E u r o E c o n o m i c a
Issue 1(33)/2014 *ISSN: 1582-8859*

The relationship between twin deficit and stock market: An ARDL approach from Pakistan

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Abstract. Current study examines the relationship of twin deficit with stock market for Pakistan from 1992 to 2012.The results of ADF test shows that variables are not integrate at same order; hence, ARDL approach is used to examine the long run relationship among variables. The result of bound test rejects the null hypothesis of no Cointegration among variables and long run model shows positive relationship of twin deficit for Pakistan. In short run the results remain same and disequilibrium in short run is adjusted rapidly back towards long run. The positive and significant relation of twin deficit with stock market for Pakistan is due to high development expenditures, increasing debt level, and incoming of foreign aid and assistance. Government must adopt solid tactic to cut down its expenditures and utilized scare resources to reduce twin deficit, as stock market of Pakistan is highly volatile.

Keywords: budget deficits, current account deficit, stock market, ADF, ARDL.

1 Introduction and Theoretical Framework

During the early 1980s, the relationship between budget and current account deficits started to draw researches attention, and it has attracted some serious consideration from academics and policymaking in both developing and developed nations. There is extensive theoretical and empirical literature in examining two deficits and developing country like Pakistan is not immune to this problem as it had experience a series of budget and current account deficits from the beginning. The linkage of twin deficits is largely observed due to its important implication on nation's long and persistent economic growth and their imbalance could impair economic activity, undermine wealth creation and reduced and the well-being of the nation.

From policy perspective, if rising current account deficit is indeed due to escalating fiscal deficit, then the external balance cannot be remedied unless the polices that address to government deficits are not first put in place. Many economists consider the co movement of twin deficits to be meaning full and concluded that considerable share in deterioration in current account balance was due to emergence of record level of budget deficits. This phenomenon of mutual connection was later considered as twin deficits hypothesis. Theoretical speaking there are two competing views about the relationship between twin deficits.

According to Mundell-Fleming, open economy model (having assumption of free capital mobility), an increase in budget deficit (BD) exerts an upward pressure on the rate of interest to attract foreign capital, which leads to an appreciation of exchange rate and ultimately to a deficit in a current account

(CAD). Hence, Keynesian macroeconomics argues that unidirectional causality runs from budget deficit to trade deficit. On the other hand, Ricardian Equivalence hypothesis (REH) expects no casual impact of budget deficit on current account as it states that budget deficit is in result of tax cut as it reduces public savings and revenues. As a result, the decrease in public saving is compensating by equal increase in private savings, in this way national savings will not affect.

To further clarify this relationship first, the individual's dispose of income as consumption, savings or taxes

$$Y=C+S+T \quad (1)$$

Second, income must arise from either domestic scale of consumption goods, government goods, or by net measure of goods abroad, which is export minus imports.

$$Y=C+I+G+(X-M) \quad (2)$$

Now by combining equation 1 and equation 2, the following identity is obtain, which is useful in analyzing the relationship between budget deficit and trade deficit.

$$T-G = (X-M) + (I-S) \quad (3)$$

Where T is government tax collections, G is the fixed spending's, (X-M) is the either trade surplus or deficit, (I-S) is difference of investment and savings. The equation indicates that government budget deficit (Surplus) is equal to trade Deficit (Surplus) plus excess of investment over private savings. To the extent, that budget deficit increases the trade deficit (i-e, reduce the net exports), another effect follows immediately: as budget deficit create a flow of assets abroad. It means when a country imports more, it does not receive these extra goods free; instead, it gives up assets in return. Initially, these assets may be in local currency but foreigners quickly use this money to buy corporate bonds or equity. Therefore, when budget deficit turns a country into a net importer of goods and services, the country also becomes a net exporter of the assets.

Economic theories and studies consider stock prices to be one of the best indicators of the changes in economic activities. Financial securities (i-e debt and equity) that trade on a stock exchange, is called as stock market; and it plays an important role in economic prosperity and forecasting capital formation and sustaining economic growth. The basic objective of stock market is to facilitate the exchange of securities between lender and borrower at an agreed price at real physical locations or a virtual (online). The participants in the stock market are range from small individual stock investors to larger hedge fund traders who raise capital for expansion. The prices of the securities changes on daily basis and determined by demand and supply. However, other factors that cause increase or decrease in demand and supply of a stock could comprise company fundamentals factors, behavioral or external factors.

The Paper in hand is organized as follows. Section 2 reports the research objectives, section 3 briefly reviews the relevant literature, section 4 explains the data and research methodology, section 5 provides the empirical results while, section 6 summaries the major findings and in the end section 7 reports some recommendations as well.

2 Objectives of the Study

The basic aim of this research paper is to provide some empirical evidence regarding twin deficits and their effects on stock returns. The objectives are as follows:

- To investigates that whether changes in deficits causes any changes in the stock prices or not.
- To determine the long run and short run relation between twin deficit and stock market.
- To determine the casual linkage among all variables.

3 Literature Review:

Some analyst is in a claim that, concerns of large budget deficit has significant impact on stock market crush in 1987 and it is due to failure in overcoming US deficits. On the other hand, some argued the view that budget deficit has little if any effect on stock prices. Sargent and Wallace (1981) state that large budget deficit has to managed because higher deficits will increase inflation. Aggarawal and Raj (1981) show that stock prices of domestic and multinational firms are affect by the exchange rate and stock prices react accordingly. Sachs (1982) proposed the model for current account, named fundamental equation of the current account. This model features a risk free bond as a unique fundamental instrument. Therefore, this model is inappropriate to study the impact of on the dynamics of current account.

Geske and Roll (1983) argue that an economy polices affect aggregate economic activities, which in turn have implications for stock prices. Milton Friedman (1987)discuss the link between budget deficit and stock prices crush by reflecting it as "reliance on economic fallacies", moreover stock prices surged 1980s despite of mounting deficits and perhaps investor did not consider budget deficits a major problem. The economic news has impact on stock prices and cause variations in stock returns (Cutler, David et al. 1987). Roley and Schall (1988) investigated about fiscal deficit and stock prices and the study show that simulative fiscal actions are likely to increase output and cooperate cash flows when economy is in recession. During such periods higher budget deficits are likely to boost stock prices.

Hall and Taylor (1993) claim that increase in fiscal deficit forecast future tax increase, which may cause reduction in current consumption expenditures by households and harm stock prices. This explanation supports the notion of Ricardian Equivalence hypothesis. Budget deficits impose cost on the economy and have many effects, (Ball & Mankiw, 1995) investigated that the effect of fiscal deficit followed by single initial effect: a deficit tends to reduce the national savings, reduced investment, reduced exports and create the flow of assets overseas. Greenspan and Allen (1995) investigated that reduction in budget deficit will reduced inflationary expectations and it has reverse effect on stock prices. For example, increase in inflationary expectations may benefit the equity by decreasing the real value of cooperate debt, thus increasing the firm value.

Adrangi and Allender (1998) examine the evidence regarding budget deficit and stock prices in industrialized countries such as Japan, US, France and Germany. Granger causality and VAR test shows the negative relation of budget deficit and stock prices for US; however, in other countries deficits do not affect stock prices. Mercereau (2003) examine the role of stock market in current account dynamics by using US data. The outcomes of the study show that current account might help

in predicting stock market performance. Although, results state that stock market matters to current account but it should be taken with caution, as it is well known fact that stock market performance is difficult to predict. Nevertheless, if it were possible to forecast stock market partially then current account would be a reasonable candidate.

Quayes (2010) studied the association among between budget deficit and stock prices by integrating the effects of inflation and demographic structure. Result from the Cointegration shows that both deficit and inflation have negative impact on stock prices. Osamwonyi and Osagie (2012) investigate the relationship of macroeconomic variable with Nigerian Capital market. It considers the yearly data of Interest rate, Inflation rate, ER, fiscal deficit, GDP and money supply from 1975 to 2005. The result shows that all variables are influencing the capital market. M2, IR, and GDP are having negative sign, while budget deficit. Inflation rate and ER reports positive relationship with stock market index.

Saleem, Yasir, Shehzad, Ahmed, and Sehrish (2012**)** examine the long run causal relationship between budget deficit and stock market for India and Pakistan. Results shows that due to high development expenditures in Pakistan the long term positive relationship is observed between and stock market while in India due to increase in current expenditures a negative relationship is found among both variables. In Pakistan, a causal relationship runs from budget deficit to stock market while no causal relationship among BD and stock market for India. The above discussion will help in gaining some idea about twin deficits and stock market, and there is no specific theory regarding that explains the answer that how twin deficits affects stock prices.

4 Data and Methodology

4.1 Data Description and Source

Data for twin deficits and stock prices ranges from 1992 to 2012. Budget and current account deficit reflects as the economic indicators, while for stock market representation Karachi stock exchange chosen as a test market. Budget and current account deficits taken as share of GDP, while returns are calculated from indexes to captures the true impact of twin deficits on investor's returns. Data of budget and current account deficit gather from state bank of Pakistan and World Bank respectively, while data for stock market is obtain from Karachi stock exchange. Eviews-7 statistical package was use for analysis purpose.

4.2 Research Model and Methodology

The equation specified is based on the intuitively reasonable assumption that stock price can be explained by macroeconomic factors.

$$SMR = \alpha_0 + \beta_1 BD_t + \beta_2 CAD_t + \mu_t \quad (4)$$

Where:

SMR = Stock market return calculated from stock indexes.

BD = Budget deficit is the difference of total government revenues and expenditures.

CAD = Current account deficit is the combination of trade deficit, income received / Paid from abroad and unilateral transfers as well.

4.2.1 Unit Root Test

Time series data contains unit root and it need to be tested for non-stationarity before further estimation. Augmented Dickey Fuller (1979) test is commonly used as it takes extra lagged terms of the depended variables to remove autocorrelation. On the basis of AIC or SBC value, the decision was made that how many lag are to be included. Following equation is applied to test the unit root among variables.

$$\Delta Y_t = \alpha + \beta_t + \rho Y_{t-1} + \sum_{i=1}^{k} \gamma_i \Delta Y_{t-1} + e_t \qquad (5)$$

Where $Y_t$is the variable in period t, T denotes the time, Δis the difference operator, $e_t$is the error term and K is the number of lags of differences in the ADF equation.

4.2.2 ARDl Model Specification:

Pesaran and Shin (1999) and Pesaran, Shin and Smith (2001) introduced a new model for testing the Cointegration called autoregressive distributed lag (ARDL) approach. This procedure is adopted due to following three reasons

- Bound testing method is simple other than Johansen and Juselius (1980), as it allows testing the long run relationship by using OLS once the required lag order is estimated.
- ARDL approach does not require the same order of integration for variables, as they can either be in form I(0) or I(1). However, ARDL crush when any of the variables are of integrated at order I (2).
- Lastly, this method is more efficient in small or finite sample data as the current study also has.

ARDL approach constitutes of following steps.

1.Verify the order of integration of variables by using ADF; so that all the variables are of integrate at level or first difference.

2. Estimate the optimal lag order criterion by using VAR-Model.

3. Measure the long run relationship among variables by using Wald- test to measure the below mentioned hypothesis.

H_0: $\rho_1 = \rho_2 = \rho_3 = 0$

H_1: $\rho_1 \neq \rho_2 \neq \rho_3 \neq 0$

Now if the computed F-statistics is greater than the upper bound critical values given by Pesaran (1997) then we can reject the null hypothesis of no Cointegration among variables.

4. Estimate the long run and short run coefficients after detecting successful Long run relationship by using Wald test.

5. In the End, Stability test examined for ECM.

Based on equation (4), the conditional VECM for current study is given below.

$$\Delta SMR_t = c_0 + \beta_1 SMR_{t-1} + \beta_2 BD_{t-1} + \beta_3 CAD_{t-1} + \sum_{i=1}^{p} \delta\, \Delta SMR_{t-1} + \sum_{j=1}^{q} \gamma\, \Delta BD_{t-1} + \sum_{k=1}^{q} \rho\, \Delta CAD_{t-1} + \mu_t \quad (6)$$

where, β_i are the long run multipliers, c_0 is drift and μ_t is the white noise errors.

4.2.2.1. ARDL Long Run Model:

In second step, once the Cointegration relationship established, the conditional ARDL (P_1, q_1 , q_2) long run model for SMR given as follows:

$$SMR = c_0 + \sum_{i=1}^{p} + \beta_1 SMR_{t-1} + \sum_{j=0}^{q1} \beta_2\, BD_{t-1} + \sum_{k=0}^{q2} \beta_3\, CAD_{t-1} + \mu_t \quad (7)$$

4.2.2.2 ARDL Short Run Model

Last step in ARDL approach is to estimate and ECM for obtaining short run dynamic parameters. This mode is as follows

$$\Delta SMR_t = c_0 + \sum_{i=1}^{p} \delta\, \Delta SMR_{t-1} + \sum_{j=1}^{q} \gamma\, \Delta BD_{t-1} + \sum_{k=1}^{q} \rho\, \Delta CAD_{t-1} + ECT_{t-1} + \mu_t \quad (8)$$

Here δ, γ and γ are the short run dynamic coefficients, and ECT shows the speed of adjustment towards long run. Similar type of test techniques is applied by (Fosu & Magnus, 2006); Renani (2007), Duasa (2007), (Atif, Shah, & Zaman, 2012) and Champika et al (2013).

5 Empirical Results and Discussion

The results of table provide self – explanatory descriptive statistics analysis done through E-views. It shows that BD has mean value of -5.556667, median value of -5.790000, S.D of 1.688240. CAD has mean value of mean value of -2.508095, median of -2.740000, S.D of 3.608733. Moreover, SMR has mean of 0.043137, median of 0.071334 and S.D of 0.175147 respectively. The table also reports the values of minimum, maximum, skewness and kurtosis as well. P-value of JB- stats show that twin deficits and stock market returns are normally distributed.

Table 1 Descriptive Statistics

	Budget Deficit	Current Account	Stock Returns
Mean	-5.556667	-2.508095	0.043137
Median	-5.790000	-2.740000	0.071334
Maximum	-2.870000	5.330000	0.326740
Minimum	-8.660000	-9.550000	-0.380246
Std. Dev.	1.688240	3.608733	0.175147
Skewness	-0.150710	0.432053	-0.682875
Kurtosis	1.943955	3.057537	3.028307
Jarque-Bera	1.055325	0.656241	1.632817
Probability	0.589982	0.720276	0.442016
Sum	-116.6900	-52.67000	0.905870
Sum Sq. Dev.	57.00307	260.4591	0.613529
Observations	21	21	21

Table 2 Multicolinearity (Correlation Matrix)

variable	Budget Deficit	Current Account	Stock Returns
Budget Deficit	1.000000	---	---
Current Account	0.549573 [2.867373] (0.0099)*	1.000000	---
Stock Returns	0.427877 [2.063504] (0.0530)***	0.526847 [2.701859] (0.0141)**	1.000000
*, **, ***, shows significant at 1%, 5%, and 10% respectively.			

Table 2 shows the results of correlation matrix, and it report that none of the variables is linearly interdependent. Moreover, the results of the correlation matrix report positive and significant relationship between twin deficit and stock market for Pakistan.

Table 3 ADF Unit Root Test

Series	Level I(0)		Level I(1)		Decision
	T-Statistics (Intercept & trend)	K	T-Statistics (Intercept & trend)	K	
SMR	-5.489448*	4	-6.121757*	4	I(0)
BD	-2.371674	4	-4.984843*	4	I(1)
CAD	-1.778004	4	-3.920615**	4	1(1)
Note: *,**,*** denotes the rejection of Null hypothesis that series contains a unit root. The rejection is done on the basis of Mackinnon (1996) critical values, i-e at level (intercept & Trend), -4.498307, -3.658446 and -3.268973, while at first difference (intercept & Trend), -4.532598, -3.673616 and -3.277364 are significant at 1%, 5% and 10 % respectively..					

ADF test is applied to check the stationarity of the variables, as the results of correlogram shows that SMR are stationarity at level while CAD and BD reports mix results. From these results the correct order of integration among variables is not gathered, hence ADF test is used to get proper integration order. ADF test includes constant with no trend at level I (0) and first difference I (1) for all variables and Lag length is selected according to SIC value. The results of ADF show that BD and CAD become stationary at first difference, while SMR is integrate at order I (0). The stationarity of all variables show that all shocks are temporary and they are eliminated during time. From these results, it is conclude that variables are not integrate at same order; hence, ARDL approach is most likely to apply instead of Johansen test for measuring long run relationship among variables. The ADF also provides good rational results about the integration order of variables that, none of variable are integrate at order I (2).

Table 4 Test Statistics and VAR-Length Criterion of Model (Endogenous Variables: SMR, BD, CAD)

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-76.68308	NA	0.579800	7.968308	8.117668	7.997465
1	-60.26385	26.27077*	0.280593*	7.226385*	7.823824*	7.343012*
* 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						

While in selecting the lag length, it is important that start with high order so that optimal order will not exceed it. By applying VAR model lag order 1 is selected on the basis of AIC value and current study used VAR (1) model.

Table 5 Bound Testing (Wald-Test) Results

Results of Bound Test on Equation 4.3					
Test Statistics	**AIC-Lags**	**Value**	**d f**	**P-value**	**Outcome**
F-Statistics	1	9.844374	(3, 11)	0.0019*	Cointegration
Chi-Square		29.53312	3	0.0000	
Note: *, Denotes the rejection of Null hypothesis at 1% of no Cointegration, having k=2 with intercept and trend .The upper bound critical values given by (Pesaran and Pesaran, 1997, p.478) at 1% level is 7.584, while lower bound values is 6.520 respectively.					

After finalizing the lag length criteria, next step in ARDL model is to establish a long run relationship among variables through F-statistics by using bound test. In first step, OLS is estimated and in second step Wald test is applied on the lagged values to observe the long run relationship among variables. The results of the bound test show that twin deficits are having long run relationship with stock returns for Pakistan. Calculated F-stats is greater than the upper bound critical values given by Pesaran (1997) case II, having trend and intercept in the data. These results are in line with Saleem et al. (2012) who have found long run relationship of budget deficit with stock market for Pakistan by using Johansen approach.

Table 6 ARDL Long Run Estimates

Dependent Variable: KSE_Returns: ARDL (1,2,0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.301395	0.065636	4.591898	0.0013*
BD(-2)	0.037362	0.013720	2.723118	0.0235**
CA	0.021382	0.003543	6.034356	0.0002*
R-squared	0.752015	Mean dependent var		0.082193
Adjusted R-squared	0.641800	S.D. dependent var		0.170362
S.E. of regression	0.101961	Akaike info criterion		-1.455996
Sum squared resid	0.093565	Schwarz criterion		-1.227761
Log likelihood	15.19197	Hannan-Quinn criter.		-1.477123
F-statistic	6.823141	Durbin-Watson stat		2.168143
Prob(F-statistic)	0.008256*			
Diagnostic Tests:				
Ramsey Reset Test	F-Stats: 1.045241 (0.3239) [a]			
Correlogram of Residuals	Q-Stats: 10.865 (0.455) [b]			
Correlogram of Residuals Square	Q-Stats- Square: 8.9808 (0.624) [c]			
BG-LM-Test	Obs*R-squared: 2.528384 (0.2825) [d]			
Jarque-Bera	1.101066 (0.576642) [e]			
ARCH-LM-Test	Obs*R-squared: 0.117402 (0.7319) [f]			
Note: *,**,*** Denotes the rejection of Null hypothesis at 1%,5% and 10% respectively. Subscripts *a, b, c, d, e, f* shows the acceptance of Null hypothesis for respective Tests.				

ARDL (1, 2, 0) long run model is finalized based on AIC value and it shows that two lags are chosen for BD and no lag for CAD. The results show that twin deficits have positive and significant

relationship with stock returns. It shows that one unit increase in BD will cause SMR to increase by 3.7 % while one unit increase in CAD will lead to increase the SMR by 2.1 %.Intercept of regression model is positive and significant which shows the average value of stock prices when independent variables are zero. It shows that there is positive long run relationship between stock prices and twin deficit for Pakistan but effect of this relationship is quite small due to highly debt paying condition of the country. The positive relationship of BD is due to high development expenditures than current expenditures and economy is under- employed. It also suggests that increase in deficits will lead to slight increase in stock returns.

These results are in line with (Roley & Schall, 1988; Saleem et al 2012; and Osamwonyi and Osagie 2012), who talked about positive linkage of stock prices with BD while Ray (2012) has found same positive relation of balance of trade with stock prices for India. Ramsey test is applied which accept the null hypothesis that model is correctly specified. Other diagnostic test show that model is free from autocorrelation as the DW-value is near to 2, while the p-value of Q-stats and Q-stats-square are insignificant enough to accepts the null hypothesis of no autocorrelation up to lag 13. Moreover, the results of BG-LM and ARCH-LM test shows those residuals of the model free from autocorrelation and Hetroskedecity. Moreover, JB-stats indicate that errors are normally distributed over time.

Table 7 ARDL Model ECM Estimates

Dependent Variable: D(KSE_Returns): ARDL (1,0,0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.031044	0.041930	0.740383	0.4733
D(BD)	0.044779	0.024551	1.823953	0.0931***
D(CA)	0.033090	0.017821	1.856734	0.0881***
ECT (-1)	-1.488979	0.400600	-3.716871	0.0029*
R-squared	0.901096	Mean dependent var		0.005280
Adjusted R-squared	0.859886	S.D. dependent var		0.276541
S.E. of regression	0.103514	Akaike info criterion		-1.437016
Sum squared resid	0.128582	Schwarz criterion		-1.140225
Log likelihood	18.93314	Hannan-Quinn criter.		-1.396093
F-statistic	21.86599	Durbin-Watson stat		2.168143
Prob(F-statistic)	0.000012*			
Diagnostic Tests:				
Ramsey Reset Test	F-Stats: 0.157782 (0.6977) ^{a}			
Correlogram of Residuals	Q-Stats: 7.4822 (0.943) ^{b}			
Correlogram of Residuals Square	Q-Stats- Square: 10.650 (0.777) ^{c}			
BG-LM-Test	Obs*R-squared: 1.912247 (0.3844) ^{d}			
Jarque-Bera	0.206084 (0.902089) ^{e}			
ARCH-LM-Test	Obs*R-squared: 0.424017 (0.5149) ^{f}			
Note: *,**,*** Denotes the rejection of Null hypothesis at 1%,5% and 10% respectively. Subscripts *a, b, c, d, e, f* shows the acceptance of Null hypothesis for respective Tests.				

Short run (ECM) coefficients are estimated to observe the speed of adjustments that requires adjusting the long run values after short run shock. The results of ECM model report same relationship of twin deficit with stock prices, but in short run they are significant at 10% level. The error correction term is statistically significant with expected negative sign and coefficient of ECT is quite large, which

implies that disequilibria in stock prices is adjust back towards long run with in one year. The negative and significant value of ECT is the strong proof of long run relation among stock prices and twin deficit for Pakistan. The diagnostic test of ECM show that the value of DW is near to 2, the value of R-square is .90 which is good as their in no multicolinearity in the model because the value of VIF is 10.

Ramsey test show that model is correctly specified, the results of Q-stats and Q-stats square show that there is no autocorrelation in residuals up to lag 17. Moreover, the result of BG-test and ARCH-LM test reports no autocorrelation and Hetroskedecity in the short run model; hence, we can say that all the coefficients obtain from result are BLUE. Finally Cusum and Cusum square test is applied to check the stability of regression model and Figure 1 shows that the ECM successfully passed the stability test and shows that no structural breaks are present during selected time.

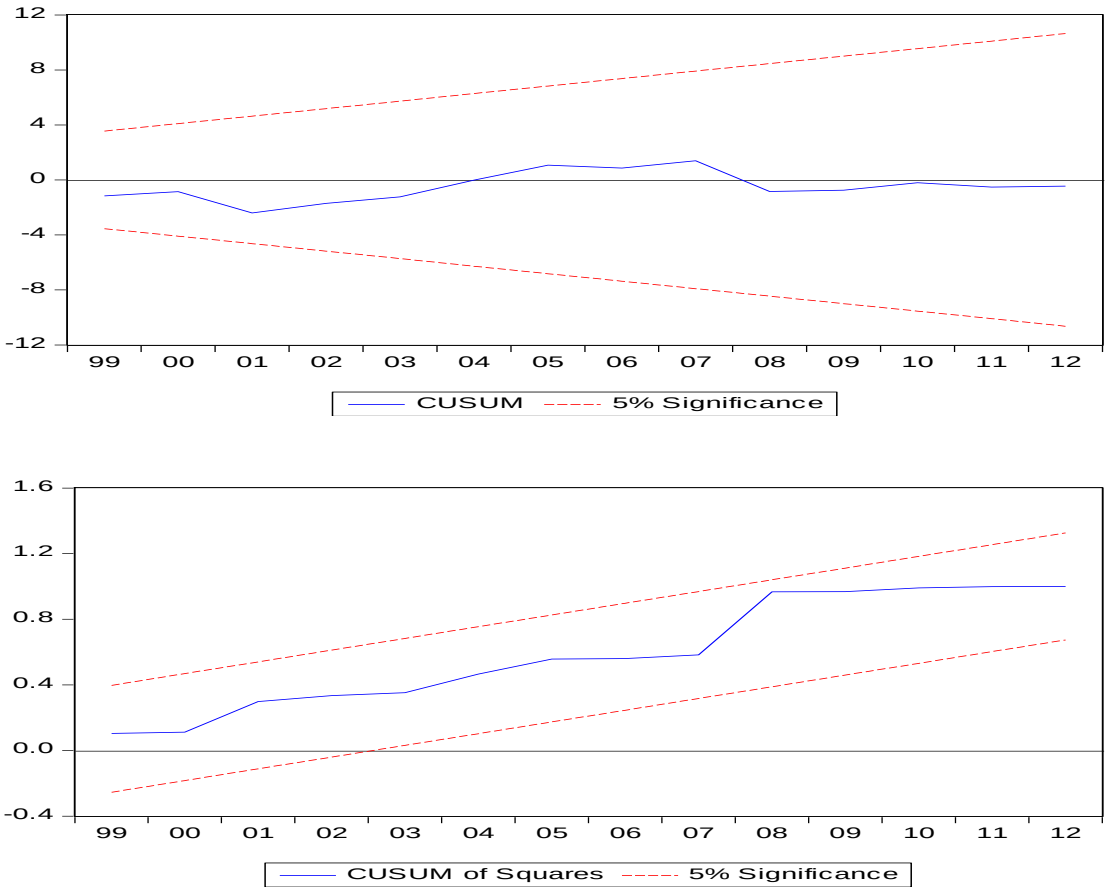

Figure 1 Plot of CUSUM and CUSUMQ of Recursive Residuals: 1992-2012.

6 Conclusion:

The intention of this research is to investigate the relationship between twin deficits and stock market for Pakistan. The results of ADF shows that budget deficit and current account deficit become

stationary at order one, while stock returns is stationary at level. The outcome of unit root impose a restriction for using Johansen approach for measuring long run relationship among variables, hence ARDL framework is most likely to apply. Bound testing procedure is adopted in first step of ARDL model and it shows that their exist a long run relationship between twin deficit and stock market for Pakistan as the computed F-statistics using Wald-test is well above the upper bound critical given by Pesaran (1997). In long run, twin deficits have positive and significant relationship with stock market and the reason for this positive relationship is due to high development expenditures, foreign Aid, and highly debt holding nation as well. In short run the relationship between twin deficit and stock returns remains same as in long run and error correction term (ECT) is negative and significant which is the strong indication of long run relation among variables. The ECT shows very fast speed of adjustment in errors and disequilibrium in short run model is adjusted back towards long run with in a year.

Evidence from Pakistan revels that there is long run positive relationship exists between twin deficit and stock market. The economy of Pakistan is not fully employed and in order to sustain the economic conditions government spent money on different sectors of economy by running deficits and this increase in development expenditures by government cause slight increase in stock prices. The structural deficits has typically risen during recessions and then decreased early in subsequent expansions. Pakistan still trying to achieve the industrial stability and it also considers as insecure place for investment opportunities. Moreover, Pakistan is currently under debt to World Bank, IMF and other various countries, inefficient capital market, unemployment and economic conditions are few other reasons due to which positive correlation among twin deficits and stock market has occurred.

7 Policy Recommendations

The rising twin deficit should serve as the reminder for policy makers to monitor and control its effects on economic conditions. There are some recommendations for the stakeholders, which formulated on basis of this study.

1. The authorities that deal with fiscal policymaking should take correct measures to curb budget and trade deficit up to that level which is acceptable for current economic conditions.

2. Government should take some bold steps to cut down its running expenditures; hence, it may lead towards lesser borrowings from state bank. Moreover, central bank should follow strict rules and regulations in advancing loans to the government and repayment schedule.

3. Concern authorities should promote bi-lateral trade and tax free zones to reduce the current account deficit.

4. Monetary authorities should concentrate on resource utilization and concrete strategies to drive the economic conditions smoothly.

5. The capital market for Pakistan is developed, so concerned authorities should formulate laws and regulations to protect investor's funds, enhance transparency and improve member listings.

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