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Economic impact of Government spending on GDP Growth rate: a case study of Pakistan's economy

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Abstract
The present study aimed at assessing Total Expenditure *(TE_t)*, Current Expenditure *(CE_t)*, and Development Expenditure *(DE_t)* over GDP *($LGDP_t$)* Growth Rate of Pakistan for time period 1994-95 to 2020-21, wherein Results of Augmented Dickey Fuller Test towards GDP revealed stationary at level I(0) order of integration and respective variables *(TE_t, CE_t, DE_t)* were stationary at 1st difference I(1). Findings of Autoregressive Distributed revealed that lag values of Total Expenditure *(TE_t)*, Current Expenditure *(CE_t)*, and Development Expenditure *(DE_t)* impacted significant influence on GDP Growth Rate of Pakistan. Results of Bound Test indicated long run relationships among variables. A negative and statistically significant value of error correction term (-0.892305) indicated that the variables will adjust positively towards their long-run equilibrium. Since Centered VIF values of all re-tested variables *(TE_t, CE_t, DE_t)* were found less than 10 revealed no severe presence of multicollinearity in the model. Heteroskedasticity test revealed presence of homoskedasticity (no heteroskedasticity) in the model. F-Statistics value of LM Test indicated no serial correlation/ no autocorrelation in the model. F-Statistics value in case of Normality test revealed that sample data drawn from normally distributed population. Granger Causality Test revealed uni-directional causal relationship between Development Expenditure and GDP (P<0.10), bi-directional between Total Expenditure and Current Expenditure (P<0.10) indicating long-term relationship in the co-integration test, while no causality exists among rest of other combinations in the model. Since negative as well as positive responses existed, so shock to GDP noticed symmetric impact of Total Expenditure, Current Expenditure and Development Expenditure in Pakistan in short as well as in long run. Wald test confirmed the set of independent variables (TE_t, CE_t, DE_t) were significant for a model.

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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 link 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 and Dangal, 2023). Current account deficit was positively affected by Budget deficit in short and long term time periods, revealing the existence of twin deficit hypothesis, regardless of structural breaks (Shah et al., 2023).

Using Johansen's cointegration approach the past study established a significant long-term association of the deficits, indicating that improving budgeting policy and export competitiveness can address the persistent current account and budget deficit issue (Waheed & Akram (2023). The interplay of trade deficit, fiscal deficit, and saving-investment gap highlighted their interconnectedness and implications for the Pakistani economy, with ARDL and cointegration methods revealing short-run and bi-directional causalities among external debt, current account, and fiscal balances Abbas et al. (2022). Deficits in sub-Saharan Africa's current, fiscal, and financial accounts, revealed bidirectional causal links between them, emphasized the need for coordinated fiscal, monetary, and trade interventions to support the African Continental Free Trade Area Dimnwobi et al. (2022). Triple deficit hypothesis in the Iranian economy provided trade openness for two different models regarding oil as well as without oil trade with the help of error correction mechanism and Johansen Co-integration approaches for the aim of determining long term relationships of tested parameters, revealed the confirmation of long run relationship between tested variables, whereas validity of triplet deficit hypothesis was not confirmed in case of short run relationships between tested parameters. Moreover, Impulse Response Function also confirmed the validity status of oil as well as non oil trade indicating presence of inverse mechanism for the model of oil free trade Mehrara et al (2022).

Negative effect of the trade deficit impacted on GDP, revealing harmful effects of external debt on GDP. Moreover, previous study also indicated positive impact of labour force, exchange rate and manufacturing value added, indicating negative and significant association between economic growth and external debt Safdar et al. (2021). The interplay among macroeconomic fiscal deficit, economic uncertainty outcomes of Nigeria revealed that economic uncertainty negatively impacted GDP and inflation by eroding investor confidence and dampening economic activity, emphasizing the importance of conducive economic environment and effective fiscal policy Ubi et al. (2021). Employing a simultaneous model with stochastic equations, the study indicated a significant positive two-way link between current account deficit and fiscal deficit emphasizing need of coordinated and prudent monetary and fiscal policies to address rising twin deficits scenario Awan et al. (2020). Non-linear effect possibility aimed at suggesting stronger negative effect on economic growth at time of occurrence of huge trade deficits Blavasciunaite

et al. (2020). A positive association among money supply and fiscal deficit, while a negative association of fiscal deficit and inflation suggesting that effective policies to control inflation and manage money supply are crucial for reducing fiscal deficit's negative impact on the Pakistani economy Hassan et al. (2020). Co-integration provided that Size of Market, FDI, Infrastructure and Average Tariff had observed negatively on the trade deficit of Pakistan Lakhan et al. (2020).

RESEARCH METHODOLOGY

Method, Structure of data, Range of data and Sources of data:

Time series data ranges from 1991-92 to 2020-21 from authenticated sources of Pakistan Economic Surveys, Federal Statistical Bureau, World Bank etc were utilized for present research study. (Dickey and Fuller, 1981) was used to employ the econometric tests such as stationarity and OLS regression model. In order to check the time series data set in terms of stationarity or non stationarity levels, most suitable test such as Augmented Dickey-Fuller test has been utilized to test the stationarity status of time series tested variables (Perron, 1990). Moreover, to estimate the long and short run relationships between variables, Auto-Regressive Distributed Lag (ARDL) Model, Bounds Test, Error Correction Mechanism were employed (Pesaram & Shin. 1998), Granger causality as an econometric test also used to verify the usefulness of one variable to forecast another, indicated a bidirectional, unidirectional or no causality moving. Impulse Response Function was also used to check the direction and magnitude of casual relationship, (Pesaran & Shin, 1998, Ahad, 2017). A normality test also applied to determine whether a sample data has been drawn from a normally distributed population. The Wald test as parametric statistical measure was also used to confirm whether a set of independent variables are individually or collectively 'significant' for a model or not. EViews, being relevant statistical package was used for time series econometric analysis throughout research study.

Econometric Model

The econometric equation to assess the effects of Total Expenditure (TE_t), Current Expenditure (CE_t) and Development Expenditure (DE_t) on GDP Growth Rate of Pakistan is as follows;

$$GDP_t = \alpha_0 + \alpha_1 TE_t + \alpha_2 CE_t + \alpha_3 DE_t + e_t \text{ ----------} i$$

Where,
GDP_t = GDP Growth Rate of Pakistan in year t.
α_0 = Constant Coefficient.
α_1, α_2, and α_3 = Slopes Coefficient
TE_t = Total Expenditure in year t.
CE_t= Current Expenditure in year t.
DE_t = Development Expenditure in year t.
e_t = Stochastic term in year t.

Log-Linear Model is specified when the logarithm (Log) of the dependent variable is modeled using a linear combination of independent variables as;

$$LogGDP_t = \alpha_0 + \alpha_1 TE_t + \alpha_2 CE_t + \alpha_3 DE_t + e_t \text{ ----------} ii$$

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 HO of non-stationarity of all such variables, which confirmed that respective dependent variable ($LGDP_t$) is found stationary at level 1(0) and respective independent variables (TE_t, CE_t, DE_t) are found stationary at 1st difference I(1) as reflected in Table-1.

Table-1 Unit Root Test for Tested Variables *($LGDP_t$, TE_t, CE_t, DE_t)*

Variable(s)	ADF (Levels)		ADF in 1st Differences		Integration sequence through differencing I( )
	Intercept	Intercept & Trend	Intercept	Intercept & Trend	
$LGDP_t$	-3.59	-3.52	-5.11	-4.99	I(0)
TE_t	-2.39	-2.35	-6.14	-6.22	I(1)
CE_t	-2.27	-2.21	-5.00	-5.11	I(1)
DE_t	-2.15	-2.09	-5.36	-5.26	I(1)

Note: Variables estimated in log linear form;

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

Table-2 Ordinary Least Square (OLS) for Tested Variables *($LGDP_t$, TE_t, CE_t, DE_t)*

Response Variable: Log(GDP)				
Method: **Least Squares**				
Sample: 1994-95 to 2020-21				
Counted observations: 27				
Variable(s)	**Co-efficient(s)**	**Stand. Error**	**t-Statistics**	**Probability**
Total Expenditure (TE)	-0.421401	0.870930	-0.483852	0.6331
Current Expenditure (CE)	0.069683	0.908702	0.076684	0.9395
Development Expenditure (DE)	1.050409	0.880888	1.192443	0.2452
Constant (C)	7.649553	4.012816	1.906281	0.0692
R^2	0.190549	Durbin Watson Statistics (DW)		1.616005
Adjusted- R^2	0.084968			
F-Statistics	1.804770			
Probability (F-Statistics)	0.174442			

The estimated econometric equation to assess the effects of Total Expenditure (TE_t), Current Expenditure (CE_t) and Development Expenditure (DE_t) on GDP Growth Rate of Pakistan in long run is as follows;

$$\boldsymbol{LGDP_t = \alpha_0} -0.421401^{*}\boldsymbol{TE_t} + 0.069683^{*}\boldsymbol{CE_t} + 1.050409^{*}\boldsymbol{DE_t} \quad \textbf{----------iii}$$

Table-2 indicated insignificant effects of Total Expenditure (TE_t), Current Expenditure (CE_t) and Development Expenditure (DE_t) on GDP Growth Rate of Pakistan ($LGDP_t$) over a period of time 1994-95 to 2021-22. In case of Total Expenditure, the value of its coefficient is worked out as -0.421401 means for 1 unit increase by Total Expenditure, Dependent Variable as GDP Growth

Rate decreases by 42.1%. In case of Current Expenditure, the value of its coefficient is 0.069683 means for 1 unit increase by Current Expenditure, Dependent Variable as GDP Growth Rate increases by 6.9%. In case of Development Expenditure, the value of its coefficient is worked out as 1.050409 means for 1 unit increase by Development Expenditure, Dependent Variable as GDP Growth Rate increases by 105%. The perusal of Table-2 provides that R^2 value is 19% indicated that independents variable such as TE_t, CE_t and DE_t are predicting 19% variation in Dependent Variable as $LGDP_t$. F value is worked out as 1.8 (P>0.05) revealing overall combined effects and overall unfitness of the Model. Moreover, DW (1.62) lies within acceptable range of 1.5 to 2.5 revealing no autocorrelation in the model.

Table-3 Autoregressive Distribute Lags Model for Tested Variables *($LGDP_t$, TE_t, CE_t, DE_t)*

Response Variable: Log(GDP)				
Method: **ARDL** (1,5,5,5)				
Sample: 1994-95 to 2021-22				
Counted observations: 22 after adjustments				
Variable(s)	**Co-efficient(s)**	**Stand. Error**	**t-Statistic**	**Probability***
LGDP(-1)	0.843662	0.350457	2.407321	0.1378
TE	-5.217347	1.353729	-3.854056	0.0612
TE(-1)	-5.202065	0.895197	-5.811082	0.0284**
TE(-2)	0.283423	0.759494	0.373174	0.7449
TE(-3)	-3.133612	0.792960	-3.951790	0.0585
TE(-4)	-0.579729	1.094781	-0.529539	0.6493
TE(-5)	-5.378289	1.423482	-3.778264	0.0635
CE	3.022976	1.260866	2.397539	0.1387
CE(-1)	7.067295	1.217702	5.803798	0.0284**
CE(-2)	-0.407213	0.730171	-0.557696	0.6331
CE(-3)	2.582374	1.017268	2.538538	0.1264
CE(-4)	1.225393	0.942482	1.300176	0.3232
CE(-5)	4.650249	1.705934	2.725926	0.1123
DE	6.208548	1.596190	3.889605	0.0602
DE(-1)	4.942733	0.949410	5.206112	0.0350**
DE(-2)	-3.552044	0.755710	-4.700273	0.0424
DE(-3)	2.965916	0.909284	3.261815	0.0825
DE(-4)	0.638400	1.228379	0.519710	0.6551
DE(-5)	7.552367	1.396291	5.408877	0.0325
C	16.25782	9.098359	1.786896	0.2159
R^2	0.987920	Durbin Watson Statistics (DW)		2.984099
Adjusted- R^2	0.873163			
F-Statistics	8.608753			
Probability(F-Statistics)	0.109041			

***Significant at 5%*

Perusal of Table-3 provides the application of Auto-Regressive Distribute Lags Model (ARDL) an established least square regression that includes lags of response and explanatory variables. Since both integration sequence comprised of mixture of conditions prevails at level I(0) and at 1st difference I(1) as reflected in Table-1, after application of ARDL approach, the results findings of Table-3 revealed that lag values of Total Expenditure ($P<0.05$) impacted negative and significant influence, whereas Current Expenditure ($P<0.05$) and Development Expenditure ($P<0.05$) impacted positive and significant influence on GDP Growth Rate of Pakistan, Hence, ARDL examined co-integrating relationships between tested variables in the model. The perusal of Table-3 provides that R^2 value is 99% indicated that independents variable such as TE_t, CE_t, DE_t are predicting 99% variation in Dependent Variable as $LGDP_t$. F value is worked out as 8.6 ($P<0.10$) revealing significant relationships between dependent and independent variables in estimated model, which tells us overall combined effects and overall fitness of the Model. The present study is associated with past research conducted by Nhemhafuki (2023), validated the positive relationship of Government Expenditure (i.e Government Consumption, Investment, and Transfer Payments) to the Economic Growth. Moreover, Government Expenditure leads to enhancement in the aggregate demand of the goods and services as well as stimulating the competitiveness, innovation and productivity.

Table-4 Bound Test for estimating long run relationships among Variables *($LGDP_t$, TE_t, CE_t, DE_t)*

ARDL Bounds Test		
Sample: 1994-95 to 2020-21		
Counted observations: 22 after adjustments		
HO: No long-run relationships		
Test Statistics	Value(s)	k
F-Statistics	21.61143	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
Bound Test is applied to ensure the presence of long run relationships between tested variables in the model. Table-4 indicated that result findings of Bound Test that value of F statistics is worked out 21.61, 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.

Table-5 Error Correction Mechanism (ECM) for estimating short run relationships and long run adjustments among Variables *($LGDP_t$, TE_t, CE_t, DE_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	0.001983	0.381470	0.005199	0.9959
D(TE)	-0.462675	0.619222	-0.747188	0.4632
D(CE)	0.254626	0.616271	0.413172	0.6837
D(DE)	0.985153	0.773901	1.272969	0.2169
ECT(-1)	-0.892305	0.205606	-4.339874	0.0003***
R^2	0.513048	Durbin Watson Statistics (DW)		1.938694
Adjusted- R^2	0.420295			
F-Statistics	5.531349			
Probability (F-Statistics)	0.003341			

****Significant at 1%*

The estimated econometric equation for short run model to assess the effects of Total Expenditure (TE_t), Current Expenditure (CE_t) and Development Expenditure (DE_t) on GDP Growth Rate of Pakistan in short run is as follows;

$$LGDP_t = \alpha_0 - 0.421401^{*} TE_t + 0.069683^{*} CE_t + 1.050409^{*} DE_t - 0.892305\ ECT(-1) \quad \text{----------iv}$$

Part-B: Long run and Short Run adjustments

Variable	Model			
	Long run	**p-value**	**Short run**	**p-value**
TE_t	-0.421401	0.6331	-0.462675	0.4632
CE_t	0.069683	0.9395	0.254626	0.6837
DE_t	1.050409	0.2452	0.773901	0.2169
ECT(-1)	n/a	n/a	-0.892305	0.0003***

In Table-5 (Part-A), the insignificant values of Total Expenditure, Current Expenditure and Development Expenditure indicated short run relationships. Since all tested variables are stationary at I(1) and error term at I(0), it means co-integration and long run relationship exists. Perusal of Table 4.15 (Part-A) indicated the short run insignificant relationships between tested variables but the value of Co-integrating equation is negative (-0.892305) and significant (P<0.01) provides speed of adjustment as 89% per unit time indicating that there is convergence from short run dynamics towards long run equilibrium. Since the negative value of error correction term is -0.89, this means that 89 percent of the error will be corrected in the next period in converging positively towards long run adjustments. Perusal of Table-5 (Part-B) provides long run and short run adjustments towards long run equilibrium.

Table-6 Variance Inflation Factors for checking the presence of Multicollinearity for variables *($LGDP_t$, TE_t, CE_t, DE_t)*

Variance Inflation Factors			
Sample: 1994-95 to 2020-21			
Counted observations: 26 after adjustments			
	Coefficient	Uncentered	Centered
Variable(s)	Variance	VIF	VIF
C	0.145519	1.017959	NA
D(TE)	0.383436	6.486976	6.410158
D(CE)	0.379790	4.951813	4.932791
D(DE)	0.598923	2.510589	2.480592
ECT(-1)	0.042274	1.011890	1.011045

Variance Inflation Factors (VIF) ≥ 10 indicate existence of severe Multicollinearity in the Model. Perusal of Table-6 indicated that Centered VIF values of all tested variables (TE_t, CE_t, DE_t) are less than 10 revealed non existence of severe multicollinearity in the model.

Table-7 Heteroskedasticity Test for variables *($LGDP_t$, TE_t, CE_t, DE_t)*

Heteroskedasticity Test:			
F-statistics	0.075844	Probability. F(4,21)	0.9888
Obs*R^2	0.370261	Probability. Chi-Square(4)	0.9848
Scaled explained SS	0.176598	Probability. Chi-Square(4)	0.9963

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 Null Hypothesis is accepted revealing presence of homoskedasticity (no heteroskedasticity) in the model.

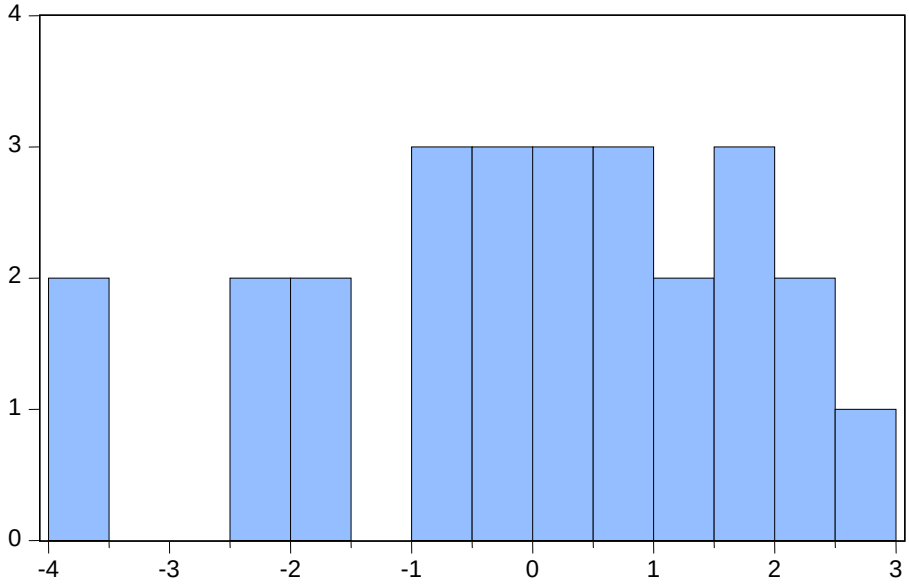
Table-8 Lagrange Multiplier (LM) Test for checking serial correlation/ Autocorrelation among variables *($LGDP_t$, TE_t, CE_t, DE)*

Serial Correlation LM Test:			
F-statistic	2.255894	Probability. F(2,19)	0.1321
Obs*R^2	4.989262	Probability. Chi-Square(2)	0.0825

HO: No serial correlation between variables
H1: Serial correlation between variables

Perusal of Table-8 revealed the probability values of all tested variables *(i.e TE_t, CE_t, DE_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 *($LGDP_t$, TE_t, CE_t, DE_t)*



Series: Residuals	
Sample 1994 2020	
Observations 26	
Mean	5.12e-17
Median	0.073763
Maximum	2.658433
Minimum	-3.672220
Std. Dev.	1.766937
Skewness	-0.453340
Kurtosis	2.462232
Jarque-Bera	1.203869
Probability	0.547751

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

HO: Sample data has been drawn from normally distributed population

HI: Sample data has not been drawn from normally distributed population

Since the probability value of Normality Test (0.55) 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.

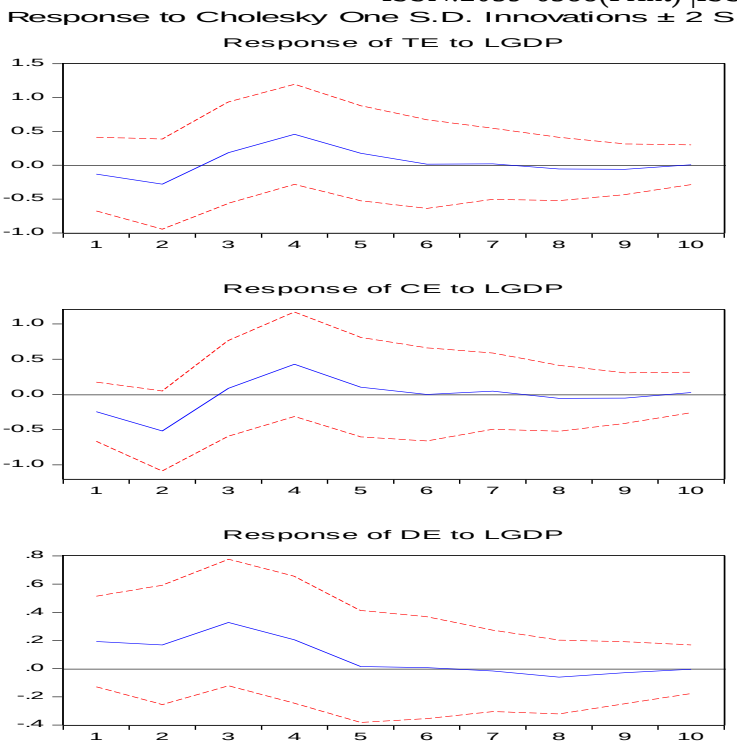
Table-9 Granger Causality Test for tested variables *($LGDP_t$, TE_t, CE_t, DE_t)*

Pairwise Granger Causality Tests			
Sample: 1994-95 to 2020-21			
Lags: 2			
HO:	Obs	F-Statistic	Probability*
TE not Granger causing LGDP	25	1.99648	0.1620
LGDP not Granger causing TE		1.00765	0.3829
CE not Granger causing LGDP	25	2.00542	0.1608
LGDP not Granger causing CE		2.29412	0.1268
DE not Granger causing LGDP	25	2.51206	0.1063***
LGDP not Granger causing DE		0.89810	0.4231
CE not Granger causing TE	25	2.62695	0.0971***
TE not Granger causing CE		3.21357	0.0616***
DE not Granger causing TE	25	1.02529	0.3768
TE not Granger causing DE		1.01641	0.3798
DE not Granger causing CE	25	1.09841	0.3527
CE not Granger causing DE		1.23177	0.3130

****Significant at 10%*

Perusal of Table-9 revealed uni-directional causal relationship between Development Expenditure and LGDP ($P<0.10$), bi-directional between Total Expenditure and Current Expenditure ($P<0.10$) 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 *($LGDP_t$, TE_t, CE_t, DE_t)*



Perusal of Figure-2 depicted red lines and blue line in all three responses of Total Expenditure, Current Expenditure and Development Expenditure to LGDP. Red lines referred to 95% confidence interval and blue line referred to Impulse Response Function.

In case of Response of Total Expenditure to LGDP revealed that one standard deviation shock or impulse or innovation given to LGDP resulted in sharp decline of Total Expenditure from 1st to 2nd period in negative state, then sharp increases from 2nd to 3rd period becomes positive, then gradual increases from 3rd to 4th period, then sharp declines from 4th to 6th period and thereafter remained stable from 6th to 10th period.

In case of Response of Current Expenditure to LGDP indicated that one standard deviation shock or impulse or innovation given to LGDP resulted in resulted in sharp decline of Current Expenditure from 1st to 2nd period in negative state, then sharp increases from 2nd to 3rd period becomes positive, then gradual increases from 3rd to 4th period, then sharp declines from 4th to 6th period and thereafter remained stable from 6th to 10th period.

In case of Response of Development Expenditure to LGDP revealed that one standard deviation shock or impulse or innovation given to LGDP resulted in gradual decline of Development Expenditure from 1st to 2nd period, then sharp increases from 2nd to 3rd period, then sharp declines from 3rd to 5th period, then stable from 5th to 7th period, then gradual declines from 7th to 8th period becomes negative and thereafter gradual increases from 8th to 10th period.

Since negative as well as positive responses existed in all three responses, so shock to LGDP noticed symmetric impact of Total Expenditure, Current Expenditure and Development Expenditure in Pakistan in short as well as in long run.

Table-10 Wald Test for tested variables (*$LGDP_t$, TE_t, CE_t, DE_t*)

Wald Test:			
Test Statistic	Value(s)	d.f	Probability*
F-Statistics	8.608753	(19, 2)	0.1090***
Chi-square	163.5663	19	0.0000*
HO: C(1)=0 to C(19)=0			
HO Summary:			
Normalized Restriction (= 0)		Value(s)	Standard Error
C(1)		0.843662	0.350457
C(2)		-5.217347	1.353729
C(3)		-5.202065	0.895197
C(4)		0.283423	0.759494
C(5)		-3.133612	0.792960
C(6)		-0.579729	1.094781
C(7)		-5.378289	1.423482
C(8)		3.022976	1.260866
C(9)		7.067295	1.217702
C(10)		-0.407213	0.730171
C(11)		2.582374	1.017268
C(12)		1.225393	0.942482
C(13)		4.650249	1.705934
C(14)		6.208548	1.596190
C(15)		4.942733	0.949410
C(16)		-3.552044	0.755710
C(17)		2.965916	0.909284
C(18)		0.638400	1.228379
C(19)		7.552367	1.396291

**Significant at 1%*
***Significant at 5%*

HO: The value of independent variable is zero (0)
H1= 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 tested variable *(i.e TE_t, CE_t, DE_t)* are less than 10% (P<0.10) and 1% significance level (P<0.01) respectively, it means Null Hypothesis of assuming the values of independent variable is zero (0) is rejected, confirming all independent variable are significant for a model.

CONCLUSION AND RECOMMENDATIONS

The study arrived at conclusion that Government Spending in terms of Total Expenditure, Current Expenditure and Developmental Expenditure significantly influenced economic growth of Pakistan from 1994-95 to 2020-21. The present study validated the positive relationship of Government Expenditure (i.e Government Consumption, Investment, and Transfer Payments) to the Economic Growth. Moreover, Government Expenditure leads to enhancement in the aggregate demand of the goods and services as well as stimulating the competitiveness,

innovation and productivity. Since negative as well as positive responses existed, so shock to LGDP noticed symmetric impact of Total Expenditure, Current Expenditure and Development Expenditure in Pakistan in short as well as in long run. Policy implications may put forward regarding reduction of non-developed expenditure, promotion of export-oriented firms, and enhancement of local revenue collection, prevention of corruption and acceleration of import substitutable industries to mitigate potential deficits issues. Higher imports than exports contributed to the persistent trade deficit, highlighting the need for focusing on international competitiveness to address the issue. 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. Policy recommendations included enhancing local revenue collection, reducing non-developed expenditure, promoting export-oriented firms, addressing corruption and fostering import substitutable industries to mitigate potential issues arising from this relationship.

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