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INVESTIGATING IMPACT OF EXPANSIONARY FISCAL POLICY ON OUTPUT IN BANGLADESH ECONOMY: AN ECONOMETRIC STUDY

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ABSTRACT

In this research paper, the dominance of fiscal policy variables (government expenditure, total revenue, and total investment) on output in Bangladesh has been examined. The study embraces the output accounting framework where significant fiscal variables are considered that can influence economy robustly. The analysis is executed by using time series framework and holding yearly data from 1994 to 2017. The study uses augmented dickey fuller test (ADF) to check the unit root problem in the data. The result shows all data exempt unit root problem at first difference and Johansen cointegration test confirms at least two variables as cointegrated. The study applies vector error correction model (VECM) to find out both short run and long run relationship between gross domestic product, government expenditure, tax revenue and investment. No distinct relationship between any variable in the short run has been found. The result confirms a positive relationship between gross domestic product and tax revenue as well as investment. There exists a negative relationship between government expenditure and gross domestic product. The study recommends planning total tax revenue by strengthening and modernizing customs administration, tax exemptions, reducing government expenditure and inviting foreign investments.

Contribution/ Originality: The paper's primary contribution is to investigate the effect of expansionary fiscal policy on Bangladesh's total output by using augmented dickey fuller test, Johansen Co-integration test, and vector error correction model (VECM).

1. INTRODUCTION

In the applied field of economics, fiscal policy plays a significant role to alter the economy of a country. When a government takes a decision to expand its economy with expansionary fiscal policy, there are positive or negative consequences. Therefore, any government activity to enhance economic growth towards welfare of its country is controversial since the classical times. However, major economic schools of thought including Keynesian school of economics argue that expansion of fiscal variable can play a doughty role in the economic growth whereas the classical schools find that expansionary fiscal policy can result in an increase in national debt. According to the classical school, on the contrary, the fiscal policy can cause no long-run increase in real output because of government's borrowings that promote crowding out, a situation where investments by business are reduced as

government increases interest rates in a state of budget deficit and spends more in order to suck up available financial resources. The classical school of economics suggests reducing government intervention in order to keep market free of potential barriers. When a government increases a country's expenditure and increases interest rate, private investors shift their financial resources.

Landau (1985); Marlow (1986) and Ram (1986) have estimated different dimensions of relationship between economic growth and government expenditures. In addition, to ensure sustainable development and efficient output, many developing countries should control the role of government in economic decisions. Though a misleading conclusion, but when the government expenditure surpasses revenue it is called a surplus budget which necessitates an increase in the interest rate but it reduces the economic output of the country. The Bangladesh government has set budget deficit consistently over the last three decades. Adam and Bevan (2005) studied some uprising developing countries and observed fiscal deficit being implemented by almost every country. Some economists however believe that budget deficit reduces unemployment in the country but the question arises whether it is a good solution.

Bangladesh is now considered as a developing country because of maintaining constant economic growth of 6% to 7% over the last decade. Economic growth rate of Bangladesh in FY2016-17 was 7.28 percent. Investment in FY2016-17 increased to 30.51 percent of GDP. Total revenue receipt in FY2016-17 increased by 16.09 percent to 23873.33650 million USD the last year out turn. Total government expenditure in FY2016-17 rose by 9.90 percent to 31,142.69 million USD 13.31 percent of GDP over the previous year outturn. In the revised budget of FY2016-17, budget deficit has been estimated at 11683.44 million USD which is 5.00 percent of GDP. Of this deficit, 3406.65 million USD will be financed from external sources (including foreign grant) and 8277.03 million USD will be backed by domestic sources. The budget deficit stood at 3.15 percent of GDP (excluding grants) in FY2016-17, of which 2.75 percent was financed from domestic sources and the remaining 0.40 percent from external sources. In 2010 nominal gross domestic product rose by 12 percent as compared to that of the previous year while the government expenditure rose by 17 percent from that of the previous year.

In 2016 nominal GDP rose by 14 percent from that of the previous year and government expenditure rose 15 percent from the previous year. The growth of government expenditure is therefore higher than the growth of the output (Bangladesh Economic Review, 2017). Though there are other factors that are responsible for the change in the output, we must not belittle the effect of the government expenditure upon output.

The aim of the current study is to assess the impact of expansionary fiscal policy on output in the economy of Bangladesh. This study will investigate the following two research questions: (1) Does the expansionary fiscal variable lead to significant impact or any negative consequences for the economy? (2) How should the output growth respond to the government expenditure, tax revenue, and investment plans?

The rest of the paper proceeds as follows: Section 2 provides a brief survey of the literature review, Section 3 describes the data sources and variables, Section 4 describes methodology, and Section 5 shows the empirical findings with analysis. The last section of the paper provides concluding remarks along with future research directions.

2. LITERATURE REVIEW

Idris *et al.* (2018) examined fiscal operation and economic stability in Nigeria covering yearly time series data from 1980 to 2015. Adopting ARDL model the study found an inverse relation between government expenditure and GDP in the long run inflation environment. The government expenditure increased inflation and the increased interest rate caused price instability in country's economy. The authors concluded that government should impose appropriate taxation, reduce its expenditure and balance the private investment in the country.

Rana and Wahid (2017), by using time series data from 1981 to 2011 in their study, argue that a long run fiscal deficit has negative significant effect on the economic growth of Bangladesh. The VECM model used in the study

suggests that real GDP is adjusted by 13.8% of previous year's deviation from equilibrium in short run and by running unidirectional causality from budget deficit to real GDP. The researchers asserted that increasing public investment can cause crowding out in private investment and the increasing interest rate can put inflationary pressure on the Bangladesh economy.

Hussain and Haque (2017) studied the effect of government budget deficit on output using two sets of database. They observed that while the BBS data show budget deficit having significant relation with output, the World Bank data show a completely opposite situation. In fact, more budget deficit and low tax collection has increased foreign dependence for Bangladesh. Every year large amounts of money are required to pay interests. They concluded that government should plan to increase private investment and its expenditure should be implemented after careful planning with foreign externalities.

Bekhet and Othman (2012) examined the expansionary fiscal policy impact on GDP growth in Malaysia using time series data for 1970-2011. They found that expansionary fiscal policy could increase long term indebtedness in the country rather than increasing the economic growth directly. High level of budget deficit could also be a burden for future generation because of large amounts of payable foreign debts with a high interest rate. The results of the study found the presence of co-relating variables in long run and unidirectional causality was also observed in public expenditure and output growth to foreign debt.

Surjaningsih *et al.* (2012) studied the Indonesian fiscal policy and its impact on output and inflation. They used VECM (vector error correction model) covering quarterly data from 1990-2009. The findings show that taxation has a negative effect on economic growth whereas short term adjustment co-efficient indicates an increase in public spending which has a positive outcome on economic growth. The study also found out that taxation would increase the total cost of product and increase the price level but the output will be reduced due to lower income in Indonesia.

Shevchuk and Kopych (2018), using vector error correction model, studied the Ukrainian fiscal policy and other variables to examine their impact on output for quarterly data for the period 2001 to 2016. They observed that government expenditure and net revenue has a strong positive relation with output but the interest rate has an inverse relationship with output. The study also found out that the increase in government expenditure results in low capital mobility. This tends to increase the interest rate as well as the demand for money because of high consumption expenditure compared to investment demand for money.

Kakar (2011) inspected both short run and long run dynamics of fiscal variable for the period of 1980-2009 in the economy of Pakistan. This study stated that an increase in government expenditure results in a rise in the aggregate demand creating demand pull inflation. The results reveal a cointegrating relationship existing among the variables in short run as well as long run conditions. The pragmatic outcome elicits fiscal policy is exigent for sustainable economic growth in Pakistan and also specifies that fiscal policy is a more important tool to achieve long run sufficiency.

Joharji and Starr (2010) investigated the relationship between public expenditure and non-oil gross domestic product in Saudi Arabia using data for the period between1969-2005. In their research, applying time series method, they find statistically significant relationship between the long run economic growth and government expenditure. The study also reveals that government investment enhances the growth of all programs and supports buying power of the people and increases human capital which also improves investment or economic well-being of the nation.

3. DATA SOURCE AND VARIABLES

In order to obtain the final results of fiscal variables, secondary data sources were considered for the period 1994-2017. All the dataset was obtained from Bangladesh economic review (BER, 1994-2017). In this analysis, fiscal variables like government expenditure, total tax revenue, total investment were considered as independent variables

and gross domestic product (GDP) was taken as the dependent variable. All the tests were conducted by using Stata/SE 12.0 software.

The functional form of the econometric model considered in the study is:

$$Y = f(X_1, X_2, X_3)$$

This can be expressed as follows:

$$GDP = f(GE, INV, TR)$$

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \mu$$

$$LNGDP = \alpha_0 + \alpha_1(LNGE) + \alpha_2(LNTR) + \alpha_3(LNINV) + \mu \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

LNGDP = *LN* gross domestic product, *LNGE* = *LN* government expenditure, *LNTR* = *LN* total tax revenue, *LNINV*= *LN* total investment, α= intercept term, μ = error rerm.

Table 1 shows the basic characteristics of the collected data which is usually called primary statistics of data.

Table-1. Primary statistics of the data.

Variables	Average	Max.	Min.	SD	Variance
GDP	6551.862	19758.2	1354.1	5471.005	29931896
GE	979.5558	3171.74	203.7	876.0976	767547
TR	695.6708	2427.5	124.9	638.0017	407046.2
INV	1790.038	6028.3	249.2	1676.999	2812326

Table 1 presents that average annual GDP in Bangladesh is 6551.862 billion Taka or 77.57777 billion USD with maximum 19758.2 or 233.948 billion USD and minimum 1354.1 billion Taka or 16.0333 billion USD. There is a significant gap between these two margins. The standard deviation and variance of GDP are 5471.005 and 29931896 respectively. The average annual government expenditure (GE) is 979.5558 billion Taka or 11.59850 billion USD with maximum 3171.74 billion Taka or 37.5552 billion USD and minimum 203.7 billion Taka or 2.41192 billion USD. The standard deviation and variance of government expenditure (GE) in Bangladesh are 876.0976 and 767547 respectively. The average annual total tax revenue (TR) and total investment (INV) are 695.6708 million Taka or 8.237132 billion USD and 1790.038 billion Taka or with maximum value 2427.5 billion Taka or 28.7430 billion USD and 6028.3 billion Taka or 71.3784 billion USD minimum value 124.9 billion Taka or 1.47889 billion USD and 249.2 billion Taka or 2.95067 billion USD, standard deviation and variance are 638.0017, 1676.999, 407046.2, and 2812326 respectively.

4. METHODOLOGY

4.1. Augmented Dickey-Fuller Test

Unit root problem is a common phenomenon for time series analysis. Moreover time series data are not stationary and create spurious regression due to problem of non- stationary data. In this analysis, ADF (augmented dickey fuller) test has been considered for detecting non stationary data.

Null hypothesis for unit root H_0: $\Omega = 0$

Alternative hypothesis for unit root H_1: $\Omega < 0$

The regression equation of ADF test is:

$$\Delta y_t = \eta + \Omega y_{t-1} + \sum_{n=1}^{\rho} \Omega_n \Delta y_{t-n} + \varepsilon_t$$

Where Δdenotes first difference of the operator and ε is the error term and ρ shows number of lag upon the variable. The regression equation of ADF test with trend is:

$$\Delta y_t = \eta + \beta_t + \Omega y_{t-1} + \sum_{n=1}^{\rho} \Omega_n \Delta y_{t-n} + \varepsilon_t$$

Selecting lag in variable is chosen by AIC (akaike information criterion). When the data are stationary the null hypothesis will be rejected.

4.2. Cointegration Test

The cointegration test delivers short run relationship as well as long run relationship among variables. Cointegration indicates linear combination of stationary variables cointegrating in the long run which is called cointegrating vector. In a cointegration test, all variables must be stationary at same level of order.

Johansen (1988) proposes a maximum likelihood approach to get cointegrating vector and short run adjustment coefficient of error correction model.

The following Johansen maximum likelihood approaches have been considered:

$$LNGDPi,t = \Pi 11 LNGDPi,t-1 + \Pi 12 LNGEi,t-1 + \Pi 13 LNTRi,t-1 + \Pi 14 LNINVi,t-1 + \varepsilon_{GDPi,j}$$

$$LNGEi,t = \Pi 21 LNGDPi,t-1 + \Pi 22 LNGEi,t-1 + \Pi 23 LNTRi,t-1 + \Pi 24 LNINVi,t-1 + \varepsilon_{GEi,t}$$

$$LNTRi,t = \Pi 31 LNGDPi,t-1 + \Pi 32 LNGEi,t-1 + \Pi 33 LNTRi,t-1 + \Pi 34 LNINVi,t-1 + \varepsilon_{TRi,t}$$

$$LNINVi,t = \Pi 41 LNGDPi,t-1 + \Pi 42 LNGEi,t-1 + \Pi 43 LNTRi,t-1 + \Pi 44 LNINVi,t-1 + \varepsilon_{INVi,t}$$

The analysis of subtracting lagged variable from the equation is given below:

$$\begin{bmatrix} \Delta LNGDPi,t \\ \Delta LNGEi,t \\ \Delta LNTRi,t \\ \Delta LNINVi,t \end{bmatrix} = \begin{pmatrix} \Gamma 11 & \Gamma 12 & \Gamma 13 & \Gamma 14 \\ \Gamma 21 & \Gamma 22 & \Gamma 23 & \Gamma 24 \\ \Gamma 31 & \Gamma 32 & \Gamma 33 & \Gamma 34 \\ \Gamma 41 & \Gamma 42 & \Gamma 43 & \Gamma 44 \end{pmatrix} \begin{bmatrix} LNGDPi,t \\ LNGEi,t \\ LNTRi,t \\ LNINVi,t \end{bmatrix} + \begin{bmatrix} \varepsilon_{GDPi,t} \\ \varepsilon_{GEi,t} \\ \varepsilon_{TRi,t} \\ \varepsilon_{INVi,t} \end{bmatrix}$$

Where, $\Gamma_{11} = \Pi_{11-1}$, $\Gamma_{22} = \Pi_{22-1}$, $\Gamma_{33} = \Pi_{33-1}$, $\Gamma_{44} = \Pi_{44-1}$, $\Gamma_{12} = \Pi_{12}$, $\Gamma_{13} = \Pi_{13}$, $\Gamma_{14} = \Pi_{14}$, $\Gamma_{21} = \Pi_{21}$, $\Gamma_{23} = \Pi_{23}$, $\Gamma_{24} = \Pi_{24}$, $\Gamma_{31} = \Pi_{31}$, $\Gamma_{32} = \Pi_{32}$, $\Gamma_{34} = \Pi_{34}$, $\Gamma_{41} = \Pi_{41}$, $\Gamma_{42} = \Pi_{42}$, $\Gamma_{43} = \Pi_{43}$ *and* $LNGDP_{it}$, $LNGE_{it}$, $LNTR_{it}$ *and* $LNINV_{it}$ *are integrated.*

Johansen proposes cointegration rank by trace statistics and Max statistics to use the level of significance and reduce the matrix rank.

$$\lambda trace(r) = -T \sum_{r+1}^{N} LN(1 - \hat{y}_i)$$

$$\lambda \max(r, r+1) = -TLN(1 - \hat{y}_{r+1})$$

Here T is the sample size and $\hat{y}_i$ is the i^{th} considered as the highest canonical correlation. Asymptotic critical values are obtained from Johansen and Juselius (1990).

4.3. Vector Error Correction Model

When one or two cointegrating vectors are found in variables, a suitable estimation is VECM which adjusts both short run change in variables and deviation from the equilibrium. VECM is used in order to find out short run and long run dynamics in time series variables.

$$\Delta LNGDP_{i,t} = \beta_0 + \sum_{j=1}^{\rho} \beta_1 \Delta LNGDP_{i,-j} + \beta_2 \Delta LNGE_{i,-j} + \beta_3 \Delta LNTR_{i,-j} + \beta_4 \Delta LNINV_{i,t-j}$$

$$+ \lambda[LNGDP_{i,t-1} - \hat{\alpha}0 - \hat{\alpha}1 LNGEi,t-1 - \hat{\alpha}2 LNTRi,t-1 - \hat{\alpha}3 LNINVi,t-1] + \varepsilon i,t$$

Considering ρ lag for the model where Δ denotes the first difference of variables, λ indicates the speed of adjustment from the equilibrium and ε_{it} refers as white noise term.

5. RESULTS AND DISCUSSION

5.1. Augmented Dickey Fuller (ADF) Test Result

Augment dickey fuller (ADF) test is used for checking unit root problems on the data. When the data suffers from unit root problem, we cannot estimate our regression analysis properly. The result will produce misleading conclusion.

Null Hypothesis: The data suffers from unit root problem.

Alternative Hypothesis: The data does not suffer from unit root problems.

Table-2. Augmented dickey fuller test.

Variables	Without trend			With trend		
	Level	1st difference	Critical value	Level	1st difference	Critical value
LN GDP	1.452 (1)	-3.226**	-3.750 (1%)	-1.968 (1)	-3.775**	-4.380 (1%)
LN GE	1.673 (2)	-5.001**	-3.000 (5%)	-1.986 (2)	-5.998**	-3.600 (5%)
LN TR	2.760 (3)	-3.541**	-2.630 (10%)	-2.019 (3)	-4.340**	-3.240 (10%)
LN INV	0.732 (1)	-3.630**		-2.196 (1)	-3.714**	

Notes: The lag length has chosen by akaike information criterion (AIC) where ** indicates null hypothesis rejected at 5% level of significance.

The result shows that all variables are non-stationary in level form because critical value exceeds calculated value. Null hypothesis is rejected in this case. At first level of difference, all the calculated values are significant at 5% critical value. So, we can easily reject null hypothesis.

5.2. Lag Selection

Lag selection criterion is crucial to run Johansen test of cointegration because there are one or more cointegrating vectors. However, if there exists multiple selection criteria, optimal lag can be selected. Most of the selection criteria suggest that lag number-three to be suitable for a cointegrating test. All the selected criteria are optimized at lag three.

Table-3. Lag selection from VAR.

Lag	LR	FPE	AIC	SIC
0		.000276	-5.36417	-5.3253
1	8.4435	.000201	-5.68635	-5.63776
2	19.445	.000085	-6.55861	-6.5003
3	5.9237*	.00007*	-6.7548*	-6.68677*
4	.67483	.000076	-6.68854	-6.61079

Source: Author's own calculation by using STATA software generated results.

Table 3 shows different types of lag selection criteria such as LR (likelihood ratio), SIC (schwartz information criterion), FPE (final prediction error) and AIC (akaike information criterion). We select AIC criterion for the optimal lag length.

5.3. Johansen Cointegration Test

Johansen test of cointegration is important to find out one or more cointegrating variable in the long run. When two or more explanatory variables are present, they may change the dependent variable. Johansen cointegration operates after finding out appropriate lag length with lag selection criterion. Null hypothesis for trace statistics is "r co-integrating vector" and alternative hypothesis is "m co-integrating vector" where r = 0,1,..m-1. Otherwise for Max- Eigen statistics null hypothesis is "r co-integrating vector" and alternative is "r+1 co-integrating vector". In Table 5, null hypothesis is shown rejected by 5% level of significance.

Table-4. Test statistics.

Max rank	H_0	H_1	Eigen statistics	Trace statistics	5% critical value	1% critical value	Decision
0	r = 0	r >0		106.5526**	47.21	54.46	None **
1	r ≤1	r >1	0.96450	36.4514**	29.68	35.65	None**
2	r ≤2	r >1	0.64774	14.5404	15.41	20.04	At most 2
3	r ≤3	r >3	0.42951	2.7541	3.76	6.65	At most

Source: Author's own calculation by using STATA software generated results.
Note: ** indicates rejecting null at 5% level of significance.

Table-5. Max- Eigen statistics.

Max rank	H_0	H_1	Eigen statistics	Max-Eigen statistic	5% critical value	1% critical value	Decision
0	r = 0	r >0		70.1011**	27.07	32.24	None **
□	r ≤1	r >1	0.99513	21.9110**	20.97	25.52	None **
2	r ≤2	r >1	.0.91242	11.7863	14.07	18.63	At most 2
3	r ≤3	r >3	0.65529	2.7541	3.76	6.65	At most 3

Source: Author's own calculation by using STATA software generated results.
Note: ** indicates rejecting null at 5% level of significance.

The results of Johansen cointegration test confirm that at least two variables are cointegrated. In max rank 2, value of trace statistics and Max-Eigen statistics are lower than 5% level of critical value that confirms at least two variables in the model move in the long run. It will be found at long run relationship after testing vector error correction technique.

5.4. VECM (Vector Error Correction Model) Test

VECM test confirms short run and long run speed of adjustment. In short run all coefficients of variables are insignificant at 5% significance level. All the variables cannot reach short run equilibrium, they directly move together in the long run equilibrium. Table 6 shows that all coefficients are significant at 5% level. It can therefore be estimated that positive relation exits between total tax revenue and total investment making a significant contribution to GDP.

Table-6. Estimation long run relationship using VECM

Variable	Co-efficient	Std. Err.	Z	P>|z|
LNGE	0.6324108	.0629458	10.05	0.000
LNTR	-0.3846596	.0541686	-7.10	0.000
LNINV	-1.12757	.0457536	-24.64	0.000
_cons	-2.401472			

Source: Author's own calculation by using STATA software generated results.
Note: The signs of the coefficients are reversed in the long-run.

Long run relationship as follows:

$$LNGDP = 2.40 - 0.6324108(LNGE) + 0.3846536(LNTR) + 1.12757(LNINV)$$

Table 6 presents terms of investment coefficient with every 1% increase in total investment, GDP growth increases by 1.12%. The investment variable induces more than a proportionate change on GDP. Similarly, Total tax revenue shows that every 1% increase in total tax revenue will lead to a growth of 0.38% GDP and will be significant. The total tax revenue variable induces less than a proportionate change on GDP. This shows that total government expenditure will have a negative relation and significant contribution to GDP. The total government expenditure is also found to reduce GDP by 0.63% for every 1.0% increase in total government expenditure.

Table-7. Estimation short run relationship using VECM

D_ LNGDP				
	Co. ef.	**Std. Err.**	**Z**	**P>|z|**
Variable	-.1539851	.4266593	-0.36	0.718
LNGDP				
LD.	.5584585	1.183726	0.47	0.637
L2D.	.3207085	1.352514	0.24	0.813
LNGE				
LD.	-.039388	.2327716	- 0.17	0.866
L2D.	-.0571503	.2049832	-0.28	0.780
LNTR				
LD.	.0442181	.3111778	0.14	0.887
L2D.	-.0330723	.2273999	-0.15	0.884
LNINV				
LD.	-.3522382	.8204688	-0.43	0.668
L2D	-.2104269	.8685945	-0.24	0.809
_cons	.078729	.0485886	1.62	0.105

Source: Author's own calculation by using STATA software generated results.

In short run, Table 7 indicates that error correcting equations are negative and insignificant and all variables and their lags are not significant. Probability of p value is higher than Z value (P>|z|) and the test confirms no clear conclusion to indicate no possibility of short run adjustment to the equilibrium. Engle and Granger (1987) substantiate existence of progressive relationship among variables where error correction technique compounds together the short run as well as the long run relationships. ECT is a negative sign but statistically insignificant. In short run, variables deviate more at the equilibrium level and do not return. Dada (2013) also investigated government expenditure composition effect on output growth and consumption in Nigeria and also found out similar short run results. This result is also consistent with that of Akpan (2005) and Maku (2009). In the long run, it has been observed that all variables are significant and there exists a positive relationship of total tax revenue and total investment with gross domestic product (GDP) whereas there exists a negative relationship of government expenditure with GDP.

6. CONCLUSION AND POLICY RECOMMENDATION

This study thus concludes that expansionary fiscal policy upsurges burden in the economy. If a government fails to construct economic sustainability, corruption and other evil factors rampant the public sector and hamper the real growth rate of economy. In Bangladesh, expansionary fiscal policy has been studied during the last two or three decades. Studies found out that the government budget deficit exhibited an increasing trend and sometimes fiscal deficit also decreased the economic output growth rate. Total tax revenue also showed an increasing trend in the economy of Bangladesh which could raise the output level. Takumah (2014) concluded from her study that there were robust relation between tax revenue and economic growth in the long run for Ghana. Total investment plays a vital role to accelerate growth rate for the economy of Bangladesh. Total government expenditure has been found to be in a negative relationship with GDP and also a significant contribution to GDP.

In Bangladesh, overall government expenditure can be divided into two parts, one as development expenditure and the other as non-development expenditure. Total government budget of 2017 was 47394.09 million USD

where non-development budget expenditure was 29,011.16 million USD and development budget expenditure was 183827.888 (BER, 2017). Maximum portion of government budget has been spent on non-development activities. The higher fiscal deficit worsens the Bangladesh economy because every year a big amount of money is spent from the budget to pay interest for the foreign debt. Taxation and total investment stimulate the economic growth of a country. As a policy recommendation, this study suggests total tax revenue should be planned to stimulate output. This can be done by improving efficiency in tax administration, strengthening and modernizing customs administration and by streaming tax exemptions. Government should control over the non-development government expenditure and decrease the fiscal deficit by increasing tax revenue. Controlling interest rate can also make a suitable environment for private investment and the government should ensure a well and amicable ambience for both private and government investments.

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