Exploring the Impact of Triplet Deficit Hypothesis on GDP Growth Rate: A Longitudinal Analysis of the Pakistan Economy from 1994-95 to 2020-21

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ABSTRACT

Purpose: *The present study was aimed at assessing the effectiveness of Fiscal Deficit, Current Account Deficit and Trade Deficit as Triplet Deficit Hypothesis towards GDP (Q_t) growth rate of Pakistan over period of time 1994-95 to 2020-21.*

Method: Time series data set ranges from 1994-95 to 2020-21 from authenticated sources were utilized for present research study. Econometric analysis was done i.e Augmented Dickey Fuller Test, Log-linear response functions, Autoregressive Distribute Lags Model, Bound Test, Error Correction Mechanism, Variance Inflation Factors for checking multicollinearity in the model, Lagrange Multiplier (LM) Test, Normality Test, Granger Causality Test, Impulse Response Function and Walt Test were employed.

Results: *Findings revealed that almost all respective tested variables in the regression model were either found stationary at level I(0), by taking at Ist difference I(1). Since some of the variables were found stationary at level and some were also found stationary at 1st difference then application of Autoregressive distributed lag Model (ARDL) examined co-integrating relationships between tested variables in the regression model. F-Statisticss value of Bound Test revealed long run relationships of tested variables in the model. The value of Co-integrating equations was worked out almost negative and significant depicting adjustment speed from short run dynamics towards long run equilibrium. Application of Variance Inflation Factors almost indicated non-existence of severe multicollinearity in the model. With the application of Homoscedasticity Test, homoscedasticity was experienced among the explanatory variables in the model, because significant F-value rejected the HO hypothesis of no heteroscedasticity in the model. Lagrange Multiplier (LM) Test was employed to check serial correlation or autocorrelation in the model. Significant F-Value of LM Test confirmed the non-existence of serial correlation or autocorrelation in the model. Findings of Granger Causality Test revealed bi-directional, uni-directional or no granger causal relationship between tested variable in the model. Impulse Response Analysis indicated negative as well as positive responses; shock to GDP*

noticed symmetric impact on Fiscal Deficit, Current Account Deficit and Trade Deficit in short run and long run. Application of Wald test almost confirmed the significance of independent variables for a model.

Conclusion: *Results revealed positive and significant effects of Fiscal Deficit, Current Account Deficit, Trade Deficit on GDP (GDP$_r$) Growth Rate of Pakistan over a period of time 1994-95 to 2020-21.*

Implications: *The study concludes the implications in terms of causes and effects of Fiscal Deficit, Current Account Deficit, Trade Deficit, which could be overcome and significantly impacted on economic growth, emphasizing the need to reduce the burden of deficits by boosting exports through good fiscal managerial strategy, provide employment and investment opportunities, generate capital accumulation so necessary to alleviate poverty and accelerate economic growth of Pakistan's economy.*

Keywords: *Fiscal Deficit, Current Account Deficit, Trade Deficit, GDP, ADF and Pakistan.*

INTRODUCTION

Pakistan's GDP growth rate, exports promotion and imports substitution would be considerably improved through adoption of appropriate remedial measures looking into consideration the possible effects of Current Account Deficits, Fiscal Deficits and Trade Deficits (lakhan *et al.,* 2020). Triple Deficit Hypothesis was investigated to measure association between budget deficit, saving investment gap and current account deficit as expansion of twin deficit hypothesis. Government becomes more dependent upon foreign investment to cover its budget deficit enabling current account imbalances to become more worsen by the passage of time (Faried *et al.,* 2023). Economic growth was found to Granger caused fiscal deficit, suggested focusing on growth-driven fiscal deficit to enhance sustainable economic growth (Gajurel & Dangal, 2023). Triple deficit hypothesis revealing bidirectional causal links uncovered between investment-saving deficit, budget deficit, and current account deficit in the short term, emphasizing the context-dependent nature of these dynamics Altunoz (2018).

JUSTIFICATION

The present study aimed at looking into possible effects of fiscal deficit, current account and trade deficits on GDP growth rate of Pakistan Economy. Fiscal Deficit, Current account deficit and Trade Deficit being Triplet Deficit Hypothesis would be taken into account as a significant indicator to assess the effectiveness of such triplet deficit hypothesis on GDP Growth rate of Pakistan Economy. Fiscal deficit is to be obtained by deducting total income from total expenditure, current account deficit is arrived after deducting total exports from total imports, whereas trade deficit could be obtained after deducting Total Exports alongwith Worker's Remittances from Total Imports (Iqbal *et al.,* 2017). In this research study, effects in respect of triplet deficit hypothesis would be found to ensure capital flows and accelerating investment opportunities so necessary to meet the financial gaps of such deficit (Lakhan *et al.,* 2021). This study is unique in sense which will cover almost all related parameters by looking systematically at the all possible effects of fiscal deficit,

current account deficit and trade deficit and their consequences to be faced by Pakistan in terms of exports, imports and GDP growth rate of Pakistan.

OBJECTIVE

Major Objective is as;
To find out effects of Fiscal Deficit, Current Account Deficit and Trade Deficit as Triplet Deficit Hypothesis on GDP Growth rate of Pakistan Economy.

HYPOTHESIS

Ha: Effect of Fiscal Deficit, Current Account Deficits and Trade Deficits towards GDP Growth Rate of Pakistan Economy.

RESEARCH METHODOLOGY

I.

II. METHOD, STRUCTURE OF DATA, RANGE OF DATA AND SOURCES OF DATA:

The present study adopted methodology comprised of structure of data, data range and data sources. Time series data set ranges from 1994-95 to 2020-21 from authenticated sources (i.e Pakistan Economic Surveys and Federal Bureau of Statistics) were utilized for assessing the effects of Fiscal Deficit, Current Account Deficit, Trade Deficit towards GDP growth rate of Pakistan. Inferential statistics were used for basic empirical analysis. In this regard, various statistical techniques and tests were used such as Augmented Dickey-Fuller (ADF) Test for Unit Root (Dickey & Fuller, 1981), Log Linear Response Function based on Ordinary Least Square (OLS) Regression also employed to describe the relationship between tested variable, Autoregressive Distributed lag (ARDL) Model to examine co-integrating relationships between parameters, Bounds Test to test long run relationships, Error Correction Mechanism (ECM) to make adjustment from short run dynamics towards long run equilibrium (Pesaram and Shin, 1998), Variance Inflation Factors to check the presence of Multicollinearity, Heteroskedasticity Test to identify the existence of heterogeneity, Lagrange Multiplier (LM) Test to check Serial Correlation/ Autocorrelation, Normality test to assess whether sample data drawn from normally distributed population or not, Granger Causality Test to verify the usefulness of one variable to forecast another, Impulse Response Function to indicate the direction and magnitude of causal relationship (Pesaran & Shin, 1998), At the end, Wald Test was used to confirm whether a set of independent variables are collectively or individually found 'significant' for a model or not. EViews, being relevant statistical package was employed for time series econometric analysis throughout research study.

Econometric Model

The study has been conducted to assess the effects of Fiscal Deficit, Current Account Deficit, Trade Deficit and Components of Balance of Payment towards economic growth of Pakistan. In this regard, the following econometric model is symbolically expressed as;

$$GDP_t = \alpha_0 + \alpha_1 FDA_t + \alpha_2 CAD_t + \alpha_3 TD_t + e_t \text{ -------------------------} i$$

Where,

GDP_t = GDP Growth Rate of Pakistan in year t.

α_0 = Constant Coefficient.

$\alpha_1, \alpha_2,$ and α_3 = Slopes Coefficient

FD_t = Fiscal Deficit in year t.

CAD_t = Current Account Deficit in year t.

TD_t = Trade Deficit in year t.

e_t = Stochastic term in year t.

Taking logarithm on both sides of equation i, hence log-linear form of model specified becomes;

$$LogGDP_t = \alpha_0 + \alpha_1 Log\ FDA_t + \alpha_2 Log\ CAD_t + \alpha_3 Log\ TD_t + e_t \text{ -------------------------} ii$$

RESULTS AND DISCUSSION

Augmented Dickey Fuller (ADF) Test for Unit Roots: This test is used to determine integration sequence among tested variables in the regression model. It has been noticed that such test tends to reject Null Hypothesis of non-stationarity of all such variables, which confirmed that respective dependent variable (GDP_t) is termed as stationary at level I(0) and respective independent variables (FD_t, CAD_t, TD_t) are found stationary at Ist difference I(1) as reflected in Table 1. The present study is related with previous study conducted by Abbas & Waheed (2021).

Table 1. Unit Root Test for Tested Variables *(GDP_t, FD_t, CAD_t, TD_t)*

Variables	ADF (Levels)		ADF in 1st Differences		Integration sequence through differencing I( )
	Intercept	Intercept and Trend	Intercept	Intercept and Trend	
GDP_t	-3.59	-3.52	-5.11	-4.99	I(0)
FD_t	-2.35	-2.39	-5.58	-5.49	I(1)
CAD_t	-2.81	-2.89	-5.22	-5.11	I(1)
TD_t	-1.23	-2.11	-4.82	-4.81	I(1)

Note: Variables estimated in logarithms;

95 percent critical values = -2.98 (Without Intercept and without Trend); and
95 percent critical values = -3.60 (With Intercept and Trend)

Table 2.   Log-linear response functions for Tested Variables *(GDP$_t$, FD$_t$, CAD$_t$, TD$_t$)*
Response Variable: GDP
Method: Least Squares
Sample: 1994-95 to 2020-21
Counted observations: 27

Variable(s)	Co-efficient	Standard Error	t-Statistics	Probability
Fiscal Deficit (FD)	-0.702008	0.289549	-2.424485	0.0236**
Current Account Deficit (CAD)	0.027092	0.178468	0.151805	0.8807
Trade Deficit (TD)	0.150319	0.182514	0.823603	0.4186
Constant (C)	7.338094	1.480386	4.956877	0.0001
R^2	0.207814	DW Statistics	1.869465	
Adjusted- R^2	0.104486			
F-Statistics	2.011197			
Probability (F-Statistics)	0.140431			

**Significant at 5%

The estimated econometric equation to assess the effects of Fiscal Deficit, Current Account Deficit and Trade Deficit on GDP Growth Rate of Pakistan in long run is as follows;

$$LGDP_t = \alpha_0 -0.702008^*LFD_t + 0.027092^*LCAD_t + 0.150319^* LTD_t \quad -----iii$$

Table 2 indicated negative and significant effects of Fiscal Deficit (**FD$_t$**), whereas positive but insignificant influence of Current Account Deficit and Trade Deficit on GDP Growth Rate of Pakistan (**GDP$_t$**) over a period of time 1994-95 to 2021-22. In case of Fiscal Deficit, the value of its coefficient is worked out as -0.702008 means by increasing 1 unit by Fiscal Deficit, Dependent Variable as GDP Growth Rate is decreased by 0.70 units, In case of Current Account Deficit, the value of its coefficient is 0.027092 means by increasing 1 unit by Current Account Deficit, Dependent Variable as GDP Growth Rate is increased by 0.02 units, In case of Trade Deficit, the value of its coefficient is worked out as 0.150319 means by increasing 1 unit by Trade Deficit, Dependent Variable as GDP Growth Rate is increased by 0.15 units. The perusal of Table 2 provides that R^2 value is 21% and Adjusted R^2 value is 10% which indicated that independents variable such as **FD$_t$, CAD$_t$, TD$_t$** are predicting 21% Dependent Variable as **GDP$_t$**. The size of R^2 is

21%, which is inappropriate to indicate overall fitness of estimated equation. F value is worked out as 2.01 (P>0.05) revealing overall combined effects and overall unfitness of the Model.

Table 3.   Autoregressive Distribute Lags Model for Tested Variables *(GDP$_t$, FD$_t$, CAD$_t$, TD$_t$)*

Part-A

Response Variable: GDP
Method: ARDL (1, 1)
Sample: 1994-95 to 2020- 21
Counted observations after adjustments: 26

Variable(s)	Co-efficient	Standard Error	t-Statistic	Prob.*
GDP(-1)	0.044386	0.190675	0.232784	0.8181
FD	-0.115599	0.291885	-0.396043	0.6959
FD(-1)	-0.706826	0.317950	-2.223071	0.0368**
C	8.679856	2.008957	4.320578	0.0003
R²	0.366699	DW Statistics		1.733982
Adjusted- R²	0.280339			
F-Statistics	4.246198			
Probability (F-statistics)	0.016440			

**Significant at 5%

Part-B

Response Variable: GDP
Method: ARDL ARDL(1, 1)
Sample (adjusted): 1994 2020
Counted observations: 26 after adjustments

Variable(s)	Co-efficient	Standard Error	t-Statistic	Probability*
GDP(-1)	0.275335	0.211517	1.301718	0.2065
CAD	0.039212	0.219124	0.178947	0.8596
CAD(-1)	-0.359896	0.204649	-1.758596	0.0926*
C	4.039497	1.036813	3.896073	0.0008
R²	0.222376	DW Statistics		2.013697
Adjusted- R²	0.116337			
F-Statistics	2.097106			
Probability (F-statistics)	0.129708			

*Significant at 10%

Part-C
Response Variable: GDP
Method: ARDL (1, 1)
Sample (adjusted): 1994-95 to 2020-21
Counted observations: 26 after adjustments

Variable(s)	Co-efficient	Standard Error	t-Statistic	Probability.*
GDP(-1)	-0.021725	0.168379	-0.129022	0.8985
TD	0.896210	0.256432	3.494921	0.0020***
TD(-1)	-1.146138	0.260253	-4.403944	0.0002***
C	5.470841	1.012919	5.401064	0.0000

R^2	0.520635		DW Statistics	2.543330
Adjusted -R^2	0.455267			
F-Statistics	7.964692			
Probability(F-statistics)	0.000889			

***Significant at 1%

Perusal of Table 3 provides the application of Auto-Regressive Distribute Lags Model (ARDL) a standard least square regression that includes lags of dependent and independent variables as regressors. The results findings of Table 3 (Part A, B and C) revealed that lag values of Fiscal Deficit ($P<0.05$), Current Account Deficit ($P<0.1$) and Trade Deficit ($P<0.01$) impacted negative and significant influence on GDP Growth Rate of Pakistan, Hence, ARDL examined co-integrating relationships between tested variables in the model. The current study is on the analogy of previous studies conducted by Abbasi *et al* (2021); Abbas *et al* (2022) and Abu & Staniewski (2022).

Table 4. Bound Test for estimating long run relationships among Variables (GDP_t, FD_t, CAD_t, TD_t)

ARDL Bounds Test
Sample: 1994-95 to 2020-21
Counted observations: 27
HO: No long-run relationships

t- Statistics	Value	k

F-statistics	11.34740 3

Critical Bounds Value

Sig	*I0 Bounds*	*I1 Bounds*
10%	*2.72*	*3.77*
5%	*3.23*	*4.35*
2.5%	*3.69*	*4.89*
1%	*4.29*	*5.61*

HO= No Long Run Relationships between variables
HI = Long Run Relationships between variables

Table 4 indicated that result findings of Bound Test that value of F statistics is worked out 11.35, which is greater than upper bound critical value, hence by rejecting HO hypothesis and accepting HI, which shows long run relationship between variables in the model. The study is in line with past findings of Afonso *et al.* (2022).

Table 5. Error Correction Mechanism (ECM) for estimating short run relationships and long run adjustments among Variables *(GDP$_t$, FD$_t$, CAD$_t$, TD$_t$)*

Part-A
Response Variable: D(GDP)
Method: Error Correction Mechanism
Sample: 1994-95 to 2020-21
Counted observations: 26 after adjustments

Variable(s)	*Co-efficient*	*Standard Error*	*t-Statistic*	*Probability.*
C	*-0.199567*	*0.311373*	*-0.640925*	*0.5285*
D(FD)	*-0.440394*	*0.249169*	*-1.767454*	*0.0917***
D(CAD)	*-0.094649*	*0.171803*	*-0.550916*	*0.5875*
D(TD)	*1.034383*	*0.298091*	*3.470030*	*0.0023**
ECT(-1)	*-1.121731*	*0.177806*	*-6.308719*	*0.0000**

R²	0.682440	DW Statistics	2.019244
Adjusted- R²	0.621952		
F-statistics	11.28229		
Probability (F-statistics)	0.000048		

*Significant at 1%
***Significant at 10%

The estimated econometric equation to assess the effects of Fiscal Deficit, Current Account Deficit and Trade Deficit on GDP Growth Rate of Pakistan in short run is as follows;

$$LGDP_t = \alpha_0 - 0.440394^* LFD_t - 0.094649^* LCAD_t + 1.034383^* LTD_t \text{ ------------------------------iv}$$

Part-B: Long run and Short Run adjustments

Variable	*Model*			
	Long run	*p-value*	*Short run*	*p-value*
FD_t	-0.702008	0.0236**	-0.440394	0.0917***
CAD_t	0.027092	0.8807	-0.094649	0.5875
TD_t	0.150319	0.4186	+ 1.034383	0.0023*
$ECT(-1)$	n/a	n/a	-1.121731	0.0000*

In Table 5(A), the significant values of Fiscal Deficit (P<0.1) and Trade Deficit (P<0.01) indicated short run relationships. Since all tested variables are stationary at I(1) and error term at I(0), it means cointgration and long run relationship exists. Perusal of Table 5 indicated the short run significant relationships between tested variables (FD_t, TD_t) and insignificant relationship of tested variable (CAD_t). The perusal of Table 5 provides that R^2 value is 0.68 and Adjusted R^2 value is 0.62 which indicated that independents variable such as *FD_t, CAD_t, TD_t* are predicting 68% Dependent Variable as *GDP_t*. F value is worked out as 11.28 (P<0.01) revealing significant relationships between dependent and independent variables in estimated model, which tells us overall combined effects and overall Fitness of the Model. The value of Co-integrating equation is negative and significant provides speed of adjustment that there is convergence from short run dynamics towards long run equilibrium. Table 4.5(B) indicated long run and short run adjustments in the model. The current study is in agreement with previous study conducted by Rahman (2012); Saeed & Khan (2012); Kaygisiz *et al.* (2016).

Table 6.   Variance Inflation Factors for checking the presence of Multicollinearity for variables (GDP_t, FD_t, CAD_t, TD_t)

Variance Inflation Factors
Sample: 1994-95 to 2020-21
Counted observations: 27 after adjustments

Variable(s)	Co-efficient Variance	Uncentered VIF	Centered VIF
FD	0.083839	19.84006	1.351339
CAD	0.031851	3.044790	1.115295
TD	0.033312	7.975314	1.420771
C	2.191544	14.97230	NA

Variance Inflation Factors (VIF) $\geq$ 10 indicate existence of severe Multicollinearity in the Model. Perusal of Table 6 indicated that Centered VIF values of all tested variables (FD_t, CAD_t, TD_t) are less than 10 revealed non existence of severe multicollinearity in the model. The present study is in association with previous studies conducted by Tang (2014).

Table 7. Heteroskedasticity Test for variables $(GDP_t, FD_t, CAD_t, TD_t)$

Heteroskedasticity Test:

F-statistics	0.212081	Probability. F(3,23)	0.8870
Obs*R^2	0.726789	Probability. Chi-Square(3)	0.8669
Scaled explained SS	0.671968	Probability. Chi-Square(3)	0.8798

Ho: No Heteroskedasticity
HI: Heteroskedacticity

Perusal of Table 7 indicated that probability value of F-Statistics and Chi-square are greater than 5% level of significance, hence HO is accepted revealing presence of homoskedasticity (no heteroskedasticity) in the model. The current study is in line with past study conducted by Guder & Kılıc (2016).

Table 8. Lagrange Multiplier (LM) Test for checking serial correlation/ autocorrelation among variables $(GDP_t, FD_t, CAD_t, TD_t)$

Serial Correlation LM Test:

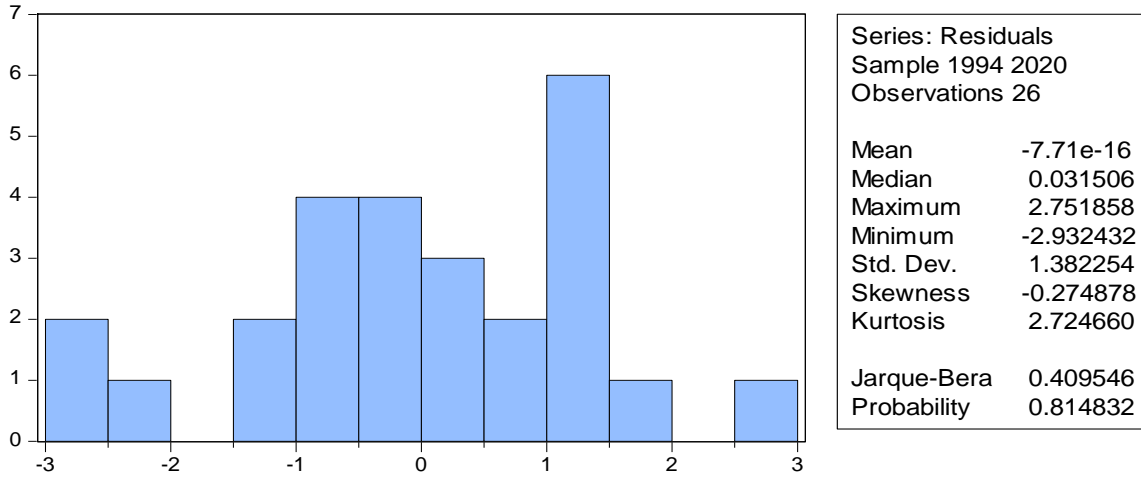|			
F-statistics	0.554759	Probability. F(2,21)	0.5824
Obs*R^2	1.354936	Probability. Chi-	0.5079

Square(2)

HO: No serial correlation between variables

HI: Serial correlation between variables

Perusal of Table 8 revealed the probability values of all tested variables (i.e FD_t, CAD_t, TD_t), which are greater than 5% significance level (P>0.05), hence HO is accepted, which revealed that model is free from serial correlation/ autocorrelation and does not need to be treated.

Figure 1.   Normality Test for tested variables *(GDP$_t$, FD$_t$, CAD$_t$, TD$_t$,)*

Series: Residuals	
Sample 1994 2020	
Observations 26	
Mean	-7.71e-16
Median	0.031506
Maximum	2.751858
Minimum	-2.932432
Std. Dev.	1.382254
Skewness	-0.274878
Kurtosis	2.724660
Jarque-Bera	0.409546
Probability	0.814832

A normality test determined the sample data has been drawn from a normally distributed population.

HO: Sample data has been drawn from normally distributed

HI: Sample data has not been drawn from normally distributed

Since the probability value of Normality Test (0.81) in Figure 1 is greater than 5% (P>0.05) level of significance, hence accepts HO means sample data has been drawn from normal distributed. Hence relationships among tested variables are normal in the model.

Table 9.   Granger Causality Test for tested variables *(GDP$_t$, FD$_t$, CAD$_t$, TD$_t$)*

Pairwise Granger Causality Tests
Sample: 1994-95 to 2020-21
Lags: 2

HO:	Obs	F-Statistic	Probability.
FD not Granger Causing GDP	25	5.34950	0.0138**
GDP not Granger Causing FD		0.09964	0.9056
CAD not Granger Causing GDP	25	2.13850	0.1440
GDP not Granger Causing CAD		1.77224	0.1956

TD not Granger Causing GDP	*25*	*1.86779*	*0.1804*
GDP not Granger Causing TD		*4.87927*	*0.0188****
CAD not Granger Causing FD	*25*	*0.72591*	*0.4962*
FD not Granger Causing CAD		*1.85614*	*0.1822*
TD not Granger Causing FD	*25*	*3.21388*	*0.0616**
FD not Granger Causing TD		*2.43946*	*0.1127*
TD not Granger Causing CAD	*25*	*0.15304*	*0.8591*
CAD not Granger Causing TD		*2.53758*	*0.1042**

**Significant at 5%
*Significant at 10%

   Perusal of Table 9 revealed uni-directional causal relationship between Fiscal Deficit and GDP, between GDP and Trade Deficit, between Trade Deficit and Fiscal Deficit and between Current Account Deficit and Trade Deficit indicating long-term relationship in the cointegration test, while no causality exists among rest of other combinations in the model.

Figure 2: Impulse Response Analysis for tested variables *(GDP$_t$, FD$_t$, CAD$_t$, TD$_t$)*
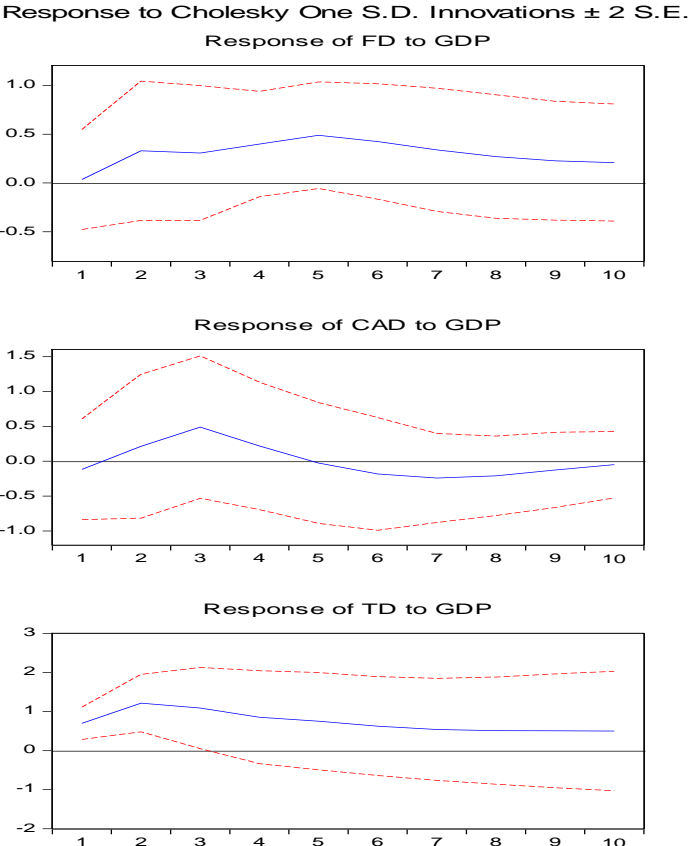
Perusal of Figure 2 depicted red lines and blue line in all three responses of Fiscal Deficit, Current Account Deficit and Trade Deficit to GDP. Red lines referred to 95% confidence interval and blue line referred to Impulse Response Function.

In case of Response of Fiscal Deficit to GDP revealed that one standard deviation shock or impulse or innovation given to GDP resulted in sharp increase of Fiscal Deficit from 1st to 2nd period, then stable from 2nd to 3rd period, then gradual increases from 5th to 10th period.

In case of Response of Current Account Deficit to GDP indicated that one standard deviation shock or impulse or innovation given to GDP resulted in sharp increase of Current Account Deficit from 1st to 3rd period becomes positive, then sharp declines from 3rd to 5th period becomes negative and thereafter gradual declines from 5th to 10th period.

In case of Response of Trade Deficit to GDP revealed that one standard deviation shock or impulse or innovation given to GDP resulted in sharp increase of Trade Deficit from 1st to 2nd period followed by gradual decline from 2nd to 10th period.

Since Impulse Response Function indicated direction and magnitude of casual relationships among tested variables, hence in all three responses, negative as well as positive responses existed, so shock to

GDP noticed symmetric impact of Fiscal Deficit, Current Account Deficit and Trade Deficit in Pakistan in short as well as in long run.

Table 10: Wald Test for tested variables $(GDP_t, FD_t, CAD_t, TD_t)$

Wald Test: (ARDL 1 lag Dependent and 4 lags Independent Variables

Test-Statistics	Value(s)	d.f	Probability
F-statistics	4.508425	(7, 17)	0.0053***
Chi-square	31.55897	7	0.0000***

HO: C(1)=0,C(2)=0,C(3)=0,C(4)=0,C(5)=0,C(6)=0,C(7)=0

HO Summary:

Normalized Restriction (= 0)	Value(s)	Standard Error
C(1)	-0.142698	0.188448
C(2)	-0.275106	0.257051
C(3)	-0.265674	0.197639
C(4)	0.333478	0.232063
C(5)	-0.312549	0.179606
C(6)	1.133842	0.309830
C(7)	-1.265548	0.340022

Linear restrictions in coefficients.

***Significant at 1%

HO: The value of independent variable is zero (0)

HI= The value of independent variable is not equal to zero (0)

Since the results of Wald Test in Table 10 indicated the probability values at F-test and Chi-Square values in case of Independent Variables (*i.e* FD_t, CAD_t, TD_t) are less than 1% significance level (P<0.01), it means Null Hypothesis of assuming the values of independent variables are zero (0) is rejected, confirming independent variables (*i.e* FD_t, CAD_t, TD_t) are significant for a model. The present study is in agreement with past study conducted by Turan (2015); Senadza & Aloryito (2016).

CONCLUSION

The present study revealed significant effectiveness of Fiscal Deficit, Current Account Deficit and Trade Deficit as Triplet Deficit Hypothesis in relationships with GDP growth rate of Pakistan over a period of time 1994-95 to 2020-21. It is worth mentioning to keep the fiscal deficit below such threshold level and governmental expenditure to be restricted towards productive investments for promotion of long run growth potentials in the country. It is quite evident from findings that reducing fiscal deficits could help alleviate trade deficits through complementary policies focused on the promotion of exports, enhancement of productivity, along-with the improvement in exchange rate in Pakistan. The findings revealed asymmetric impacts of Fiscal Deficit, Current account deficit and trade deficit on economic growth of Pakistan's economy in both short and long run, emphasizing the need for adaptive policies to address varying deficits dynamics in external and internal sectors. Findings suggest three-way association of fiscal deficit, current account deficit and trade deficit as Triplet Deficit Hypothesis emphasized dire need of coordinated, prudent and effective monetary and fiscal policies to address rising triplet deficit hypothesis especially in Pakistan's economy.

POLICY IMPLICATIONS
Following policy implications of the study are as;

1. The study concluded the implications in terms of causes and effects of Fiscal Deficit, Current Account Deficit, Trade Deficit and Components of Balance of Payments, which could be overcome and significantly impacted on economic growth, emphasizing the need to reduce the burden of deficits by boosting exports through good fiscal managerial strategy, provide employment and investment opportunities, generate capital accumulation so necessary to alleviate poverty and accelerate economic growth of Pakistan's economy

2. Some Economists were of opinion that deficits are sometimes necessary to stimulate aggregate demand helps in reviving or driving economic growth. Good Fiscal Management on the part of Government would be the strongest arguments for a policy of stable or low fiscal deficits in the economy.

3. Good Fiscal Strategy will leads to foreign lending and helps in avoiding crowding out of personal investments inflows. Hence, there is dire need to frame sound fiscal strategy in Pakistan's economy so as to reduce all three deficits at all means on one hand and to promote economic growth by boosting exports on another, rather an economy growing with rising deficits trends would leads towards unproductive and uncompetitive and resultantly, local and foreign investors may not be willing to invest in such type of economy.

4. It is dire need to look into consideration the critical role of macroeconomic variables, especially the pronounced link between budget and current account deficits. Prudent fiscal

management needs to be emphasized so necessary to mitigate excessive budget deficits, thereby alleviating current account imbalances.

5. Consequences of Triplet Deficit Hypothesis on the economy i.e higher future interest payments and accumulation of loan burden on the part of Government, would results in occurrence of huge impact of expenditure on administration and maintenance. Ultimately it leads to high inflationary pressure on the economy.

REFERENCES:

Abbas, S., & Waheed, A. (2021). Fiscal Deficit and Trade Deficit Nexus in Pakistan: An Econometric Inquiry. *Panoeconomicus, 68*(5), 745-736.

Abbas, Z., Abbas, A., & Abbas, M. (2022). The Three Gaps Phenomenon in Pakistan: Evidence and Implications. *Journal of Development and Social Sciences*, 3(2), 1197-1207.

Abbasi, M.A., Amran, A., Rehman, N.A., Sahar, N.U., & Ali, A. (2021). Twin Deficit and Macroeconomic Indicators in Emerging Economies: A Comparative Study of Iran and Turkey. *Journal of Asian Finance, Economics and Business, 8*(5), 617-626.

Abu, N., & Staniewski, M.W. (2022) An empirical investigation of the effect of corruption on domestic savings in Nigeria. Economic *Research-Ekonomska Istraživanja 35*(1), 4092-4112.

Afonso, A., Huart, F., Jalles, J.T., & Stanek, P. (2022). Twin deficits revisited: A role for fiscal institutions? *Journal of International Money and Finance, 121*, 1-22.

Altunoz, U. (2018). Analysis of Triple Deficits in the Context of Current Account, Budget Deficit, and Investment-Savings Gap: The Case of Turkey. *Maliye Dergisi, 175*, 115-139.

Dickey, D.A., and Fuller, W.A. (1981). Likelihood Ratio Statistics for Autoregressive time series with a Unit Root. *Econometrica, 49*(4), 1057.

Faried, S., Mohamed, H.A., & Hemaya, A.E.S. (2023). An Empirical Investigation of the Validity of Triple Deficits Hypothesis in Egypt. *Scientific Journal for Economics and Commerce*, 13-30.

Gajurel, R. P., & Dangal, D. N. (2023). Does Fiscal Deficit Cause Economic Growth? Evidence from Nepal. *Gyanjyoti*, 3(1), 40.

Iqbal, N., Muslehuddin, & Ghani, E. (2017). The Fiscal Deficit and Economic Growth in Pakistan: New Evidence. *The Lahore Journal of Economics, 22*(SE), 53-72.

Kaygisiz, A.D., Kaya, D.G., & Kosekahyaoglu, L. (2016). Test of twin deficit hypothesis for turkey: an analysis for 2001-2014 period. *Romanian Journal of Economic Forecasting, XXI*(4), 211-228.

Lakhan, A.B., Keeryo, Z.A., & Mumtaz, J. (2020). Causes and consequences of Trade Deficit in Pakistan. *Ilkogretim, 19*(4): 6360-6370.

Lakhan, A.B., Keeryo, Z. A., Mumtaz, J. (2021). Basic Parameters Of Trade Deficit In Pakistan. *Palarch's Journal Of Archaeology Of Egypt/Egyptology*, 18(10), 1129-1138.

Pesaran, H.H., & Shin, Y. (1998). Generalized impulse response analysis in linear multivariate models. *Economics Letters, Elsevier, 58*(1), 17-29.

Rahman, N.H. (2012). The Relationship between Budget Deficit and Economic Growth from Malaysia's Perspective: An ARDL Approach. *International Conference on Economics, Business Innovation IPEDR, 5*(11), 54-58.

Saeed, S., & Khan, M.A. (2012). Twin deficits hypothesis: The case of Pakistan 1972-2008. *Academic Research International, 3*(2), 155.

Senadza, B., & Aloryito, G.K. (2016). The twin deficits hypothesis: Evidence from Ghana. *International Journal of Business and Economic Sciences Applied Research (IJBESAR)*, 9(3), 55-62.

Tang (2014). Fiscal Deficit, Trade Deficit, and Financial Account Deficit: Triple Deficits Hypothesis with the U.S. Experience, Monash University Department of Economics *Discussion Paper, 6*, 1-13.

Turan, T. (2015). The Causal Relationship between Current Account and Financial Account Balance in Selected CEE Countries. *Ekonomicky casopis, 63*(09), 959-974.