1974-2014). For estimation purpose, Johansen –Co integration technique has been used and integration order has been applied for each variable before applying co-integration technique. This research actually seeks to examine the trade growth factors from period (1974-2014).The ARDL (autoregressive distributed lag model) examines the long run elasticity of trade. The shown technique has been collaborated through ADF test. All of the variables are incorporated at first difference i.e. I(1) accept one variable, which is GDP.ADF (augmented dickey- fuller) unit root test has been applied to examine the stationary time series data. Equation has been constructed for terms of trade and other independent variables to examine their long- run relation. ARDL shows that there is co-integration between trade growth and other independent variables i.e. GDP, CPI, NEER, NEER, IMP, EXP and also with the dependent variable TOT. Clearly, it can be noticed that the long- run relationship exists between these variables. It could be observed that "Marshal-Lerner condition" is true for Pakistan as well as for other underdeveloped countries.
Keywords: Gross Domestic Product, Consumer Price Index, Import, Export, Real Effective Exchange Rate, Nominal Effective Exchange Rate, Pakistan

Introduction

In developing countries the examination of trade policies are of much importance from the past decades. The export sector received limited aid during 1950's and registered an annual mean decrease of 5.7 percent. The export sector was given attention in 1960's and exports increased to an average of 10.5 percent annual, and in 1970's high growth rate observed in the growth of exports. It increased to an average rate of 22.3 percentage as we compared it to 1970's, 1980's and the starting years of 1990's. It showed a noticeable decrease in export growth, exports grew at 8.5 percent annually in 1980's and 7.6 percent annually in the starting eight years of 1990's.From the background studies of imports and exports, elasticity of demand has been low, and the validity of Marshal-Lerner condition is limited. It contempt the proof against Marshal-Lerner condition the results in the real depreciation to make better trade balance because after the lag of J-curve effects.

Pakistan in 2008, experienced a balance of payment issues by ensuring amount of 11 billion dollars (IMF) loan package the IMF along with ADB has been forcing Pakistan's government to carryout politically raw regeneration to build up the economy and extend the revenue base of the country. Pakistan is indebted to IMF just over 6 billion dollars. It had to make a huge repayment in six months of 2013.It is evident that the trade policy role in the development of economy has been

an important debate in the development. Whereas, the liberality in 1950's and 1960's was in favor of substitution of import and in 1970's and 1980's it advocated promotion of exports.

Economic policies are essential to create balance in the economy as well as trade. Balance of trade by implicating appropriate policy is a controversy between economists. There are different views about trade balance. Trade is a basic tool for every country to make its economic condition better. So, it is important to know the significance of trade. Trade breaks the monopolies. Trade promotes a country to produce only specialized goods and services, at the minimum opportunity cost. Trade promotes competition and decrease world prices, which provides advantages to consumers by increasing the purchasing power of the consumer. As competition increases in the country the quality of domestic goods and services becomes better. Trade promotes employment.

An important economic policy to shrink deficit of trade is known as devaluation. There is a noticeable divergence among economists debating on the desirability of devaluation in under developed countries. The proponents believe that it is a priceless tool for making the balance of payment strong because it effects absolute prices, monetary and real variables, but opponents believes that it is stag-flationary, upgrading domestic inflation decreasing real output and neglecting the improvement of account of BOP. It has been reasoned that extreme devaluation may not be good because of very low elasticity of imports and exports in under developed countries. Naqvi et al [(1983), p.151] opposed that depreciation should not have enough effects on exports, even it effects imports. Balance of payment of a nation or country demonstrates how much a country is progressed and technologically forward. The betterment in BOP is connected with the growth of the country's economy. Many underdeveloped countries are facing the problem of deficit in balance of payments.

This means that alteration in the effective exchange rate is important then alteration in nominal exchange rate for balance of payments. Hassan and Khan [(1994)] have reasoned that depreciation amend the trade balance in Pakistan. They have accounted that the Marshal-Lerner condition for depreciation is fulfilled for Pakistan and thus depreciation will be helpful in the betterment of trade balance. The Marshal-Lerner condition states that "If the sum of elasticity of demand of import and export is greater than one, then the trade balance improves by devaluation". This condition is given due importance in the balance of trade progress, but in some cases it is not fulfilled. The exchange rate policy has been an argumentative issue for underdeveloped countries, whenever these developing countries are in front of deficit of balance of payment issue they devalue their currencies.

There are two kinds of exchange rate system; one is flexible exchange rate system which advocates that demand and supply determination of exchange rate and there is no interruption of government at all, and other one is fixed exchange rate system which advocates that the rate of exchange is specified by government. The flexible rate of exchange is most desirable exchange rate system. Abba-Lerner, Alfred Marshal and their followers were having persuasions that in international market competitive advantage is resulted by depreciation of currency. Depreciation increases competitiveness, upgrades exports and moves demand towards domestic goods. Deformation in the balance of payments is one of the prevailing reason for the dull economic condition of Pakistan and many underdeveloped countries. Overall, the consequences suggest that Marshal-Lerner condition is accepted in the long run. The elasticity approach which is also called imperfect substitutes is a commonly used model in trade balance analysis. This is an important issue that whether or not depreciation makes trade balance better.

There are three ways of examining the BOP's, first one is elasticity approach represented by (Robinsen 1937) it advocates that depreciation in the currency amend the BOP if the price elasticity of foreign and domestic import demand is more than 1. J – Curve and Marshal –Lerner conditionare used in this method. Second one is absorption approach represented by Alexander (1952) this

approach is utilized to watch at the trade balance from the national income accounting point of viewMundel (1971) examined that balance of payment is a monetary process and the non-equilibrium condition in the balance payment can be improved by foreign reserves.

Literature Review

Mustafa (2000) examined whether the devaluation in the developing countries are expansionary or contradictory. According to him the issue of devaluation has since long, been a major item on the economic agendas of LDC's as a result it would be possible to decrease foreign trade deficit and improve the balance of payments. Devaluation might play important role in evacuating the market deformation and improving the price disturbances. The parallel statement interest sport cost channel forced the importance of elasticity. As real balance channel stated as the result of devaluation traded goods prices will raise to non-trade goods, as prices increase, real money balance decreases, as it falls expenditure will decrease. As trade liberalization channel may least developing countries have many limitations on foreign trade from which very important are import quotas Devaluation is used as a substitute policy. Herepanel data is used for 18 countries. In this paper he discussed the effects of devaluation on output growth in less developed countries (LDCs) .Devaluation is a policy instrument is relevant especially in the context of misalignment. F statistic test is used in this study to indicate that values of parameter are significantly different from zero together, and variables which he used are TOT, Y = real output, T = time period, G = relative size of government expenditures, REER = real exchange rate. In this paper in order to analyze empirically whether or not devaluation results in output contraction in LDCs data from 18 sample countries are used in a fixed effect procedure more important than the above findings is that a systematic pattern was observed as far as the effect of devaluation on output growth is concerned.

Derrick and Guglielmo (2001) examined real exchange rate effects on the balance of trade which is a co-integration approach .Elasticity approach is most commonly used in balance of trade analysis. Here they used single equation estimators are used for estimation which are more desirable small sample properties data at which analysis is done is time series data Johansen procedure is estimated here in the study ARDL technique is used for analysis and FM-OLS method is used which were put forward by Philips and Hansen (1990) variables used were X = volume of exports, P = multiplied by domestic prices, M = volume of imports, P*= foreign prices, S = nominal spot exchange rate. First they used co-integration VAR in their model. Secondly, VARDL which treats world output as exogenous. Thirdly, they used single equation ARDL which treats all the variables. There is a considerable heterogeneity, overall the results suggest that the Marshal-Lerner condition is satisfied in long run with their J.curve effects in short run.

Zehra and Aurangzeb in (2002) analyzed long run and short run impact of devaluation on Pakistan trade performance. In this paper we investigate if the Marshal-Lerner condition is held true for Pakistan in long run and in short run then the price elasticity of export and import demand are inelastic. Here the data which is used for analysis is time series data and covers the period from 1980 to 2004, in this data co-integration technique is used many methodologies is also applied on this studies such as ordinary least square (OLS), (2SLS), (3SLS), J.J methodology was used for estimation here for j. -curve by using Error Correcting Modeling Approach the j.curve for Pakistan is traced. Here variables are used are M =real imports.RPM =relative price of imports, X =real exports. To check co-integration between variables ADF (augmented dickey fuller test) and P.P (Phillips Peron) test are applied along with that Johansen technique is used to test the existence of co-integration. Thus the analysis confirms that real depreciation of Pak rupee may be used as policy tool to improve the trade balance.

Khan et al in (2003) studied Pakistan export demand income and price elasticity estimates.

Here there are empirical studies on Pakistan export demand various techniques such as (ARDL) is used to find out long run relationship among variables. The data which is used to study is time series data which covers period from (1981 to 2010) and it is collected from various sources. Variables in this article are used which were REER = real effective exchange rate, RX = real export, FRGDP = weighted real gross domestic product all variables used are constant in prices. In this paper the export demand function is reexamined the economic approach of ARDL is employed using annual data for the year 1981 to 2010.

Sadia, B. in (2006) determined import intensity of exports of Pakistan this study provides the disaggregated long run import estimates which are 16 % of capital goods and 24% of raw goods. Here the data used is time series which are taken from different data sources. In this study various methodologies are used for investigation from which OLS (ordinary least square) technique is used to investigate the imported goods presence as it is one of the main variables. The study covered the aforesaid weakness by restraining the demand and supply shifters to estimate an export function which is semi reduced. It shows the conduct of imports to the domestic production value, thus the imported inputs contributed approximately 18% share in total value of domestic production. Similarly, Khan and Knight (1988) estimate the import compression and export performance in developing countries through 2SLS method, on the other hand, Koukouritakis in (2004) his model based on the previous empirical work by Khan and Knight (1988) he had used 3SLS approach to estimate the trade model.ADF test is also applied to check the stationary of data. She used variables in her article which are EX = export index, CM = index of capital import, M = quantum index of import, RM = quantum index of industrial raw material, RPI = relative price index, NEER = nominal effective exchange rate, CP = cotton production here NEER and RPI were negatively related with exports. The objective of this study is to examine and estimate the long run dynamics of real exports and imports of Pakistan. This study provides empirical evidence in support of the hypothesis that imports of intermediate and capital goods are critical inputs in the export production of the country.

Oskooee and Cheema (2009) canvass short run and long run effects of currency depreciation on bilateral trade balance between Pakistan and its major developing partners. The data which is used is time series quarterly data is used from 1980 to 2003 for empirical analysis which is collected from WDI ordinary least square (OLS), (2SLS), techniques are used to test variables. Aftab and Aurangzeb who used Johansen and Juselius method and quarterly data to show that long run Marshal - Lerner condition for Pakistan is satisfied .They used Johansen co-integration approach ADF(augmented dickey fuller test) and unit root test was also applied. They used variables TBi = Pakistan's trade balance with her trading partners, Yi =measure of real GDP for country, REXi = bilateral real exchange rate. Previous research on Pakistan relied on aggregate date for J curve but this study went one step further and employed disaggregated bilateral trade between Pakistan and other trading partners.

Janjua (2007) examined Pakistan external trade: does exchange rate misalignment matter of Pakistan? The prime objective of the current city is to evaluate the suitability of existing exchange rate policy for Pakistanis external trend .Time series data is used in this study and ADF (augmented dickey fuller) test is applied to check the stationary of data, which fulfills the criteria for estimating any long run relations. OLA (ordinary least square) has been applied for the estimation of results. The Engle Granger co-integration technique is used for estimation. Variables which have been used are GDP,BOP,CAD(current account deficit),ERER (equilibrium real effective exchange rate, TOT .This paper primarily aimed at assessing the significance of the exchange rate on Pakistan's foreign trade.

Oskooee and Kara (2008) examined relative responsiveness of trade flows to a change in

prices and exchange rate in developing countries. Data used is time series the data is extracted from the IMF financial statistics. Tests which are applied on the data are OLS, F-test, CUSUM and variables used are PD = price of domestic goods, E = nominal effective exchange rate, Y = domestic income, PM = price of imports, PX = price of exports, PXW = world export price index YW = index of industrial production. In this paper we follow the methodology of Bahumani-Oskooee and Kara (2003) and consider the experiences of several developing countries. The main purpose of this paper is to test the relative responsiveness of the trade flows to changes in exchange rate and changes in relative prices by drawing data from developing countries.

Baluch and Bukhari (2010) examined price and income elasticity of imports; in case of Pakistan, this study covers the period from 1971 to 2009.Here time series data is used what distinguish this paper from the earlier studies is the use of Robust estimation technique of auto regressive distributive lagged model ARDL it is obtained from international monetary fund financial statistics. variables which are used are GDP =gross domestic product, ER = exchange rate various techniques are used such as ARDL, OLS, Error correction model (ECM) ADF test is also done to check whether data is stationary or not. The outcome of the study holds policy implications for the monetary authorities as well as the fiscal authorities in Pakistan, exports of goods in GDP is almost 17 %.

Bushra and Aliya (2011) examined trade openness: new evidence for labor demand elasticity in Pakistan's manufacturing sector according to them, trade liberalization is favored primarily on the grounds of facilitating economic growth .Panel data is used in this note and covers the period from 1970/71 to 2000/2001. The estimation technique is used in common intercept model (CIM). Panel data approach is used to captured long term fluctuations .A pooled ordinary least square (OLS) technique is used in this study, but the limitations of OLS in this sort of study prompt interest in alternative methods such as (FEM) fixed effect model variables which are used such as Y = output, W= wages, C. To explain the note some traditional theories such as Hecksher-Ohlin theory is used .Here they quoted some reference of evolution of trade policy in Pakistan. This paper is primarily aimed at assessing the significance of the exchange rate on Pakistan's foreign trade.

Malik and Chaudhary (2012) examined the structure and behavior of Pakistan's imports from selected Asian countries: an application of gravity model. The data which is used is time series and it is used cross sectional. They used GLS (generalized least square) with balanced panel data technique variables which are used are GDP = gross domestic product, ER =exchange rate, IN = inflation rate SAC and the dependent variable is import flows to analyze the impact of trade policies researchers generally used gravity model Tinbergen (1962) was the first to conceive the gravity model while Poyhonen (1963) was second one who used. This model used gravitational force concept to explain the volume of trade.

Upadhaya et al. (2013) examined exchange rate adjustment and output in south Asia. In this study the focus is done on the relationship between currency devaluation and output growth. In this article the data which is used here is panel data from many countries of south Asia the data is taken from world development indicators. Upadhaya (1999) used two approaches to examine the effect of exchange rate on output the first one includes the real exchange rate directly and the second enables us to find out whether any effect originates from a change in the nominal exchange rate. In this study to ensure the stationary of the panel data, here panel unit root test is applied, along with that the PEDRONI'S panel co-integration test was applied. This article examines the effect of currency devaluation on aggregate output in the countries of south East Asia.The estimated results suggest that the currency devaluation is contractionary in the short run.The model is estimated using a fixed estimator which proposed that the devaluation of the currency in the short run is contractionary also

in the immediate run but in long run it is not. Variables which are used here are TOT = terms of trade, ER = exchange rate, and REPR.

Iqbal et al. (2014) studied the dependency of Pakistan's economy's demand for imports is highly concentrated in a few products and import markets. Here our objective is to analyze Pakistan's structure of imports with special reference to regional economic integration. Different methodologies and data from different sources are used in this study from which ADF (augmented dickey fuller) unit root test is applied ARDL (autoregressive distributed lagged model) is also applied to test co-integration approach. In this article time series data is used here CUSUMS cumulative sum of square is also used and variables which are used are GDP per capita, domestic prices, import prices from this study it can be concluded that this study indicates the existence of constraints to trade facilitation and physical infrastructure, in this study it also canvass that if Pakistan is to grow at 7 to 8 % it will continue to experience strong growth in imports.

Azraet al (2015) examined what determines the BOP (balance of payment) of Pakistan. The stability of BOP is related to the economic growth of the country. The data which is used is time series, First elasticity approach is used to justify the devaluation of currency presented by (ROBINSEN 1987), Second is absorption approach presented by (Alexander 1952) ARDL technique is used, different researchers utilized different econometric technique e.g. (Johnson Jeselus 1990), OLS , Engle Granger (1987).annual data is used from time series data for the period 1972 to 2013 variables which are used are BOP (balance of payments) M1= money supply, RER = real exchange rate, IR = interest rate, FB = fiscal balance, RGDP = real gross domestic product. Here they also used Jerqua-Berra Normality test ARCH test is done to check hetroscedasticity .

Conceptual framework

In order to examine the effect of currency devaluation on terms of trade the study inculpate the Marshal Theory Of Price Elasticity Of Demand it is very crucial theory in the approach of elasticity's to the terms of trade. It is named on the name of economist who discovered it who was: "Alfred Marshal (1842-1924)". Abba Lerner (1903-82) and John Robinson (1903-83). Essentially, the Marshal-Lerner condition is an expansion of "Marshal Theory of price elasticity demand to foreign trade.

The condition requires the answer of the question: how the real depreciation in currency of the country makes terms of trade better? Answer is that let terms of trade is expressed in the home currency units at one ultimate case, if the import demand has elasticity zero then the import value in home currency will increase with complete maximum percentage of the real devaluation. For the terms of trade to become better, the export value in home currency has increase. This is the case when the elasticity of export is more than one. Let the elasticity of demand for export is equal to zero than, the devaluation, the export value in the home currency remain unchanged. For the terms of trade to improve a real devaluation, the imports value in home currency has to decrease. So, what the MLR condition express is that, in the event of real depreciation, if elasticity is more than one, but their sum is greater than one then the boost in imports will be more then set-back by the increase in exports and trade balance and terms of trade will become better.

Mathematical derivation of Marshal-Lerner condition:

It is defined as the one unit price of foreign currency in terms of the domestic currency Using the description, the trade balance denominated in domestic currency (with normalize the domestic and foreign prices to one) is given by:

$$N_x = X - Qe$$

Here X represents exports, and Q imports.

Differentiating with respect to e gives:

$$\frac{\partial N_x}{\partial e} = \frac{\partial X}{\partial e} - e\frac{\partial Q}{\partial e} - Q$$

Dividing both sides by X:

$$\frac{\partial N_x}{\partial e}\frac{1}{X} = \frac{\partial X}{\partial e}\frac{1}{X} - \frac{e}{X}\frac{\partial Q}{\partial e} - \frac{Q}{X}$$

At equilibrium,

$X = eQ$. Therefore:

$$\frac{\partial N_x}{\partial e}\frac{1}{X} = \frac{\partial X}{\partial e}\frac{1}{X} - \frac{1}{Q}\frac{\partial Q}{\partial e} - \frac{1}{e}$$

Multiplying both sides by e:

$$\frac{\partial N_x}{\partial e}\frac{e}{X} = \frac{\partial X}{\partial e}\frac{e}{X} - \frac{\partial Q}{\partial e}\frac{e}{Q} - 1$$

This can be expressed as

$$\frac{\partial N_x}{\partial e}\frac{e}{X} = \eta_{Xe} - \eta_{Qe} - 1$$

Here, η_{Xe} and η_{Qe} are usual notation for the exports and imports elasticity for the exchange rate respectively.

In order for depreciation in the value of a country's currency (i.e. an increase in e using above definition) its trade balance is affected positively, the left hand side of the equation must be positive (i.e. for a rise in e to cause a rise in N_x). Therefore:

$$\eta_{Xe} - \eta_{Qe} - 1 > 0 \Rightarrow \eta_{Xe} - \eta_{Qe} > 1$$

Which can be also be written as:

$$\eta_{Xe} + |\eta_{Qe}| > 1$$

If the initial situation is a trade deficit, then the Marshal-Lerner condition is necessary but not sufficient because it advocates that devaluation in exchange rate will cause improvement in terms of trade if the absolute sum of the long-term export and import elasticity of demand is above then 1 (unity) if the domestic currency depreciates exports become cheaper and imports become expensive, due to relative price change.

Model Specification, Data & Methodology

Here in this part of study the analysis is shown by two equations which represents the model properly it is clear that TOT is the variable which is dependent on other variables like GDP, CPI, NEER, REER, EXP, IMP this equation also contains residual term which is used to eliminate or overcome errors and contamination in the model caused by other factors which may be included or not included in the model.

Model Specification:-

Equation 1:

Y= f (TOT)   ------- Eq1

Where equation 1 represents as

TOT= terms of trade

Y= output

Equation 2:

TOT=β_0+ β_1 (GDP) +β_2 (EXP1) +β_3 (IMP) +β_4 (REER) + β_5 (NEER) +β_6 (CPI) + $\mathcal{E}$ --------- eq2

Where sign represent

TOT= terms of trade.

REER=real effective exchange rate.

NEER= nominal effective exchange rate.

CPI= consumer price index.

EXP01=Exports

IMP= imports

These are some specific variable that effects terms of trade such as Gross domestic product, imports, exports, real effective exchange rate, nominal effective exchange rate and consumer price index.

In equation (1) output is the function of terms of trade but in the 2nd equation terms of trade are the dependent variables of other variables.

$$\Delta \ln(TOT) = \beta_o \Sigma \beta_1. \Delta \ln(TOT_t -) + \Sigma \beta_2. \Delta \ln(GDP_t -) + \Sigma \beta_3. \Delta \ln(REER_t -)$$

i=0 i=0 i=0

$$+ \Sigma \beta_4. \Delta \ln(NEER_t -) + \Sigma \beta_5. \Delta \ln(CPI_t -) + \Sigma \beta_6. \Delta \ln(IMP_t -) + \Sigma \beta_7. \Delta$$

i=0 i=0 i=0

$$\ln(EXP1_t -) + \beta_8 \ln(TOT_t -) + \beta_9 \ln(GDP_t -) + \beta_{10} \ln(REER_t -) + \beta_{11}$$

i=0

$$\ln(NEER_t -) + \beta_{12}\ln(CPI_t -) + \beta_{13}\ln(IMP_t -) + \beta_{14}\ln(EXP1_t -) + \mu_t$$

i=0 i=0   i=0

Here Δ represents the first difference; q is optimal lag length, β_1, β_2, β_3, β_4, β_5, β_6, β_7 present the dynamics which are short run in the model and β_8, β_9, β_{10}, β_{11}, β_{12}, β_{13}, β_{14} are long-run elasticity. When we step towards the ARDL approach, we examined the integration level of all Variables in the model because, if any of the Variable is I(2) or above then that, then the used ARDL approach is not justified. For this purpose, we implemented Augmented Dickey-Fuller Test (ADF) to this model. In this practice to discover the Long-run relation in the existing model, we use Bound Test applying F-statistic with two bounds that is Upper Bound and Lower Bound. The null hypothesis adopts that there is no co-integration in the variables of our model. If the value of F-statistic in Bound test is higher than the Upper bound's value, then we came to know that the null hypothesis is discarded or we do not have sufficient evidences to accept null hypothesis. On the other part, if F-Statistic value is below the Lower bound then we came to know that we have accepted the null hypothesis or we do not have sufficient evidences to reject the null hypothesis. If its value is between the two bounds that is upper and lower bounds, the test is mysterious. After applying co-integration test, we use Schwarz Bayesian Criterion (SBC) to select the appropriate or best variable's lag lengths. The error correction form of the above equation is:

Following:

q₁   q₂   q₃

$$\Delta \ln(TOT) = \beta o \Sigma \beta_1. \Delta \ln(TOT_t -) + \Sigma \beta_2. \Delta \ln(GDP_t -) + \Sigma \beta_3. \Delta \ln(REER_t -)$$

i=1   i=0   i=0

$$+ \Sigma \beta_4. \Delta \ln(NEER_t -) + \Sigma \beta_5. \Delta \ln(CPI_t -) + \Sigma \beta_6. \Delta \ln(IMP_t -) +$$

i=0   i=0   i=0

$$\Sigma \Delta \beta_7. \Delta \ln(EXP1_t -) + \lambda ECt - + \varepsilon t$$

i=0

Here q 1, q 2, q 3, q 4, q 5, q 6, q 7 presents the Optimal lag length, is the pace of parameters adjustment. EC shows the Error Correction Term which is in the result from Long-run relationship of variables.

Description of variables

In this part of analysis we will shortly elaborate variables including dependant and independent variables. Previous study analysis and literature review enabled to select the variables TOT is used as dependant variable in this paper and consumer price index, gross domestic product, imports, exports, nominal effective exchange rate, real effective exchange rate are used as independent variables.

Terms of trade (TOT)

The idea of terms of trade was prefaced by "J. S Mill" for computing the gains between trading countries .TOT is a quantitative relation between two goods. Terms of trade is the worth of the export of the country compared to the imports of that country? Terms of trade of a country is computed by dividing export value by the import value of that country and then taking the product of that computed value by 100.If the calculated country's TOT is below 100 %, it means that country is buying more imports or spending more capital (money) to buy imported goods, but if the value of TOT is more than 100 % it means that country is earning more capital (money) in the form of selling exports.

Gross Domestic Product (GDP)

Gross domestic product is one of the most commonly used measures of an economy's output. It is defined as "The total value of goods and services produced within a country's borders in a specific time period –monthly, quarterly and yearly" GDP is a correct indicator of a size of economy. Samuelson and Nordau's by applying efforts sum up the significance of the domestic accounts and GDP in their textbook "Economics". They like the power of GDP to given a thorough picture of the condition of the economy to that of a satellite present in space that can monitor the weather across the continent. GDP makes able policy makers and state banks to examine that whether the economy is contracting or expanding, whether the economy requires a boost, and if an economy is experiencing the threat such as inflation. The national income and product account (NIPA) which makes the basis for monitoring the GDP which permits policymakers, economist and business analysts to analyze the effect of these variables as monetary policy and fiscal policy, shocks in the economy like increase in oil price, tax,on the entire economic and on particular of it. With better policies and institutions, national account has contributed to important decreased in the sensitivity of business cycles.

Consumer price index (cpi)

The Consumer Price Index (CPI) is a measure of alteration in the level of price of a market bulk of consumer goods and services consumed and purchased by the households. TheCPI is a statistical approximation is computed by utilizing the sample price of characteristic commodities and there prices are taken in different intervals of time. Sub-indexes are calculated for different status and sub-classes of commodities and services that have been attached to construct the whole index with weights describing their part played in the consumer total spending covered by index. Inflation can be measure by utilizing the annual percentage change in consumer price index. A CPI can be used to monitor the real value of cost of labor, salaries and pensions, for changeable prices and for depreciating monetary degrees to represent alteration in real values. In many countries, the CPI along with the census and the USA national income and product account, which is one of the most related, noticed national economic statistics.

Imports

Goods and services are imported to provide the rare products to local market at lower price and better quality than competing goods produced in the local market. The products that are imported are not available in the domestic market.There are three types of importers: "Looking for any product around the world to import and sell.", "looking for foreign sourcing to get their products at the cheapest price.", "Using foreign sourcing as part of their global direct import represents to a type of business import which includes are trailer and aforeign manufacturer located outside the borders. A retailer usually purchases goods designed by local companies that can be manufactured outside the borders. In a direct-import strategy, the retailer ring way the domestic supplier (middle man)and purchases the final good directly from the producer.

Imports are based on transactions in goods and services to a resident of a person living in the boundaries of a country (such as a nation) from the person living outside the boundaries. A general elaboration of imports in domestic accounts is given below:

- An import of a good happens when there is an alteration of ownership from a person living inside the borders from person living outside the borders; this does not necessarily implement that the commodity crosses the frontier.
- Smuggled goods must be included in the imports.
- Services of imports consist of all services interpret by non-residents of nation to residents of nation..
- any direct purchases in domestic accounts by resident living outside the economic border of a nation are monitored as imports of services; so all the expenses paid by the tourists in the economic borders of other country are considered part of the imports of services.
- International flows of illegal services must be included in the account.

Exports

The term Export means the shipping of goods and services out of the country's borders. The producer or retailer who sells the goods is known as Exporter and is present inside the sending country of export. Export also involves any product or information or any kind of document which is being mailed, delivered by hand or shipping though air, uploaded on internet or send by the form of email fax or on telephone conversation. The advantages of exports are the firm's own assets, experience, and the ability to develop products at low cost. The advantages of a specific market are a combination of market potential and investment risk. Internal advantages are the benefits of retaining acompetition within the country and threading it though the chain rather than gains to license or sell it. Companies that have lesser levels of ownership advantages either do not get entry to international markets. Exporting needs specially lower level of investment than other ways expansion. In other words, theusual return on export sales may not be enormous, but there is no risk at all. Exporting permits managing persons to practice operational limitation but does not provide them the option to practice as much marketing control.

Nominal effective exchange rate (neer)

It is a quantity of a currency value inverse a weighted average of many foreign currencies. WhenNEER of a country enhances it means that the local value of currency is increasing as compared to the currencies of the other trading partners. NEER is actually a disturbed weighted average value of the currency of a country compared to the all other major currencies, with in the index of many currencies. The significance of weights are specified by the country itself according to the value of currency, which is determined by the balance of trade.A greater NEER coefficient (which is upper then 1) means that the currency of the trading home country have value more than the currency being imported, and lesser NEER coefficient (which is under 1) means that the currency of the trading home country have less value then the traded currency. The NEER shows the

approximation of relative price of an imported goods which a consumer pays. It is calculated by the formula given below:

Formula of NEER

$$NEER = \prod_{i=1}^{n} e_{t,KM}^{+}{}^{wi}$$

Where:

N – Number of competitor countries in the reference group of trading partners

KM (expressed in number of units of foreign currency per KM)

t – Period

w – Trade weight assigned to the currency of trading partner

i – It represents the currencies of trading partners (CHF, CNY, CZK, EUR, HRK, HUF, LTL, MKD, PLN, RON, RSD, RUB, TRY, and USD)

Π – It represents the symbol of multiplication.

The weights implemented on the trading partner are computed from the part in the production of goods for international trade.

The enhancement of NEER diverge the nominal value of "KM" against the trading partner currencies, while the depreciation of NEER diverge the decrement of "KM".

As we discussed above, that nominal effective exchange rate is nominal because their exchange rate monitors the exchange value in numerical terms and it do not measure anything else, other factors such as currency's purchasing power.

The nominal effective exchange rate defines the level by which the domestic currency exchange rate changed the rate of exchange of trading countries related to base year.

However, the alteration in nominal effective exchange rate does not bring changes in the currency's purchasing power. For calculating this REER is used.

The NEER fits bilateral nominal exchange rate by employing trading data (weighted) of its partners, and REER consider difference in price level between trading partners.

Nominal effective exchange rate is usually used as indication of external competitiveness.

NEER is computed as an average (weighted) of nominal bilateral exchange rate of domestic currency in competition of foreign currency,

According to the computation method, NEER can be represented as:

$$NEER = \prod_{i=1}^{n} \left(\frac{si}{si*} \right)$$

Where:

- n – number of countries (currencies) from the basket;
- s_i – exchange rate of the national currency against the currency of the country i;

- s_i^{*} – exchange rate of the national currency against the currency of the country i during the base period;
- w_i – country's weight (of the currency).

Real Effective Exchange Rate (Reer)

The Real Effective Exchange Rate (REER) is the country's average (weighted) of aCurrency as Compared to an Index or group of other major Currencies affected by inflation. The weights are examined by comparing the comparative trade balances in terms of currency of one country compared with each other country within the index. Various factors compute exchange rates, and all are related to the trade relationship among any two countries. Recollected exchange rates are comparable and can be represented as a comparison of two countries currency. The following are

some of the Principals that determine the Exchange Rate betweentwo countries. These factors having no particular order; like other attributes of Economics, The Comparative significance of these factors is subject to more discussion. A country which has a constant Low Inflation Rate express an increased Currency value, as its purchasing value rises as compared to the other currencies. During the Twentieth century last half decade, countries which have less Inflation which areGermany and Japan, while some will achievelow inflation rate in future. Exchange rate, inflation rate and Interest rates are all extremely interdependent. Increased interest rate declares lenders in an economy having a higher return compared to the other countries. Therefore,increased interest rate attracts Foreign Capital and cause in the increase in exchange rate. The effect of greater interest rate is declined, however, if country's inflation tare is very much higher. Then, the other countries:

Data and Methodology
Data
For constructing the model, I took the time series data of 34 years. This data covered the time period from 1980-2014. In this notes, the econometric techniques (ARDL and Granger causality test) are applied. I used secondary data from different sources. The sources of data are: - SBP (state bank of Pakistan), SBP (Pakistan bureau of statistics), WDI (world development index), IMF (International Monetary Funds) and different economic surveys.

Table 1: Variable Description

Variable	Description of variables	Unit of measurement	Expected sign	sources
TOT	Terms of trade	Million Rupee		PBS
CPI	Consumer price index	Million Rupee	Negative (-)	SBP
GDP	Gross domestic product	Million Rupee	Negative (-)	IMF
NEER	Nominal effective exchange rate	2010=100	Negative (-)	HBS
REER	Real effective exchange rate	2010=100	Positive (+)	WDI
EXP01	Exports	Million Rupee	Positive (+)	PBS
IMP	Imports	Million Rupee	Negative (-)	PBS

Source of data
To make our results of research reliable, we require a reliable set of data so annual data has been taken from the Pakistan bureau of statistics (PBS), federal bureau of statistics (PBS), Pakistan economy handbook of statistics (HBS), State bank of Pakistan (SBP), world development index (WDI) and IMF. To examine the variables relation this analysis is based on the data taken from 1974 to 2014. This time frame has been chosen due to data availability.
Methodology
The ADF (Augmented Dickey Fuller) test is a statistical method which is used to examine whether the variables are significant or non-significant .and the second technique which is used for this purpose is ARDL method. ARDL is the statistics technique which is attempted to find the function which most close and relevant approximates of the data. It is an approach to fitting a model to the observed data.

Procedure of estimation

Estimation process includes various steps. The process of estimation has done with the software E-views (9.5). The analysis procedure used time series data to check its properties. Stationary of variables is also checked by E-views.

Stationary affect of data

It is significant in our estimation to check the stationary effectof data. Stationary affect in the model arises when the mean and variance of the model are same (constant) and non-stationary of variable needs the condition of non-constant mean and variance. The spurious regression issue may contaminate the time series data, the spurious regression problem could be avoided by checking the data stationary, that data is stationary or not.

Unit root test

This test is implemented to examine the stationary nature of our related variables. If the coefficients which are estimated have "spurious regression" then there coefficients will not have the assumption of BLUE (best linear unbiased estimate). To escape from this problem of spurious regression the ADF (augmented dickey fuller) test which is developed by dickey and fuller is used. They formulated this process to check the stationary condition and then f-version that assembled the lagged value of dependant variable to control the problem of autocorrelation in residual term.

Hypothesis Testing

(a)Null hypothesis:-

H_0: data is non-stationary.

(b)Alternative hypothesis:-

H_1: data is stationary.

If F. Value computed is greater than critical value than, the null hypothesis data is rejected and alternative hypothesis will be accepted. For the model estimation simple OLS will be used if all the variables are stationary at level $I(0)$ but, if the variables are stationary at first difference $I(1)$ the Johansen co-integration method will be used, if the stationary impact of variables is mixed order at level as well as at 1st difference then ARDL technique will be used (which was developed in 2001).

Co-integration analysis

Word co-integration indicates that there is long run relationship present between the variables which are non-stationary at level $I (0)$. There are various co-integration methods to analyse the long term relationship among variables some famous methods of co-integration are Engle-Granger (1987) and Johansen and Jeselius methods. Engle-Granger is two stepped residual base method and modern ARDL method now a days.

ARDL Approach

Pesaran et al (2001) represented the ARDL technique to check the long run and short run relation among the variables. But only one condition could be estimated through ARDL method. Moreover ARDL is helpful when sample size is small (Narayan 2004). Johansen and Engle Granger are thought not appropriate to use if sample size is small. When the integration of variable of order zero $I(0)$ or $I(1)$ then ARDL is preferred and if there is a mixture of stationary effect of variables at level and first difference then ARDL is also used. Pre testing of variables are required by Johansen co-integration method.This paper also uses ARDL technique which assists us to choose appropriate method of estimation further. Wald test is then used as a next step to check the long term relationship between variables, that this relation exist or not and in the end calculation of short and long run coefficients will be done.

Due to authentication of ARDL method which is to be implemented at small samples, this study uses ARDL method. If model includes dummy variables then to analyse co-integration ARDL is used. ARDL would not show authentic results when variables are integrated of order $I(2)$. Hence

in this case ARDL is not used. ARDL technique has two phases first phase used F. statistics to check the long run relation in the model. In next phase the coefficients of long and short run relationship are checked and include the conclusion application of ARDL technique.

The Wald test (F. Statistics)

When we apply ARDL on the study the other step after ARDL is to apply Wald test and check the f statistics to examine the long run relation between variables. To calculate f statistics of variables, Wald test is applied on lagged values. Then the computed value will be compared with the f statistic table value.

When we are confirmed that long run relationship exist between variables then, in the result we estimate the short term and long term coefficients of our model, for this estimation of coefficients choice of lag length is necessary. Many criteria's are there to choose lag lengths but among them AKIKE information criteria (AK), Hanna and Quinn, R square, SCHARTZ BAYSEIN criteria (SBC) are the popular methods.

Estimation of short and long run co-efficient of the model

When we check whether variables are stationary and making sure about the relationships of variables next step is to use ARDL methodology of co-integration to estimate long and short run estimate of variables, to analyse the effect of independent variables on TOT.

Error correction term

ECM represents the pace at which the adjustment of stability is achieved most importantly this term makes sure the presence of stable long run relationship among variables. This term monitors the instability of the last period balancing that has precious economic effect.

Test for stability:

To interpret the results properly, it is compulsory to know the parameter stability and for the policy makers for making good policies as well. Non stability conditions can make the results wrong. To analyse the coefficients stability the (CUSUM) cumulative sum of recursive residuals will be used. If plotted lines are inside the critical boundaries our model is stable and acceptable as well. In all such circumstances our model will be appropriate for policy making.

Table 2: Descriptive Analysis

Variables	Mean	Maxi.	Mini.	Std.dev	Skewness	Kustosis	J-B	Prob.
TOT	103.475	150.00	57.6261	26.0223	-0.5505	2.0608	3.57767	0.16715
GDP	4.83383	10.2157	1.01439	2.10391	0.3456	2.63678	1.04166	0.59402
IMP	20.1541	24.099	14.6332	2.49619	-0.6282	2.64880	2.90822	0.23360
EXP01	13.6266	17.3593	9.24068	2.29405	-0.1295	2.01800	1.76204	0.41436
NEER	172.373	330.66	56.0660	99.2397	0.37601	1.5824	4.39881	0.11086
REER	139.109	228.980	93.7208	47.8030	0.73336	1.78281	6.20610	0.04491
CPI	145.9139	236.7150	49.3170	55.68669	-0.0779	1.95053	2.08855	0.35194

Source: Author's calculation (E-Views 9.5).

This includes all variables interpretation. From the above table it can be seen that the mean value of TOT is 103.4752. Its maximum value is 150.0000 and minimum value is 57.62615. TOT is negatively skewed because its value is less than zero. Thekurtosis value of TOT shows that it is "Platykurtic" and is normally distributed. The mean value of GDP is 4.833837. It is positively skewed. The kurtosis value shows that GDP is "messokurtic". The value of Jarque-Bera indicates that it is normally distributed. The average value of REER is 139.1090. The table shows that REER

is positively skewed. The kurtosis value illustrates that it is "Platykurtic" because its value is less than 3 and the value of Jarque-Bera shows that the variable is normally distributed.The variable NEER has average value172.373. Its maximum value is 330.680and minimum value is 56.0660. The value of Skewness shows that NEER is positively skewed. The kurtosis value indicates that NEER is Platykurtic. The value of Jarqua-Bera shows that NEER is normally distributed.The variable CPI has an average value 145.913. Its maximum value is 236.715and minimum value is49.3170. The value of Skewness which is less than Zero shows that CPI is negatively skewed. The kurtosis value indicates that CPI is Platykurtic. The value of Jarque-Bera shows that CPI is not normally distributed.The variable IMP has average value20.15411. Its maximum value is 24.09992 and minimum value is 14.63323. The value of Skewness shows that IMP is negatively skewed. The kurtosis value indicates that the selected variable is messokurtic. The value of Jarque-Bera shows that IMP is normally distributed .The variable EXP has average value13.62664. Its maximum value is 17.35930 and minimum value is9.246608. The value of Skewnessindicates that WPI is negatively skewed. The kurtosis value indicates that it is "Platykurtic". The value of Jarque-Bera shows that WPI is not normally distributed.

Table 3: Correlation

	TOT	GDP	IMP	EXP01	NEER	REER	CPI
TOT	1						
GDP	0.298461	1					
IMP	0.231644	0.242654	1				
EXP01	-0.135808	-0.209548	-0.352788	1			
NEER	0.755420	0.491356	-0.712657	0.964537	1		
REER	0.629493	0.416696	0.491356	-0.712657	0.964537	1	
CPI	-0.851105	-0.395216	-0.379518	0.445552	-0.962744	-0.88642	1

Source: computations are carried out with the assistance of E-views 9.5(Quantitative software)

In the present model, we offer is the correlation matrix for terms of trade, Real effective exchange rate, Gross Domestic product, Nominal effective exchange rate, consumer price index, Import, export. As all the variables are stationary so that correlation is significant for these variables. The table evaluate air wise zero order correlation in order to study the degree of association among the independent variable. The Correlation table shows that there is negative relationship between TOT and GDP. TOT also has negative relationship with NEER, and IMP. The dependent variable TOT has positive relationship with REER and EXP. The correlation between TOT and GDP is 0.298461 shows no multi-collinear data. The correlation between TOT and REER is 0.629493 shows no multi-collinear data. The correlation between TOT and IMP is 0.231644 shows no multi-collinear data. The correlation between TOT and EXP is -0.135805 shows no multi-collinear data. EXP and REER have positive relationship. The explanatory variables CPI and NEER are negatively related to each other.

ADF test is applied to check the unit root in variables. According to hypothesis developed.

H0 : data is significant

H1: data is not significant

In ADF table term I(0) shows that Stationarity variables exists at level term I(1) represents that Stationary exists at first difference . A comparison is done by equating the estimated value in the critical value of ADF.

Table 4: Unit root test

Variables	Level		1st difference		Conclusion
	Intercept	Trend and Intercept	Intercept	Trend and Intercept	
TOT			-6.9404	-6.9413	I(1)
CPI			-4.202	-4.2255	I(1)
GDP	-4.0729	-4.824			I(0)
REER			-5.922	-6.159	I(1)
NEER			-3.239	-5.046	I(1)
IMP			-7.995	-7.901	I(1)
EXP01			-6.404	-6.399	I(1)

We can say that variable is stationary, when it`s computed value is less than table value.

The above table shows that all variables are stationary at first difference except GDP . GDP is stationary at level.

AUTO -REGRESSIVE DISTRIBUTED LAG MODEL (ARDL)

This test is employed by two steps

(1) First test is involving of the presence of long term relation among variables.

(2) and the second step involving that if long term relation exist between variables then taking the coefficient of both long and short term relation are estimated.

Table 5: Distribution of Lag

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-856.0605	---	4.3011	46.65192	46.95669	46.75937
1	-601.8303	398.5231	6863966.1	35.55840	37.99654	36.41796
2	-550.9270	60.53370	8336105.1	35.45551	40.02704	37.06719
3	-465.1608	69.54013	286478.1	33.46815	40.17305	35.83194
4	-255.3358	90.73513*	6052.885*	24.77491*	33.61319*	27.89082*

*indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Table 6: Estimate Equation

R^2	Adjusted R^2	Akaike	Schwarz	Hannan	Durbin- Watson
0.9987	0.9908	4.413	5.8069	4.9048	2.212
0.9879	0.9627	6.3015	7.4220	6.7002	2.4188
0.9917	0.9709	6.0071	7.1507	6.5062	2.6616

Table 7: Bound test

F-Statistics	19.17689	
Critical Bound Value	LCB	UCB
10%	1.99	2.94
5%	2.27	3.28

It is a kind of test in which of test in which the value of f-statistics is above then the value of upper critical bound this represents that there is long term relationship is present between the variables.

Table 8: Diagnostic test

Test Statistics		
Serial Correlation LM test	Lagrange multiplier test	0.2599(0.7868*)
Normality test	Based on the test of Skewness And kurtosis of residuals.	0.7223(0.6968*)
Hetroscedasticity	Based on regression of squared residuals on square fitted values.	3.0340(0.0086*)
Functional form	Ramsey's RESET test using the square of fitted lines.	5.1602(0.0856*)

The diagnostic table represents there is zero serial correlation between the variables and all the variables which we estimated are distributed normally. Probability value in the hetroscedasticity table configure that hetroscedasticity is not present between the variables. The other form is functional form which shows that there is no specification error in the model.

Table 9: Short-Run Coefficients Estimation

Variables	Coefficients	Std. Error	t-Stat	Prob.
$\Delta(TOT(-4))$	0.4115	0.083641	4.9209	0.0006
$\Delta(CPI)$	-2.2244	0.2744	-8.10557	0.000
$\Delta(REER(-2))$	0.5149	0.1857	2.7719	0.0197
$\Delta(NEER(-2))$	-0.9488	0.1760	-5.3906	0.0003
$\Delta(IMP(-2))$	0.41688	0.3355	1.2423	0.2424
$\Delta(EXP01)$	4.9941	0.7198	6.9380	0.000
$\Delta(GDP(-2))$	-1.4313	0.3945	-3.6275	0.0046
CointEq.	-1.0399	0.100	-10.299	0.000

Source: Author's calculation (E-Views 9.5)

The short run estimation of variables presents that in the short run, estimated relationship is present between the variables. If the value of the estimated coefficient lies between limits (0 and -1) the co-efficient of co-integration is significant.

Table 10: Long-Run Coefficients Estimation

| Variables	Coefficient	Std.Error	t-Statistics	Prob.
CPI	-0.3981	0.2385	-1.6686	0.1261
REER	1.2716	0.3766	3.3762	0.0070
NEER	-0.4352	0.2182	-1.9936	0.0742
IMP	-1.8437	1.0719	-1.7200	0.1162
EXP01	9.8357	2.2712	4.3306	0.0015
GDP	-0.9018	1.5539	-0.5803	0.5745
C	-33.7535	87.9270	-0.3838	0.7091

Source: Author's calculation (E-Views 9.5)

In above table the estimated long run coefficients of variables are present. The table represents that the negative relationship is present between GDP and TOT. That is why in our estimation this relationship has negative effect on economic growth. We are analysing the GDP specifically because GDP is the basic component for the economy.
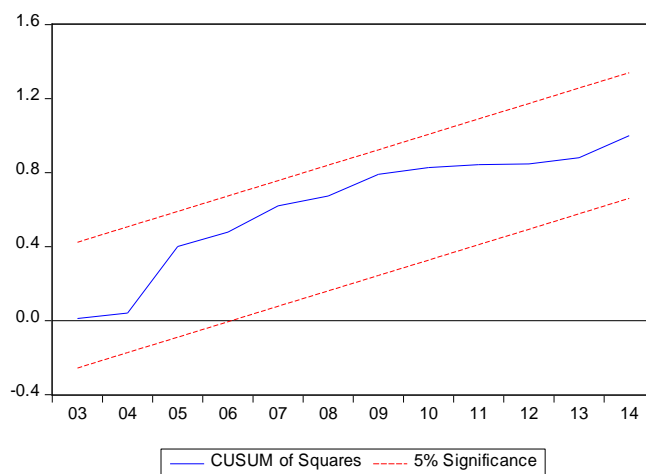
Stability test

The Parameter's long run and short run stability is being tested through the CUSUM square stability test the graphs lies between the critical boundaries at 5% level of significance.

Graph represents that this model is stable structurally.

Plot of CUSUM test:-
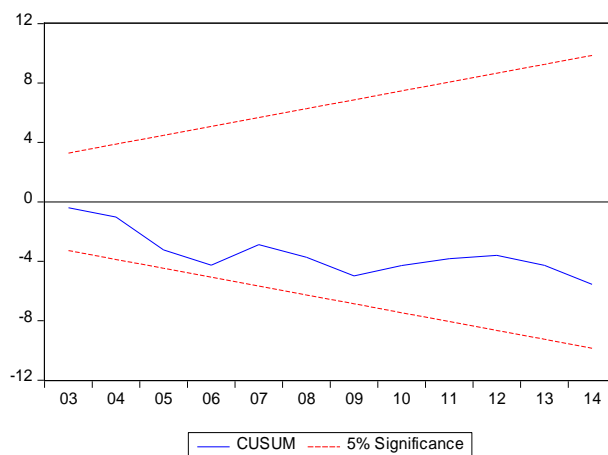
Plot of CUSUM of SQUARE of residual test:-

Conclusion

The objective behind the study of this analysis is the behaviour of terms of trade in the determining the "Elasticity of Trade in Long Run" supported by "Marshal- Lerner condition" which advocates the long run trade elasticity, trough "co-integration approach". The influence of depreciation on the country's balance of trade which is determined by "Marshal-Lerner condition" which shows that if the sum of the import and export absolute values of demand price elasticity is more than one, the depreciation is expected to support the trade balance of the country. Co-integration is highly concerned with long- run relation. "Marshal-Lerner condition "is fully supported by co-integration approach, which advocates that depreciation should make better trade

balance and economic conditions of Pakistan. This may be added that economist as well economic analyst believes that devaluation is not expansionary and will not make trade balance better. Some economist thinks that devaluation is supposed to show the contractionary effect in short run but it is expansionary in medium and long run. However, depreciation is an essential microeconomic tool (policy) that a country could apply to make economic trade conditions better. Many developing countries, along with Pakistan have depreciated their currency value whenever, they meet a serious problem of trade deficit.

Policy Implications

The above findings of conclusion implements the developing country's policy makers that they should take some cautions when they are planning devaluation of currency and the designed policy of depreciation should be in the control.In under developed countries like Pakistan, the rising interest rates will affect its terms of trade negatively because as interest rate will rise, there will be decrement in the investments and the GDP will decrease, If we look at the Pakistan's economic history, there is a deficit in the fiscal accounts of the country which is somehow acceptable in short run but not good or acceptable in long run at all. GDP is considered to be the most significant determinant of terms of trade (which is the value of total goods and services being produced within a year compared to the prices of some past years). When the GDP's value rises, it will give rise to exports of the country and the fiscal accounts will be in surplus and the results of the overall terms of trade will become better. It is also observed by some economists that, Expansion in the fiscal policy has a positive role in the growth of country's output and the expansion in the monetary policy also have important effect on output.

So, to make the trade conditions and accounts better Pakistan's government should formulate those kind of policies through which country's export rises. Promotion of exports will make conditions better. The State bank should concentrate towards the control on supply of money and also take interest rates into consideration because restricted interest rate encourages the investments in the country. To make country's terms of trade better the government policies should encourage domestic or local production and taxes and other addition expenditures should be exempted to the industries which manufactures import substitutes the development of the industries will reduce the import intensity and decrease the deficit of trade and it will increase the employment level and level of income.

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