

VALIDITY OF TWIN DEFICIT HYPOTHESIS IN CASE OF PAKISTAN: USING DIFFERENT CO-INTEGRATION TECHNIQUES

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ABSTRACTS

Pakistan is facing high rates of budget and current account deficits. The validity of the twin deficits issue is examined in the context of Pakistan economy using annual time series data for the period 1972 to 2015. The three different econometric techniques are used to check the robustness and comparison of results for Twin Deficit hypothesis. Impulse response function is also imposed to check the policy impact of variables. Results through all co-integration techniques have given a support of Twin Deficit hypothesis and one way causality from current account deficit to the budget deficit has been proved by three approaches. Finally this empirical study confirms the validity of twin deficits hypothesis and concludes that trade deficit is one of the determinants of budget deficit and can cause it in case of Pakistan.

KEYWORDS

Twin deficits Pakistan, co integration, Causality. Impulse Response Function

1. INTRODUCTION

The fiscal policy has a key role in stabilizing the economy in countries. And this policy can be effective only if government financial decisions will be able to affect household's consumption and saving decisions. This ability depends on the degree to which consumers observe government debt as a net wealth. According to the Keynesian, households treat government debt as net wealth. It means that a substitution of debt for taxes has a positive impact on private consumption and aggregate demand. The resulting decrease in total savings causes higher real interest rates, afterward crowding out private investment, capital inflows and an appreciation of the exchange rate, ultimately leading to an increase in the current account deficit (CAD). But the Ricardian approach states that households do not take government debt as a net wealth. For a given path of government expenditures, the debt-for-taxes replacement has no effect on private consumption and their increased disposable income is fully saved. So the total national saving, interest rate and crowding out effect remains unaffected (Wronlowski and Machacek, 2003).

In the 1980's both the US external deficit and the budget deficit increased significantly. As a result of this co-movement, several economists recognized a significant portion of the deterioration in the external balance to the emergence of record budget deficits. This interlinked relationship is known as the twin deficits hypothesis. As current account imbalances may stop economic growth.

Theoretically the twin deficits hypothesis is based on the Mundell-Fleming framework. According to the Mundell-Fleming, an increase in the budget deficit (BDEF) induces an upward pressure on interest rates that, in turn, will cause capital inflows and an appreciation of the exchange rate, ultimately leading to an increase in the current account deficit (CAD).

Although many research have been done on the twin deficit hypothesis. The evidences suggest mixed results about these hypotheses.

1.1. Objectives and Relevance of the Study

The main objective of this study is to evaluate whether Pakistan's public deficit has had any impact on current account imbalances, and to examine the validity of the twin deficit hypothesis for Pakistan. Pakistan comprises a valuable case study for investigating the dynamics of persistently high rates of budget and current account deficits. The debate is incomplete and inconclusive in Pakistan's context, e.g. Zaidi (1995), Burney and Akhtar (1992); Burney and Yasmeen (1989); Aqeel and Nishat (2000); Kazimi (1992); Mukhtar et al. (2007); Hakro (2009); Siddiqui (2009); Saeed and Khan (2012); Khalil et al. (2013); Kashif et al. (2014) have used different techniques on annual data sets to relate twin deficits with other macroeconomic variables. Some of the studies reached contradicting conclusions due to the pre-specification of the structural relations were used in the models.

We have applied the three different econometric techniques which are mostly used to check the long run relationship between variables; Engel Granger Co-integration and Error Correction Mechanics, Johansen Co-integration test and Autoregressive Distributed Lag (ARDL) Co-integration Bound testing to check the robustness and comparison of results. Unit root test will apply to check the stationarity of variables and Granger Causality will apply to find direction of relationship between variables. Impulse response function also imposed to check the policy impact of variables. The rest part of the paper is organized as follows. Section 2 reviews the existing literature on Twin Deficits hypothesis. Theoretical and analytical framework is presented in section 3. Section 4 gives data description and econometric methodology. Section 5 discusses the estimation results while section 6 is devoted to conclusion. The appendix and references are presented at the end.

1. LITERATURE REVIEW

This section reviews some existing theoretical and empirical literature on Twin deficits hypothesis. Anoru & Ramchander(1998), Papia Mitra and Gholam Syedian Khan (2014) and Anuradha Agarwal (2014) provide evidence in support of twin deficit hypothesis in case of India with unidirectional reverse causality between Current Account Deficit to fiscal deficit . Vamvoukas (1999) suggested that budget deficit has positive and significant effects on trade deficit both in the short run and long run for a small open economy of (Greek) using annual data. Alkhatib (2000) analyzed positive and one way causality running from trade deficit to budget deficit in the Saudi Arabian economy. Zengin (2000), Acaravci and Ozturk (2008) and Ferda (2013) provide fresh evidence on the validity of twin deficit with no causality for Turkey. Kouassi et al. (2002) found evidence of causality between the twin deficits for twenty developing countries. Aristovnik (2003) suggested that high budget deficits in transition economies confirm relatively low level of substitutability between private and public savings. These results are implying a relatively high correlation between fiscal and external imbalances. Zubaidi et al. (2005) examined the twin deficits hypothesis in Indonesia, Malaysia, Philippines and Thailand (4

ASEAN countries). They confirmed the existence of a long run relationship between the two deficits. However, the Keynesian reasoning best suits only for Thailand. Bartolini and Lahiri (2006), and Tang (2013) examined the co movement of fiscal balance, current account balance real GDP and interest rates (short- and long run) in U.S. economy. Normandin (1994) found the relevant Canadian consumer's reactions towards budget deficit are statistically positive but the responses U.S. consumers are statistically insignificant. Saleh and Chowdhury (2007) examined the long-run and short-run relationships between the current account deficit, budget deficit, savings and investment gap and trade openness in Sri Lanka. They found that trade openness has a positive effect on the current account deficit, although is statistically insignificant. Fonseca (2007) rejected the twin-deficit hypothesis as well as the validity of Ricardian equivalence in Egypt. Corsetti and Muller (2007) also investigated the co-movement of the government budget balance and the trade balance in the perspective of international business cycle theory for 10 OECD countries. Neaime (2008) analyzed unidirectional causal relationship in short run examined the relationship between current account and budget deficits in the small open developing economy of Lebanon. Arize and Malindretos (2008) explored bidirectional causality between the Twin deficits received strong empirical support in the long run but a unidirectional relationship in short run in Ten African countries. Baharumshah et al. (2009) found presence of twin deficit hypothesis (TDH) in 3 countries Malaysia, the Philippines and Thailand of Association of South East Asian Nations (ASEAN). Akbar Zamanzadeh (2011) indicates that twin deficits hypothesis (TDH) is accepted against the Ricardian equivalence hypothesis (REH) which shows that the government expenditures and taxes don't affect economic variables such as current account deficits in case of Iran over the period from 1959-2007. Merza et al. (2012) provide evidence in the support of twin deficit hypothesis in case of Kuwait for the periods from 1993:4 to 2010:4 in short run but in long run rejected this Hypothesis. A statically significant long and short run bidirectional relationship exists between both deficits examined by omoniyi (2012) for Nigerian economy. George et al. (2013) used various econometrics techniques to examine the validity of Twin Deficit Hypothesis (TDH) for Kenya using quarterly data spanning from 1970Q1 - 2012Q1. A direct relationship exists between budget and current account deficits.

Kulkarni and Erickson (1998) analyzed different evidences of twin deficits for India, Pakistan and Mexico. Aqeel and Nishat (2000) found that the budget deficit has positive and significant effect on the trade deficit for Pakistan in long run not in short run. Mukhtar et al. (2007) supported that budget deficit have optimistic and significant long run effect on current account deficit in Pakistan. Hakro (2009) suggested that causality link of deficits is flowing from budget deficits to trade deficits using multivariate time series on Pakistan's data. Siddiqui (2009) investigated the twin deficit hypothesis in case of Pakistan. The results confirmed one way direction causal relationship showing trade deficit positively effecting budget deficit in the short run for Pakistan. Rauf and Qayyum (2011) showed that in case of Pakistan the budget deficit is mainly caused by trade deficit and causality run from trade deficit to budget deficit for the period from 1980 to 2009 by using OLS Technique. The long run relationship between the budget deficit and current account deficit has examined by Saeed and Khan (2012) for the period 1972 to 2008 in case of Pakistan while the Granger causality running from current account to budget deficit by rejecting Ricardian equivalence hypothesis. Khan and Saeed (2012) found a negative relationship between current account balance and investment in short-as well as in long-run and moderate validity of Feldstein-Horioka puzzle but only in the short-run for Pakistan over the period 1976 to 2010 using autoregressive distributed lag (ARDL)-bounds testing approach to co-integration. Another empirical study by Khalil et al. (2013) confirms the validity of twin deficits hypothesis in case of Pakistan for the period of 1980 to 2011 and concludes that trade deficit is one of the determinants of budget deficit and can cause it. Kashif et al. (2014) found the positive bi-directional Twin Deficit hypothesis for the period from 1980 to 2009 in case of Pakistan.

2. TWIN DEFICITS

In the 1980's both the US external deficit and the budget deficit increased significantly. As a result of this co-movement, several economists recognized a significant portion of the deterioration in the external balance to the emergence of record budget deficits. This causal relationship is known as the twin deficits hypothesis. Moreover the causality of relationship between these deficits is not always observed in any specific direction. However, when the volumes of these deficits are large, the probability of the relationship between them increases significantly.

An extensive theoretical and empirical literature has examined the relationship between current account deficits and other specified macroeconomic variables. The Keynesian school of thought argues that the budget deficit has a significant impact on the current account deficit. The Keynesian approach argues that an increase in the budget deficit will increase domestic absorption via import expansion, causing a current account deficit.

A large body of literature (e.g. Fleming, 1962; Mundell, 1963; Kearney and Monadjemi, 1990; among others) suggests that government deficits may cause trade deficits through different channels. However, there are four testable hypotheses arise from the twin deficits phenomena.

The first hypothesis, the Keynesian preposition is a key ingredient of the twin-deficit hypothesis. According to this hypothesis, a tax cut lowers national saving by increasing private disposable income and hence private consumption (an increase in imports) causing a worsening of the CAD. The second hypothesis is provided by Barro (1974), known as the Ricardian Equivalence Hypothesis (REH). According to this hypothesis, there is no causal relationship between current account deficit and budget deficit. Ricardian equivalence states that, for a given expenditure path, the replacement of debt for taxes has no effect on aggregate demand nor on interest rates. As a result, a tax increase would reduce budget deficit but would not alter the external deficit. This implies that the tax-financed expenditures do not affect private spending or national saving. The third hypothesis is reverse causality running from current account to budget deficit termed as 'current account targeting' (e.g. Summers 1988). This outcome occurs when the deterioration in current account leads to a slower pace of economic growth and hence increases the budget deficit. The fourth hypothesis is the possibility for the existence of bidirectional causality between the two deficits. In other words, a budget deficit Granger-causes current account deficit and vice versa (Acarvci *et al.* (2008).

3.1. The Analytical Framework of Twin Deficit

The analytical framework is based on the national income identity. In an open economy, GDP (Y) is the sum of private consumption (C), private investment (I), government expenditure (G), and net exports (X-M), as in equation (1):

$$Y = C + I + G + (X - M) \quad (3.1)$$

Alternatively,

$$Y = C + S + T \quad (3.2)$$

Where S is savings and T is taxes. Substituting equation (2) in equation (1) yields:

$$(X - M) = (S - I) + (T - G) \quad (3.3)$$

(X-M) is the current account balance; (S-I) is the savings and investment balance; (T-G) is the budget balance. Any current account imbalance is attributable to either savings–investment imbalance and/or fiscal imbalance.

This relation implies that the current account is directly related to saving and investment. National savings can be decomposed further into private (S_p) and government (S_g) savings.

Since assume that

$$S^p = Y - T - C$$

And

$$S^g = T - G$$

Substituting into equation (3) yields:

$$(X - M) = -(I - S^p) + (T - G) \quad (3.4)$$

This implies that if private savings is equal to investment then external account and public budget are directly interrelated, or twinned. The external account and the fiscal balance, labeled the 'twin deficits,' have to move in the same direction by the same amount. It can also be written as:

$$\text{or } TD = BD + SD \quad (3.5)$$

Where TD is trade deficit representing the difference between exports, imports of goods and services. BD is budget deficit representing difference between public revenue and public expenditures. The SD is saving difference symbolize difference between private saving and private investment. There is no reason to assume that any deficit is an explanatory variable of other deficits. Because of the equality between the two sides of equation, it is not useful to explain any deficit by the other deficits. The most important of them is the analysis of the relationship between trade deficit and budget deficit, named as twin deficit (Saleh and Chowdhry, 2007; Alkhatib 2000).

Following the empirical literature, log-linear functional specification of long-run relationship between the external account and the fiscal balance may be expressed as:

$$CA_t = \alpha + \beta DD_t + \varepsilon_t \quad (3.6)$$

Where CA and BD are real net exports and real budget deficits, respectively, ε is error term. Estimate of beta is expected to be positive and assumed to be unity.

3. ECONOMETRIC METHODOLOGY AND DATA DESCRIPTION

In this study, we employed the unit root tests, Johansen co- integration technique and the Error Correction Model to attain our objectives. The main purpose of co-integration analysis is to verify the nature of long run relationship between a set of time series variables. However, it is essential

to check each time-series for stationarity before starting the co-integration tests. In case the time-series at hand is non stationary, then the regression analysis carried out in the usual manner may produce spurious results. So the unit root tests are conducted first to examine this property of the time-series. So, the empirical work is preceded by using Unit Root Test for stationarity of variables. Three techniques of Co-integration: Engel Granger co-integration, Johansen Co-integration and ARDL Co-integration have applied for examining the long run relationship. Granger causality test is applied to check the direction of causality. Impulse response function has applied to check the policy response of both variables.

4.1. Data and Variables

The validity of results depends on sufficient and consistent data. Problems in adequate data result into to conclusions that may be misleading. We have used annual data set of Pakistan for the period 1972-2013. The main variables used were current account deficit and Budget Deficit. This data set is retrieved from different data sources. Most of the data is collected from Federal Bureau of Statistic, Annual Reports of the State Bank and the Hand Book of Pakistan Economy and International Financial Statistic (IFS) published by the IMF.

5. RESULTS AND INTERPRETATION

As discussed in the previous section, we have adopted a three-step procedure in testing the three hypotheses under consideration. First we apply the Augmented Dickey Fuller (ADF) unit root test to check the stationarity and order of integration of different economic variables used in this study. Next we resort to the Engel Granger co-integration; Johansen Co-integration and ARDL Co-integration to test the long run co-integration among the variables. Finally, the Error Correction Model is employed to see the causality between the crucial variables please verify this statement. Granger causality test is applied to check the direction of causality. Impulse response function has applied to check the policy response of both variables.

In the following lines, we discuss the findings and analyze the relevant results.

5.1. Unit root test

Augmented Dickey Fuller (ADF) unit root test is applied for budget deficit and current account deficit. Results are reported in Table 1.

| Table 5.1: 1 Unit-root Test | | | | |
|---|--------|-------------------|-------|-----------|
| H ₀ : Variable follow unit root | | | | |
| H ₁ : Variable does not follow unit root | | | | |
| Test of Stationarity at Level | | | | |
| Variables | t-adf | t-adf Critical | AIC | Decision |
| Bd | 0.0023 | 5%=-2.95 | 15.79 | Unit Root |
| CD | -0.34 | 5%=-1.95 | 18.33 | Unit Root |
| Test of Stationarity at First Difference | | | | |
| d(Bd) | -2.26 | -2.95 | 18.46 | I(1) |
| d(CD) | -16.57 | -2.93 | 12.17 | I(1) |

Since calculated value of test statistics is less than the critical value, this indicates acceptance of H_0 . Hence results point uniformly about the presence of a unit root problem. Next, stationarity at first difference is checked and results reported at the bottom part of Table 1 indicate that both the series are station at first difference.

5.2. Engel Granger

The concept of long run relationship (co-integration) was introduced by Engle Granger (1981) firstly. So we have to apply this approach by using single equation model.

Table 5.2:

| | Coefficient | Std.Error | t-value | t-prob | R² |
|--------------------------------|--------------------|------------------|----------------|---------------|----------------------|
| Constant | -5.60301 | 38.55 | -0.145 | 0.8852 | 0.0006 |
| CD₁ | 1.03468 | 0.1672 | 6.19 | 0.0000 | 0.5085 |
| Bd | 0.0451185 | 0.008911 | 5.06 | 0.0000 | 0.4093 |
| Bd₁ | -0.0439797 | 0.008431 | -5.22 | 0.0000 | 0.4238 |
| F(3,37) = 14.15 [0.000] | | | | | |

$$CD = 0.5603 + 1.034CD_{-1} + 0.0451BD - 0.0439BD_{-1}$$

5.2.1. Error Correction Mechanism:

Unit Root test again applied on error term of estimated model (ECT) and we get following results:

Table 5.3:

| ect | t-adf | t-adf Critical | AIC | Decision |
|------------|--------------|-----------------------|------------|-----------------|
| 2 | -3.284** | 5%=-1.95 | 8.902 | Stationary |
| 1 | -2.676** | 5%=-1.95 | 8.937 | Stationary |
| 0 | -8.346** | 5%=-1.95 | 9.221 | Stationary |

Results indicated that there is long run relationship exist between budget deficit and current account deficit.

Following estimation has been done to find long run relationship.

Table 5.4:

| | Coefficient | Std.Error | t-value | t-prob | R² |
|----------------------------------|--------------------|------------------|----------------|---------------|----------------------|
| Constant | -11.8595 | 15.77 | -0.752 | 0.4569 | 0.0151 |
| DBd | 0.0378740 | 0.006158 | 6.15 | 0.0000 | 0.5055 |
| ect₁ | -0.449510 | 0.1800 | -2.50 | 0.0171 | 0.1442 |
| F(2,37) = 31.92 [0.000]** | | | | | |

$$DCD = -1185 + 0.037DBD_{-1} - 0.449ect_{-1}$$

Negative sign and Magnitude of ect term less than 1 of lag term of error correction model shows that a long run relationship also exists between budget and current account deficit as well as short run.

5.3. Johansen Co-integration

The long run co-integrating relationship between the variable is obtained by using multivariate co-integration method advanced by Johansen (1989), Johansen and Juselius (1990). As both variables are integrated of same order, so Johansen co-integrating techniques can apply on both variables. Results are given below:

URF equation for Current Account Deficit:

$$CD = -124.295 + 0.481702CD_{-1} - 0.0124785BD_{-1}$$

URF equation for Budget Deficit:

$$BD = -2585.97 - 12.2054CD_{-1} + 0.703485BD_{-1}$$

Table 5.6:

| F-tests on retained regressors, | F(2,36) | p-value |
|---|----------------|----------------|
| Constant U | 9.05496 | [0.001] |
| CD_1 | 44.2996 | [0.000] |
| Bd_1 | 54.1925 | [0.000] |
| F-test on regressors except unrestricted | F(4,72) | p-value |
| | 25.7367 | [0.0000] |

I(1) co-integration analysis of both variables are given below:

Table 5.7:

| Rank | Eigen-value | Log likelihood |
|-------------|--------------------|-----------------------|
| 0 | | -615.7100 |
| 1 | 0.52892 | -600.6557 |
| 2 | 7.5444e-006 | -600.6555 |

Trace Test:

| rank<= | Trace test | Prob | Decision |
|------------------|-------------------|-------------|--------------------------------|
| 0 | 30.109 | [0.000] | Co-integration exist at 0 rank |
| 1 | 0.0003 | [0.986] | |

Long-run matrix, rank 2

| | | |
|-----------|-----------|-----------|
| | CD | BD |
| CD | -0.518 | -0.012 |
| BD | -12.205 | -0.296 |

There is also co-integration exist between Current Deficit and Budget Deficit.

5.4. ARDL Bound Testing Approach

The Auto-Regressive Distributed Lag (ARDL) approach to co-integration was proposed by Pesaran & Shin (1999) and Pesaran *et al.* (2001). It is necessary that the variables are integrated at level or the first difference I(0) or I(1) or mutually integrated but still it is pre-requisite that none of the variables are integrated at second difference I(2) or higher order. ARDL approach implements better and provides more robust outcomes in small data set.

Results are given below:

Table 5.8:

| | Coefficient | S.E | t-value | t-prob | R² |
|----------------------------------|--------------------|------------|----------------|---------------|----------------------|
| DCD_1 | -0.871 | 0.148 | -5.88 | 0.0000 | 0.5041 |
| Constant | 89.631 | 27.63 | 3.24 | 0.0026 | 0.2364 |
| DBd | 0.043 | 0.005 | 7.77 | 0.0000 | 0.6397 |
| DBd_1 | 0.007 | 0.006 | 1.10 | 0.2788 | 0.0344 |
| CD_1 | 0.506 | 0.126 | 4.00 | 0.0003 | 0.3195 |
| Bd_1 | 0.012 | 0.004 | 3.10 | 0.0038 | 0.2209 |
| F(5,34) = 39.07 [0.000]** | | | | | |

Afterward restriction has been imposed on lag value of BD and CD at level. We got this F-Statistics.

Table 5.9:

| | | Bound Critical Values (Unrestricted Intercept and no trend) | |
|--------------------|----------------------|--|--------------------|
| Restriction | F(2,34) | Lower bound | Upper bound |
| (CD_1,Bd_1)=0 | 10.314 [0.0003]** | 3.02 | 3.51 |

By comparing this F Stats with critical value mentioned in bound test paper, we analyzed that there is long run relationship exist in both budget and current deficit in case of Pakistan.

5.2. Granger Causality:

If the two series are co-integrated each other then there will be at least uni-directional causality between the variables. Theoretically, if the current term of the lag term of a variable determines

another variable then there exists the Granger causality association between these two variables. To check the direction of causality we have applied Granger causality test. Results are given below:

Table 5.10:

| | Chi ² (3) | p-value | Decision |
|------------------------------|----------------------|----------|----------|
| BD does not causes CD | 3.4156 | [0.0646] | accepted |
| CD does not causes BD | 55.2575 | [0.0000] | Rejected |

Significance of results shows one way causal relationship between Current Deficit to Budget Deficit.

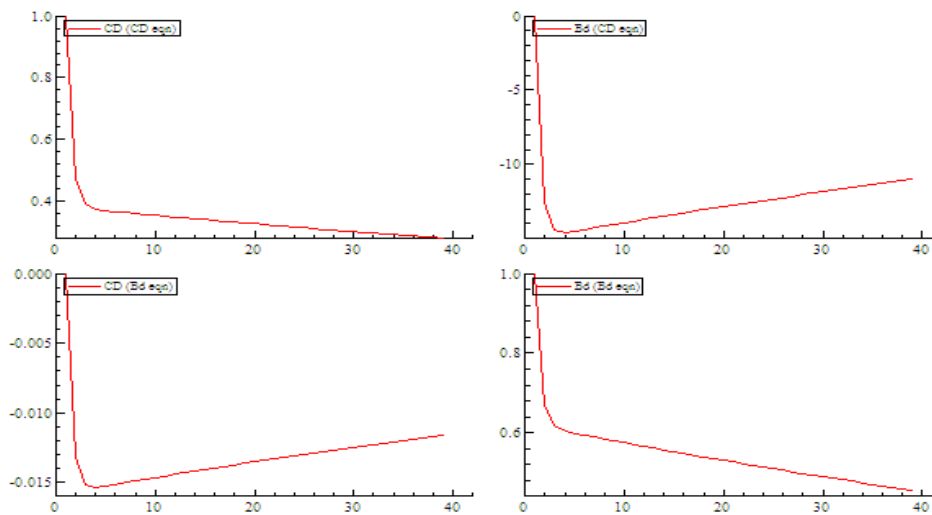
$$DCD = 47.89 + 0.027DBD + 0.2705CD + 0.006BD$$

Budget deficit in case of Pakistan have positive and direct relationship as budget deficit increases, current account will also increases as well.

Results through all co-integration techniques have given a support of Twin Deficit hypothesis and one way causality has been proved by three approaches.

5.3. Impulse Response Function:

An impulse response refers to the reaction of any dynamic system as a function of time in response to some external change. Results are given below:



Results show that as Current Deficit increase, Budget Deficit will increase by one Standard Deviation.

The evidence of Twin Deficit hypothesis has been supported by all three co-integration techniques: Engel Granger co-integration, Johansen co-integration and ARDL co-integration. The

long run causality exists in same direction from budget deficit to Current Deficit. Impulse response function also shows that Budget Deficit have positive impact on Current Deficit. Finally this empirical study confirms the validity of twin deficits hypothesis and concludes that trade deficit is one of the determinants of budget deficit and can cause it in case of Pakistan.

6. CONCLUSION AND POLICY IMPLICATIONS

The main objective of this study was to investigate the validity of the twin deficits issue in the context of Pakistan economy. The estimated empirical results confirmed the strong evidence in favor of long run relationship between the budget deficit and current account deficit for Pakistan. The Granger causality test points out to one way causation, that is, from current account deficit to the budget deficit. Again however, this result warrants caution. Economic theory suggests that an increase in budget deficit, with partial financing through borrowing, induces an upward pressure on the rate of interest rate. This invites an inflow of foreign capital in an environment of free mobility. The exchange rate appreciates due to higher demand for domestic currency, which in turn leads to a fall in exports and thereby to an increase in the current account deficit. However, the case of Pakistan, and majority of developing countries of the third world, is different. The twin deficits are surely inter-linked.

However, the underlying rationale is not the movements of the interest rates. Pakistan has to borrow most often directly from the donor agencies to finance its development and defense needs. Only recently, the government has floated bonds in the international markets to attract foreign capital. Further, the country is in practice of inviting direct foreign investment to carry out heavy development projects in the public sector. All these factors, along with population pressure and consumption demand, have led to an ever increasing demand for imports. On the other hand, the exports of Pakistan are low and more or less stagnant because of structural problems rather than variations in the exchanges rates. In fact, the Pakistani currency is constantly depreciating since 1970's in the international market but exports are not increasing due to several restrictions and non-access to the markets concerned. Naturally, the country is facing a persistent deficit on the current account of the balance of payments.

- The key policy implications concerns the twin deficit hypothesis and Ricardian equivalence derived from this study are:
- The more usual policy for the correction of a current account deficit is devaluation of national currency. But the evidence suggested that devaluation of national currency has modest impact on current account on the long run.
- Policy makers should pay more attentions to promote the nation's export promotion. As export promotion measures especially structural reforms increase the competitiveness of economy which improves the current account balance.
- The evidence suggested that in non Ricardian equivalence economies, like Pakistan, fiscal policy can be use to stabilize the business cycle. And more attention should pay to adopt debt reduction policies and to avoid debt accumulation.
- The policy variables like economic growth, exchange rate and money supply do affect current account deficit direct and use more effectively to reduce twin deficit in Pakistan. Trade deficit can reduce by reducing budget deficit.
- Furthermore, the state bank should not pursue with traditional monetary policy tools or dose of higher money supply which leads to higher budget deficit and inflation.
- There may be minimum government intervention while a balanced could restore the imbalance and a measure of confidence in international trade.

- There is a dire need to find ways and means to increase the revenues and increase the scope of direct taxation by reducing the un-necessary current expenditure, failing which the nation is likely to default in the near future.
- Fiscal policies should also be harmonized with monetary policies. However, only a stable, democratic and serious government can formulate adequate fiscal and monetary policies and implement these policies efficiently.
- An increase in our exports is essential to cover the trade deficit. This shall not be successful unless the West opens its borders and allow our exports an access to penetrate in the relevant markets. However, this is more a political matter and the government should emphasize on this point.

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