# DEFENSE EXPENDITURES, FISCAL DEFICIT AND DEBT SERVICING NEXUS: A CASE STUDY OF PAKISTAN

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#### **ABSTRACT**

A number of the countries in the world are breathing under the shadow of hostilities and terror. Many developing countries squander major part of their GDP on defense to sustain their sovereignty. Border clashes with India and Afghanistan, Pakistan has to spend massive budget on defense. Therefore, Pakistan has been facing fiscal deficit every year. Moreover, Pakistan's external debt servicing creates hurdles to increase per capita GDP. For this empirical finding for the time period from 1981-2019, the Johansen co integration and Granger causality tests are used. The empirical results indicate the existence of co-integration. The estimation shows that the defense expenditures and debt servicing statistically significant and negatively affect the per capita GDP, while fiscal deficit reveal the positive and significant impact on the same. The results confirm the existence of one-way causality between fiscal deficit and debt servicing, while causality runs from fiscal deficit to debt servicing.

**Keyword:** defense expenditures, fiscal deficit, debt servicing, Pakistan

**JEL Codes:** H56, H63, F34

### I. INTRODUCTION

Many economists and policy makers pay lots of concentration on the association between defense expenditures and growth (Benoit, 1978), (Deger & Smith, 1983), (Joerding, 1986) and (Chan, 1988), though the chain relationship among defense expenditures, fiscal deficit and debt servicing has been given a lesser amount of attention. Many rich economies cut their defense expenditures but many of the less developed and poor economies did not sever their military spending due to domestic strife, insecurities and geopolitical tensions. Defense spending are detrimental expenditures and burden on the less developed economies because it diverts the resource distribution of the nation from developmental to non-developmental activities. Mounting defense expenditures can be risky for some less developed economies. The analysis confirmed that defense expenditures negatively affect the economic growth in case of Pakistan (Shahbaz et al., 2013). Disturbances and conflicts among the countries in the different regions of the world raise the overall military expenditures. The world estimated expenditures on defense in 2014 were \$1776 billion, which were 2.3% of the world Gross Domestic product (SIPRI, 2015). Generally, military expenditures raise the government expenditures due to which developing nations are facing the shortage of revenues. That's the reason why, mounting military expenditures become a significant cause to increase the fiscal deficit. Moreover, most of developed economies in the world have to face the fiscal deficit due to unplanned or unexpected defense expenditures. The World's military spending increased in 2006 and the total contribution of US military spending was 46% out of 62% of world's total increased share in the same year. The budget deficit US was witnessed \$ 423 billion in the fiscal year 2006 and the debt burden was increased to \$ 2.84 trillion. Likewise, the debt servicing increased from \$ 206 to \$ 220 billion in the same fiscal year (Stålenheim et al., 2005). Poor economies depend upon internal as well as external debts on high rate of service charges to bridge over the gap between government's expenditures and revenues. Therefore, the inadequate debt repayment capacity of poor economies elevates the debt service along with the principal amount.

The world comprises of both developed as well as developing nations, which disburse their more revenues on defense due to geopolitical positions, internal strife and borders disturbances with adjacent countries. Pakistan, being a developing nation, also has geopolitical disturbances since after the separation of Subcontinent in 1947. The Russian armed races with Afghanistan during 1979 put a huge impact on the economy of Pakistan and

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rendered it a front line state in the south Asian region. The saving rate fell to 4.6% and Gross Domestic investment remained only 17.5% of the total gross national income. Moreover, the debt increased over to \$16 billion, while debt servicing was also increased and expenditures on education fell to 1.5% in 1982-1988 (Hilali, 2002). Likewise, owing to its internal as well as external threats, Pakistan has been spending its core fraction of Gross Domestic Product (GDP) on defense which led to enhance the fiscal deficit in the country, whereas Pakistan's economy is not in a position to abridge such gap between its income and expenditures. Therefore, the external debt burden increases gradually because of poor debt repayment capacity, which badly hurts the per capita gross domestic product growth rate of Pakistan. The findings suggested that the debt servicing severely affected the per capita income growth rate of Pakistan in short as well as long run (Jadoon et al., 2014). The fiscal deficit cause to enhance the debt burden as well as debt servicing. The budget deficit of Pakistan was 3.8% of GDP. The public debt servicing was traced RS.1, 193 billion debt servicing was 44.5% of the total revenues in FY2015 (Pakistan Economic Survey 2014-15).

# II. LITRETURE REVIEW

Many studies have been undertaken by economists and policy makers to analyze the effects of defense expenditures, debt servicing and fiscal deficit on economic growth; among them here are some of the important reviews of studies; (AL-JARRAH, 2005), (Hou & Chen, 2013), (Künü et al., 2016), (Ali, 2015), (d'Agostino et al., 2012) and (Hou, 2010) tested the outcomes of military expenditures on economic growth. Therefore, it is confirmed that increase in the defense spending leads to decline the growth. Mosikari & Matlwa. (2014) indicated that there was long-run association between the military expenditure and economic growth. While, (Yildirim et al., 2005, Halicioğlu, 20040, Khalid & Mustapha, 2014, Zaman et al., 2013, Jiranyakul & Brahmasrene, 2007) exercised the econometric methods and found the positive association between military expenses and economic- growth. Anwar et al.(2012) studied the association between defense spending and growth in case of Pakistan. Johansen co-integration and Granger Causality tests were employed to analyze the results. The empiric findings showed that the defense expenditures did not impede the economic growth. Feridun et al. (2011) found the long-run correlation between defense expenditures and economic growth with the help of Autoregressive Distributive Lag Bound testing Approach in case of North Cyprus. Dunne & Uye (2010) evaluated the results of one hundred and three (103) research studies regarding the effects of defense expenditures on economies. Therefore, results indicated that defense spending did not have positive impact on economic development.

Farhani (2016) studied the connection among the macro variables defense spending, debt-servicing, debt and economic growth in Indian perspective and found the long run association. Zhang et al. (2016) had developed econometric models to investigate the casual relationship between debt load and spending on defense for the eleven OECD countries. Unidirectional causality found that causality ran from military to debt in case of Japan, United State and Portugal. One way causality was found in United Kingdom. Moreover, all other Nations including Spain also found bidirectional causality. Prunera (2000), Mohanty (2012), Avila (2011), Keho (2010), Fischer (1993), Ahmed & Mashkoor (2016), Fatima et al. (2011), Dao (2013) and (Khan et al., 2012) scrutinized the impact of fiscal deficit on economic-growth and found negative effect on economic growth. Likewise, the studies such as (Al-Khedair, 1996, Onwioduokit & Bassey, 2013, Aslam, 2016, Akpan, 2012, Taylor et al., 2012, Maji & Achegbulu, 2012) depicted that fiscal deficit added effectively to the economic growth. Whereas, (Thirunavukkarasu & Achchuthan, 2013, Vuyyuri & Seshaiah, 2004, Ghali, 1997, Tan, 2006) revealed the neutral impact of fiscal deficit on economic growth.

Kalim & Hassan (2013) examined the effects of different economic factors on the fiscal deficit in case of Pakistan for the time period 1976- 2010. The study showed that economic growth had the insignificant effects on fiscal deficit in long run, while it had significant effect on fiscal deficit in short span of time. Adam & Bevan (2005) analyzed forty five underdeveloped nations. The simple overlapping generation model had been used for the time 1970 to 1999. The numerical findings confirmed that there was doorstep effect of deficit on growth but after that economic growth contracted the deficit. Guo et al. (2013) studied that defense expenditures and fiscal deficit a put positive impact on income distribution in India. Wolde-Rufael (2009) used the Bound Testing Method for co integration and Granger Causality technique for the time series data from 1970 to 2005. The numerical estimates reported the positive relationship between defense-spending and debt stock. Afzal et al. (2008) found that there existed a relationship in short as well as long-run among debt servicing, economic growth and export. They used the econometric technique of co-integration, Vector Error Correction Model (VECM) and Toda-Yamamoto causality approach for the time span 1970-2008.

Cholifihani (2008) looked at the relationship of debt service and GDP. The time series data from 1980 to 2005 was used for Indonesian prospective. The results of study showed in the long run that increasing debt servicing problem slowed down the gross domestic product. Patenio & Tan-Cruz (2007) founded the connection between debt servicing and economic growth for Philippines. The results of VAR pointed out that the debt servicing of

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Philippines did not have much impact on growth rate. Frimpong & Oteng-Abayie (2006) inquired the association among the economic variables external debt, debt servicing and economic growth in case of Ghana. They used the time series data from 1970-1999. Therefore, the numerical estimation indicated that cost of debt imparted the harmful impact on economic growth. Wijeweera et al. (2005) found that debt servicing hampered the economic growth of Sri Lanka. They used the econometric tests for long run analyses and error correction method for short run estimates for 1952 to 2002. Karagol (2002) attempted to investigate the effects of foreign debt servicing on gross national income of Turkey for the time period from 1956 to 1996. The numerical findings concluded that there was a negative association between debt service and GNP in short as well as long run. Were (2001) suggested that debt servicing did not lower the economic growth in case of Kenya.

## III. METHODOLOGICAL FRAMEWORK

Most of the economists suggested that the defense spending exogenously affected the economic growth but Keynesian approach to military spending checked the interaction between both. The linkages of military spending increased the economic growth through utilization of available resource (Looney, 1989). It was expected that the defense spending affected the developed economies positively, but impeded the growth of poor economies. However, it was observed through the empirical estimates that defense spending understated the investment and sluggish the growth of more developed economies, while in case of less developed economies the situation is quite contradictory (Benoit, 1973, 1978). Theoretically, economists focused on this point of view that mounting defense expenditures negatively as well as positively affected the fiscal deficit. Therefore, discussion based on Neo classical outlook suggests that the deficit retarded the economic growth. On contrary, Keynesians viewed that deficit showed positive impact on growth. In the last, Ricardian equivalence remained indifferent to the impacts of fiscal deficit on growth (Bernheim, 1989). The issue of defense and growth holds a considerable position for the economists and observers. The researchers working on it try to get the answer of their question "whether defense expenditures affect the growth positively or negatively?" The defense spending is considered as non-productive expenditures of the government and is detrimental to GDP (Arshad and Ali, 2016; Ashraf and Ali, 2018; Audi et al., 2022; Audi and Ali, 2017; Audi and Ali, 2017; Audi et al., 2021; Audi and Ali, 2016; Audi et al., 2021; Audi et al., 2021; Audi et al., 2021; Haider and Ali, 2015; Kaseem et al., 2019; Roussel et al., 2021; Senturk and Ali, 2021; Imran et al., 2022). Being a big economy, India experienced huge fiscal deficit which was attributed to the high defense expenditures having harmful effects on the macroeconomic activities (Guo et al., 2013). It is being observed through the above literature that the defense spending spillover harmful effects on fiscal deficit. In literature and empirical evidence, it is found that economists are not on the same platform regarding fiscal deficit, whether it is neutral, good or bad for the economies (Ali and Naeem, 2017; Ali, 2011; Ali, 2015; Ali, 2018; Ali and Bibi, 2017; Ali and Ahmad, 2014; Ali and Audi, 2016; Ali and Audi, 2018; Ali and Rehman, 2015; Ali and Senturk, 2019; Ali and Zulfiqar, 2018; Ali et al., 2016; Ali et al., 2021; Imran et al., 2021; Ali et al., 2021; Ali et al., 2015). Generally, the empirical outcomes followed these school of thoughts as (Thirunavukkarasu & Achchuthan, 2013), (Vuyyuri & Seshaiah, 2004), (Ghali, 1997), (Tan, 2006) revealed the neutral impact of fiscal deficit on economic growth. Likewise, the studies such as (Al-Khedair, 1996), (Onwioduokit & Bassey, 2013), (Aslam, 2016), (Akpan, 2012), (Fatima et al., 2011), (Taylor, Proaño, de Carvalho, & Barbosa, 2012), (Maji & Achegbulu, 2012) consistent to above literature that fiscal deficit added effectively to the economic growth. The negative evidence between the same is (Prunera, 2000), (Mohanty, 2012), (Avila, 2011), (Keho, 2010), (Fischer, 1993), (Dao, 2013). As a result, the dependence on the rest of the world increased to bridge over the gap between the government's imbalances which multiplied the costs of debt. Many studies Amoateng & Amoako-Adu (1996), Ezeabasili et al. (2011), Shah & Pervin (2012) and Kasidi & Said (2013) were conducted that showed the mixed results of debt servicing on economic growth. The contradictory results encourage more efforts for the conclusive and comprehensive results. For that illustration, this study will check the impacts on growth through different channels. This study also gives the answer about the nexus among defense expenditures, fiscal deficit and debt servicing.

Model:  $\log GDPP_t = F(\log DE_t, \log FD_t, \log DS_t, \log EGS_t)$ 

Here is the following econometric form of the model:

$$\log GDPP_{t} = \alpha_{1} + \alpha_{2} \log DE_{t} + \alpha_{3} \log FD_{t} + \alpha_{4} \log DS_{t} + \alpha_{5} \log EGS_{t} + \mu_{t} \tag{1}$$

Where, GDPP = per capita gross domestic product, DE = Defense expenditure, FD = Fiscal deficit, DS = Debt service and EGS = Exports of goods and services

# III.I. DATA SOURCES

The study is planned to focuses on the impact of military spending, fiscal deficit and debt servicing on economic-growth in case of long run. For empirical evidence, data for all variables have been taken from World-Development-Indicators (WDI) from World Bank (WB) and Asian Development Bank (ADB) for the time span 1981-2019. All variables are not in uniform units of measurement. Therefore, all variables have been

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used in natural log arithm form because of non-uniformity of data. For econometrics analysis the software EVIEW 9 is used.

#### III.II. DESCRIPTION OF VARIABLES

The variable per capita gross domestic product (GDPP) has been taken from the World-Development-Indicators (WDI) from World Bank (WB). This variable is available at constant level in the year 2005 in US dollars (\$), while defense expenditures have also been taken from World Bank development indicators which are in percentage of gross domestic product. The data used in this study regarding defense expenditures has been accumulated by the WB through employing the definition of NATO. The fiscal deficit, being in million Rupees and taken from Asian Development Bank (ADB), has been converted into US \$ at constant level in the year 2005. Another core variable of the study is debt servicing which is the total payment of principal amount and service charges on the loans taken from external sources and data on the debt servicing is converted at constant level. The data on exports of goods-services (EGS) is taken from WB indicators.

# III.III. ECONOMETRICS METHODOLOGY III.III.I. JOHANSEN CO-INTEGRATION TEST

Co-integration test was developed to make sure the existence and long run stability of the variables for the time series data. Engle & Granger (1987) firstly, established the concept of co-integration, but later on many other econometricians (Stock & Watson, 1988, 1993), (Johansen, 1988, 1991, 1992, 1995), (Johansen & Juselius, 1990) and (Pesaran et al., 2001) used this concept to formulate new techniques in order to examine the long run stability for time series analyses. Johansen test for co-integration will be used to verify the long run stability among the variables. Johansen (1988) initially, introduced Vector Autoregressive (VAR) based method to investigate co-integration among variables, while Johansen & Juselius (1990) test over residual based two steps test of co-integration used the maximum-likelihood method to locate the number of co integrating equations in Vector Auto-Regressive (VAR) is:

$$Z_{t} = \gamma + \delta_{1}Z_{t-1} + \dots + \delta_{k}Z_{t-k} + \lambda_{t}$$

$$(2)$$

In the above equation of VAR, where Zt is equal to  $(n\times 1)$  vector of variables integrated order 1,  $\gamma$  is intercept of vector  $(n\times 1)$  order, parameters are  $\delta_t...\delta_{t-k}$  and  $\lambda_t$  used as a error term. Above mentioned vector autoregressive (VAR) based model can be written equivalently in the shape of VECM as:

$$\Delta Z_{t} = \gamma + \sum_{i=1}^{\rho-1} \sigma_{i} \Delta Z_{t-i} + \theta Z_{t-1} + \lambda_{t}$$
(3)

In VECM, where Zt is equal to  $(n\times 1)$  vector of variables,  $\gamma$  is intercept of vector  $(n\times 1)$  order,  $\sigma$  and  $\theta$  are coefficients,  $\Delta$  is used as a difference, while  $\lambda$  represents the residual. In VAR based model of VECM,  $\theta$  illustrates the long-run relationship, while  $\sigma$  captures the short run association.

# III.III.II. GRANGER CAUSALITY TEST

To determine the casual relationships among the variables in the model, the Granger causality test has been used. The Granger causality test developed by (Engle & Granger, 1987) firstly, and later (Granger, 1988) estimated causality by using Vector Autoregressive (VAR) model as:

$$X_{t} = \lambda_{1} + \sum_{i=1}^{k} \delta_{i} X_{t-i} + \sum_{j=1}^{k} \beta_{j} W_{t-j} + \pi_{t}$$
 (4)

$$W_{t} = \lambda_{1} + \sum_{i=1}^{k} \gamma_{i} X_{t-i} + \sum_{j=1}^{k} \alpha_{j} W_{t-j} + \varepsilon_{t}$$
 (5)

If the variables are co integrated, there will be Granger causality relation among the variables at least in one direction. Such casual relationship is perhaps unidirectional (if one variable Xt cause the other variable Wt) or bidirectional (if both variables Xt and Wt cause each other).

## IV. EMPIRICAL RESULTS

Before deciding as to what kind of methods will be employed to locate the long-run association among the variables. The Augmented Dickey Fuller unit root test has been used to ensure the stationary of time series data. The ADF-test was presented by (Dickey & Fuller, 1979, 1981), whereas the Schwarz information for maximum lag selection criterion was employed to check the stationarity of the time series data. For unit root confirmation, the table of the ADF-test presents the consequences of the variables.

The empirical results point out that variables are stationary at first difference. Consequently, the results offer the test of Johansen Co-integration. The test for co-integration was developed by (Johansen & Juselius, 1990) to make sure the existence and long-run stability among the variables for the time series data, while (Johansen & Juselius, 1990) test over residual based two steps test of co-integration used the maximum likelihood procedure to locate the number of co integrating equations in Vector Auto-Regressive (VAR) situation. The numerical results of Johansen co-integration are shown in the table 2 at 5% significance level, whereas Akaike lag selection criteria has been used.

**Table 1: Augmented Dickey Fuller Test** 

At level								
	Intercept			Intercept and trend				
Variables	ADF stat	p-value	Lags	ADF stat	p-value	Lags		
logGDPP	-1.015504	0.7357	1	-2.682868	0.2497	1		
logDE	0.119696	0.9625	0	-3.21666	0.0987	0		
logFD	-0.95288	0.7581	0	-2.089181	0.5326	0		
logDS	-1.830844	0.3596	0	-3.280897	0.0871	0		
logEGS	-1.424335	0.5585	0	-1.8528	0.6558	0		
At first difference								
logGDPP	-3.691072	0.0091	0	-3.685064	0.0381	0		
logDE	-5.043912	0.0003	0	-4.951033	0.0019	0		
logFD	-6.55366	0	0	-6.402981	0	0		
logDS	-7.685518	0	0	-7.548994	0	0		
logEGS	-5.970512	0	0	-6.219951	0.0001	0		

Source: author's calculation

Table 2: Johansen Co integration Test Unrestricted Co integration rank test (Trace)

Without dummy variables				With dummy variables			
Но	Trace statistic	Critical value 0.05	Prob.	Но	Trace statistic	Critical value 0.05	Prob.
None *	70.80828	69.81889	0.0416	None *	107.7449	95.75366	0.0058
At most 1	33.41194	47.85613	0.5341	At most 1	70.74966	69.81889	0.0421
At most 2	13.40161	29.79707	0.8724	At most 2	42.43504	47.85613	0.1469
At most 3	4.134052	15.49471	0.8924	At most 3	20.72234	29.79707	0.3752
At most	0.610798	3.841466	0.4345	At most 4	7.753689	15.49471	0.4921
				At most 5	1.021051	3.841466	0.3123

Source: author's calculation. The sign of \* shows the co integrating equations

Only one co-integrating equation has been found in the model through Johansen co-integration at five percent level of significance, while the trace test has been used to identify the co-integration among defense expenditures, fiscal deficit, debt servicing and exports of goods and services. The trace test indicates the occurrence of one co-integration vectors in the model. In case of (None \*), the null hypothesis of no cointegrating equations is rejected, because the trace- statistic is more than the tabulated value, while all other null hypotheses are accepted at 5% level of significance. The structural break has been traced in the model in year 2004 through least square with break-point test. Therefore, the D4 has been used as a proxy variable in the model. The trace test points out the existence of two co-integrating vectors in the model. Therefore, the test authenticates the co-integrating relation among DE, FD, DS and EGS, while the VAR based long run coefficients are:

**Table 3: VAR Based Long Run Coefficients** 

Variables	Without dummy variables		With dummy variables		
	Coefficients	t-stat	Coefficients	t-stat	
LOGDE	-0.074809	-2.999559	-0.070341	-2.666451	
LOGFD	0.09079	8.314102	0.089288	6.76937	
LOGDS	-0.073226	-3.932653	-0.051274	-2.515898	
LOGEGS	0.247795	12.62328	0.227946	11.55327	
<b>D4</b>			0.003469	0.411506	

Source: author's calculation

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The DE and DS are negatively and significantly affect the per capita gross domestic product; FD and EGS have positive but significant contact with GDPP. The results can be interpreted in percentage form because variables have been taken in natural logarithm form. Therefore, one percent increase in FD and EGS increases the gross domestic per capita to 9.07%, 24.78% in that order, while one percent increases in defense expenditures and debt servicing decreases GDPP to 7.48% and 7.32% respectively. The DE and DS negatively but significantly affects the per capita gross domestic product; FD and EGS have positive and significant contact with GDPP. Therefore, one percent (1%) increase in fiscal deficit and exports of goods and services increases the gross domestic per capita to 8.93%, 22.79% correspondingly, while one percent (1%) increase in defense expenditures and debt servicing decreases GDPP to 7.03% and 5.13% respectively. The dummy D4 has positive but insignificant impact on GDPP, GDPP boosted to 0.34% in case of one percent increase in D4. To check the convergence or divergence of the model, VECM is applied and the results of short run have been mentioned in the table:

**Table 4: Short Run Estimates** 

Without Dummy Variables			With Dummy Variables			
Variables	Coefficients	p-values	Variables	Coefficients	p-values	
ECT <sub>t-1</sub>	0.003214	0.9785	$ECT_{t-1}$	-0.064466	0.6105	
D(LOGDE)	-1.026151	0.0122	D (LOGDE)	-1.165795	0.0115	
D(LOGDS)	-6.248956	0.0001	D(LOGDS)	-5.726508	0.001	
D(LOGEGS)	1.295244	0.1081	D(LOGEGS)	1.720162	0.0544	
С	0.006333	0.0051	C	0.006396	0.0034	

Source: author's calculation

The Vector Error term ( $ECT_{t-1} = 0.003214$ ) suggests that no relationship exists in the short run. Thus, no long run causality is found between independent variables and per capita gross domestic product. Therefore, the disequilibrium cannot be adjusted for the long run without dummy variables. While, the Vector Error Correction model confirms the existence of short run connection among defense expenditures, fiscal deficit, debt servicing, export of goods and services and dummy variable D4 in the model. The VECM suggests the long run causality of all independent variables DE, FD, DS, EGS and D4 with the per capita gross domestic product. Therefore, disequilibrium could be restored in long run, while ( $-0.064466ECT_{t-1}$ ) suggests that disequilibrium will be restored in the speed of 6.45% per period for long run, while disequilibrium will be restored in 15.51 years. To check the casual relationship among defense spending, fiscal deficit and debt servicing, granger causality test has been performed to investigate the causality among these macro variables. The numerical estimation of granger causality is given in table.

**Table 5: Granger Causality Test** 

Null Hypothesis	F-Statistic	Prob.
LOGFD does not Granger Cause LOGDE	0.94674	0.4005
LOGDE does not Granger Cause LOGFD	1.66582	0.2079
LOGDS does not Granger Cause LOGDE	1.58484	0.2235
LOGDE does not Granger Cause LOGDS	1.48084	0.2453
LOGDS does not Granger Cause LOGFD	0.25795	0.7745
LOGFD does not Granger Cause LOGDS	7.86720	0.002

Source: author's calculation

Granger causality suggests that the one way causality is found between fiscal deficit and debt servicing at five percent significance level, while causality runs from fiscal deficit to debt servicing.

## V. CONCLUSION AND POLICY IMPLICATIONS

The study is conducted to investigate the nexus among defense expenditures, fiscal deficit and debt services for period 1981-2019The statistics has been collected from Asian Development Bank and World Development Indicators from World Bank. Since, after the separation of Sub-continent, Pakistan is facing troubles with its neighbors such as India and Afghanistan. Thus Pakistan has to spend major part of its resources on defense. To highlight the empiric relation among these variables including other control macro variables, model has been constructed to check the joint effects on per capita GDP and the casuals relationship among these variables. Conclusively, it can be argued that the defense expenditures and debt servicing are rendering harmful impact on per capita GDP, while apparently; the fiscal deficit is playing its part to enhance the same. The other evidence

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regarding Granger causality test interprets that the ever increasing expenditures on defense by Pakistan does not have any impact on fiscal deficit, while it is observed that fiscal deficit is causing an increase in the debt servicing. However, the defense expenditures do not mitigate the fiscal deficit but it doesn't mean that it will not cause any drastic effects in future. This study is significant for policy makers. The following are the policy implications. The Government of Pakistan may avoid to enhancing spending on defense; rather it may utilize its resources on the productive activities to projectile the economic growth in the country. Pakistan may rely on its own sources other than depending on rest of the World. More wise and lawful policies may be implemented by the Government of Pakistan for getting foreign advances at cheaper cost in case of dire necessities. Government may reduce the services on debt through export promoting policies which lead to enhance the foreign assets.

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