

An Empirical Analysis of Fiscal Deficit and Inflation in Bangladesh

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Abstract—This paper empirically examines the impact of fiscal deficit on inflation in the context of Bangladesh. The question addressed is - are the methods of financing the fiscal deficit of Bangladesh inflationary? There are several options available to the hand of government to finance its budget deficit including bank borrowing, non-bank borrowing, and printing money. The government of Bangladesh uses all the three sources. The government's borrowing from the central bank is of special interest in this research paper. It is found by analyzing data from 1973 to 2018 that there exists a long-run relationship among inflation, fiscal deficit (FD), and total bank borrowing (TBB) as there exist more than 1 cointegrating equation. In the Johansen Cointegration Test, it is found that FD is negatively and TBB is positively related to inflation. However, FD is not significant at a 5% level of significance whereas TBB is significant at that level. It is found through the vector error correction model that changes in FD and TBB are absorbed by inflation every 8 months.

Keywords— *Budget, Bank borrowing, Economic development, Fiscal policy, Government financing.*

I. INTRODUCTION

Inflation is defined in a way as the excess in money supply compared to the goods available in the market. Inflation is a monetary phenomenon but not entirely determined by monetary policies; fiscal policy has an important role to play in the sustaining level of inflation especially considering the ways of the government in financing a fiscal deficit. Furthermore, fiscal policy can affect variables in the economy like GDP, tax collection, wages, public expenditure, etc. Inflation is connected to fiscal deficit directly through the methods of financing a fiscal deficit. The government can finance a deficit through three channels – borrowing directly from banks or through savings certificates, foreign sources, and printing money. If the government decides to print money, it will increase the supply of money not backed by outputs. Again, as the government borrows through the central bank, it can increase money supply in the economy thereby increasing inflation (Sill, 2005). It is to be empirically examined if fiscal deficit puts extra inflationary pressure in case of the economy of Bangladesh.

That the size GDP of Bangladesh is growing steadily, budget size of the country has also increased steadily during the last decade. The size of the fiscal deficit is also increasing keeping pace with that growth. Since the 2000s, Bangladesh has maintained a GDP to deficit ratio of 5% or less. There is a two-way relationship between GDP and the budget of an economy. Higher GDP shall automatically set a doorway for a higher budget to effectively support that GDP growth. Otherwise, infrastructural developmental costs might cause the GDP to shoot up and it might require a higher budget (Van den Berg, 2016). Either way, a higher budget is required. And when the budget skyrockets quickly without appropriate tax reforms it might take years to achieve the intended goals of it. But there stays a big budget deficit on the table to deal with. The government deals with the deficit by borrowing from domestic sources, or borrowing from abroad, or both. Borrowing from domestic sources comprises two parts – borrowing from banking channels, and borrowing by issuing interest-bearing debt. Borrowing from the banking channel might and very often does involve printing money. This printed money might put inflationary pressure on the economy, *ceteris paribus*.

Inflation: A Theoretical Perspective

Inflation and fiscal deficit: General theoretical aspects

The most popular theory that has been used to deal with inflation is the Quantity Theory of Money. The theory states that inflation is a function of money supply growth. Keeping the velocity of money constant an increase in money supply results in a proportionate increase in the price level to hold the equation of the theory. For example, ceteris paribus, if the govt. replaces every unit of Tk with twice that unit, Tk will be half its worth immediately. In other words, the consumers will pay 4 Tk for purchasing 2 Tk goods now. A similar situation happens when the govt. opts to print money to finance its deficits. Simply, the govt. just releases more currency notes to chase the same limited amount of output. Output and employment do not increase in this way. Rather it imposes an inflationary pressure on the economy as a compensating factor to the increased money supply - not backed by output increase.

The quantity theory of money provides a good perspective here regarding money supply. The quantity theory of money tells that money supply multiplied by its velocity should be equal to the value of the total output produced or transacted in the economy. Where velocity refers to the number of times a currency changes hand. The equation is following –

MV = PQ

Where M refers to the quantity of money, V to velocity, P to price, and Q to the quantity of total goods and services transacted. If we keep the velocity constant over the years, we are left with 'M only refers to the printed money'.



In the now famous words of Friedman, "inflation is always and everywhere a monetary phenomenon". However, others argue that the real world is more complicated than this. Fiscal policy has significant impacts on inflation. Because the ways the government uses to finance its deficit might push the economy towards higher inflation. This interconnected issue can be discussed here. There are several ways for the govt. to take money from the system. One way is to print money –

$$P_t (G_t - T_t) = dM_t$$
$$dM_t = M_t - M_{t-1}$$

Pt represents prices in period t. Fiscal deficit is indicated by G_t – T_t and dM_t represents changes in money supply while assuming velocity of money constant. The equation says that the govt. is financing the excess expenditure over tax revenue with printed money, assuming the velocity of money is kept constant. The govt. is paying its bills exercising the special authority of printing money which no other parties in the economy have. In other words, the govt. is increasing non-interest-bearing debt on its balance sheet which should inflict inflationary pressure on the economy.

But an important question arises here. If the relation between money growth and inflation is so clear, why do the countries not just print less money? Since many countries in the world are facing higher inflation; Brazil, Venezuela, and Zimbabwe having hyperinflation, they could just print less money or why not destroy some money to have better control over the inflation rate? However, the problem of the countries is the large fiscal deficit. If the govt. finance the fiscal deficits from domestic sources, two doors are open – increase money supply by printing money or increase interest-bearing debt. So, the equation above can be rewritten as follows –

$$P_t (G_t - T_t) = dM_t + dB_t$$

Or

 $G_t - T_t = dM_t / P_t + dB_t / P_t$

The equations above show that the government collects finance equivalent to its deficit by either issuing interestbearing debt or by printing new money. When the government raises funds from interest-bearing debt, it doesn't create inflationary pressure. There is another way around it. The government can also reduce the level of fiscal deficit so that it requires less financing. But if the government can neither cut the deficit nor issue interest-bearing debt, the only alternative left out is printing money. When the government prints new money, it obtains goods and services in exchange for those pieces of paper, the "seigniorage". Seigniorage can be derived from our above equation. Dividing changes in money supply with the level of price in a particular period gives Seigniorage.

Now, inflation is not really a monetary phenomenon as addressed by Friedman – "Inflation might be a monetary phenomenon, but the money is a reflection of fiscal policy and not of monetary policy". Given the fact that the monetary base controlled by the central bank comprises money in the hands of the public and the reserve of commercial banks to the central bank, an essential question arises how could inflation be a fiscal phenomenon? Why can't the central bank just print less money, reduce the money supply and control inflation? Why let the country suffer from a high inflation rate?

Two assumptions shall be fulfilled, apparently so, to let the monetarists control inflation effectively – a strong correlation between the monetary base and general price level, and the power of monetary authority to raise or reduce Seigniorage (Sergent & Wallace, 1981). In their seminal work, Sergen and Wallace (1981) argue that monetary policy cannot control inflation if it is interpreted as Open Market Operations (OMO) even if all the assumptions of monetarists are fulfilled. In their interpretation, Seigniorage plays a central role in the financing of fiscal deficit. The balance between inflation and budget deficit is a game between monetary and fiscal authorities. The fiscal authority arbitrarily sets its budget deficit to be financed from interest-bearing debt, foreign sources, and Seigniorage. Thus, the fiscal authority makes the first move leaving the monetary authority with a tough choice between controlling inflation and financing deficit by printing money.

So, it can be argued from the experience of many countries that inflation is not exogenous but rather endogenous. Because the countries put a large fiscal deficit in their budget and finance it by printing money. The excessive money growth rate is caused by the necessity of the government to finance its large budget deficits. So, though the apparent reason for inflation is monetary growth, the true reason behind the scenes is a large fiscal deficit that is not financed by an increase in (non-Seigniorage) taxes or a cut in spending.

Sources of Financing Fiscal Deficit

The govt. finance its fiscal deficits from domestic and international sources. Domestic sources include printing new money, borrowing from banking channels, and borrowing from non-bank channels. The govt. can use external sources to finance deficits. World Bank, Asian Development Bank, International Monetary Fund, and other financial institutions from worldwide finance the deficits at relatively lower interest rates. However, foreign credits often come with covenants that might threaten sovereignty in the long run. From the sources of funds discussed above, the equation becomes

$$\mathbf{P}_{t} \left(G_{t} - T_{t} \right) = dM_{t} + dB_{t} + dE_{t}$$

Further breakdown of dB_t gives bank borrowing (dBb_t) and non-bank borrowing (dBn_t) :

$$P_t (G_t - T_t) = dM_t + dBb_t + dBn_t + dE_t$$

Or

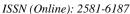
$$G_t - T_t = dM_t / P_t + dBb_t / P_t + dBn_t / P_t + dE_t / P_t$$

The above equation tells that as long as $G_t > T_t$, the govt. has to restructure its internal or external borrowing composition; eventually the real money supply base i.e. by printing money. The extent and mode of borrowing affect the economy which includes inflation. But one point is noteworthy here since printed money data is not available. Bank borrowing amount has a portion that is printed and not disclosed, but other parts of the amount should put inflationary pressure. The relationship is disguised by the money supply. That is, the money supply in the economy essentially increases as the central bank finances greater fiscal deficit of the government.

II. LITERATURE REVIEW

Several studies examine the relationship between inflation and the fiscal deficit. A study by Catao and Terrones (2005)

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concludes that there is a strong positive relationship between inflation and budget deficit in developing countries where inflation tends to be high. But in the case of the developed economies, the relationship doesn't hold. Lin and Chu (2013) examine the relationship between inflation and deficit in 91 countries from 1960 to 2006 and conclude that fiscal deficit has a strong impact on inflation in high-inflation periods and the opposite in low-inflation periods.

However, fiscal deficit is associated with economic growth which in turn indicates GDP growth and a corresponding higher budget to support that growth. A higher budgetary position normally is associated with higher economic growth in the long run as well as the short run. Gupta et al. (2005) find that countries concentrating their spending on wages economic growth experience lower whereas those concentrating on capital and nonwage goods and services enjoy greater output growth. Adam and Bevan (2005) relate economic growth and fiscal deficit. They found a threshold effect when the deficit is around 1.5 percent of GDP. They examine 45 developing countries and find that there is a growth payoff to reducing deficit. But when there is a financial contraction in place the payoff effect disappears or reverses. The magnitude of the payoff necessarily depends on how the deficits are financed, through borrowing or seigniorage, and on how well the deficit is accommodated elsewhere in the budget. So there is a relationship between budget deficit and economic growth. When the budget deficit is lowered, the economic growth might slow down.

Now, turning attention to the inflation derived from the financing of fiscal deficit, typically higher economic growth triggers higher inflation. Because when the aggregate demand of an economy becomes higher than the aggregate supply, the price essentially shoots up (Mallik & Chowdhury, 2001). Pollin and Zhu (2006) attribute the above relationship to the fiscal deficit. As argued earlier, higher economic growth is ensured by a higher budget. A higher budget amount normally ends up in a higher deficit. Since a higher deficit leads to higher economic growth, a relationship between deficit and economic growth can be forged. Higher deficit means higher growth means higher inflation (Barro, 2013).

In the case of money supply growth, when the output growth is less than the money supply growth there is persistent inflation. Most of the increase in the money supply is used to finance the government's budget deficit. Then there is the relationship between fiscal deficit and inflation (Mukhtar and Zakaria, 2010).

However, apart from these endeavors to relate inflation with GDP growth, and money supply growth, there are researches directly investigating the relationships between inflation and fiscal deficit. Taylor (2000) argues that fiscal policies set at the discretion of the authority might distort inflation. Therefore, the fiscal policy shall be set intuitively with the long-run target of tax and social security reforms. Dixit and Lambertini (2001) talk about monetary and fiscal policy integration whereby there should be a leadership of either fiscal or monetary policy in attaining growth targets and maintaining inflation within target.

There are several papers available that focus on the Asian countries to investigate the relationship between fiscal deficit and inflation. Nguyen (2015) takes 9 South Asian countries and runs two sophisticated models to find the relationship between inflation and other variables. Money supply (M2), fiscal deficit, government expenditure, and interest rate significantly affect the inflation in those countries (Nguyen, 2015). In the Asian developing countries, there is a positive relationship between budget deficit and inflation. In other words, budget deficit is inflationary in those countries (Habibullah et al., 2011). They used two models viz. Granger Causality and Error Correction Model using 49 years' data. In other countries like Nigeria, Awe and Shina (2012) find that budget deficit affects inflation directly and indirectly. The indirect way is through increasing the money supply. In Pakistan, Mughal et al. (2011) analyze data from 1960 to 2010 to conclude that budget deficit has a powerful impact on inflation and there is a necessity for coordination between monetary and fiscal policy to curb inflation. Samimi and Jamshidbaygi (2011) conclude on the Iranian economy that there is a positive and significant impact of budget deficit on monetary variables like inflation. Also, there is a positive relationship between the price index and the budget deficit (Samimi & Jamshidbaygi, 2011). On Pakistan's economy, Agha and Khan (2006) also concluded that there is a positive relationship between fiscal deficit and inflation. They included total bank borrowing by the government for budgetary support and found a strong positive correlation between total bank borrowing and inflation.

However, in Bangladesh, there have been several works on inflation and other parameters like determinants of inflation, money, and inflation, etc. There is visibly one paper that examines the relationship between inflation and fiscal deficit in the opposite way than this paper. That is, it investigates the effects of inflation on fiscal deficit and finds that government expenditure adjusts to inflation more quickly than govt. revenues and results in higher fiscal deficit (Hossain, 1987). Hossain and Islam (2013) investigate the determinants of inflation in Bangladesh. They find that money supply affects inflation directly. Fiscal deficit and exchange rate also affect inflation but only insignificantly.

Based on the empirical results from the above-discussed literature, it is expected that there exists a positive relationship between fiscal deficit and inflation in Bangladesh as well.

III. METHODOLOGY

The data used for the analysis of this research paper are mostly collected from secondary sources. Variables collected include budget, fiscal deficit, total bank borrowing, money supply (M2), CPI, GDP at constant and current market price, and exchange rate. Several sources are used in the process. The website of Bangladesh Bank is the source of all data except for fiscal deficit, total bank borrowing, and budget data. These three variables were collected from Bangladesh Economic Review – a Ministry of Finance yearly publication, and newspapers. The period considered here is 1973 – 2018, a total of 45 years.



The dependent variable of the model is inflation. CPI and GDP deflator can be used as a measure of inflation. CPI has a limited coverage but it is the most reliable measure of inflation. CPI is also widely used in different research projects. CPI data is collected from the Bangladesh Bank website. The data is rebased keeping 1973-74 as the base year. Then inflation is calculated.

Fiscal deficit – the first independent variable, can be measured as the total expenditure minus total revenue (positive value being deficit). Another way can be subtracting total revenue from total expenditure plus annual development program. The latter finds the overall budget deficit. There is another figure i.e. foreign grant which reduces the budget deficit. But in this study, the overall deficit excluding foreign grants is taken to see the effects of the overall budget deficit not of foreign grants. Data for the period from 2018 to 1992 are collected from the Ministry of Finance's publication 'Bangladesh Economic Review' and data for the period before that are from the 'Bangladesh Economic Survey' of the same Ministry.

For measuring the relationship between inflation and fiscal deficit, total bank borrowing (TBB) is used as another independent variable. TBB includes borrowing both from the central bank and commercial banks for budgetary support. Data provided by the Ministry of Finance have been used.

There are two control variables – Real GDP (RGDP) and exchange rate (ER) of Tk against USD.

To do the data analysis in this research two models are used *viz.* Johansen Cointegration Test and Vector Error Correction Model (VECM). Three main variables are inflation denoted by *P*, fiscal deficit denoted by *FD*, and total bank borrowing denoted by *TBB*. Johansen Cointegration Test is used to find out the long-run equilibrium relationship between variables using optimum lag lengths. Then VECM is used to find out the speed of adjustment in the short run. Below are the constructed equations for VECM keeping real GDP and exchange rate as exogenous variables –

 $\Delta P_{i} = \alpha_{0} + \sum \alpha_{i} \Delta P_{t\cdot i} + \sum \beta_{i} \Delta F D_{t\cdot i} + \sum \beta_{i} \Delta T B B_{t\cdot i} + \varphi_{1} \mu_{t\cdot 1} + \upsilon_{t1}$ $\Delta F D_{i} = \alpha_{0} + \sum \alpha_{i} \Delta F D_{t\cdot i} + \sum \beta_{i} \Delta P_{t\cdot i} + \sum \beta_{i} \Delta T B B_{t\cdot i} + \varphi_{2} \mu_{t\cdot 1} + \upsilon_{t2}$

$$\Delta TBB_{i} = \alpha_{0} + \sum \alpha_{i} \Delta TBB_{t-i} + \sum \beta_{i} \Delta P_{t-i} + \sum \beta_{i} \Delta FD_{t-i} + \varphi_{3}\mu_{t-1} + \upsilon_{t3}$$

There is a second VECM here with two variables FD and change in money supply keeping the velocity of money constant i.e. printed money (SG). The equations are following

 $\Delta lnSG_i = \alpha_0 + \sum \alpha_i \,\Delta lnSG_{t-i} + \sum \beta_i \,\Delta lnFD_{t-i} + \varphi_1 \mu_{t-1} + v_{t1}$

 $\Delta lnFD_i = \alpha_0 + \sum \alpha_i \,\Delta lnFD_{t-i} + \sum \beta_i \,\Delta lnSG_{t-i} + \varphi_2 \mu_{t-1} + v_{t2}$

To do the VECM, firstly it is determined if there is any long-run relationship between the variables. This is done by testing cointegrating equations. When there is a cointegrating equation between the variables, there is a long-run relationship and the VECM model can be specified. Otherwise, unrestricted VAR can be performed. The following steps are followed –

Step 1: All the variables are tested for stationarity. It is made sure that they are stationary at I(1).

Step 2: Optimal lag length (*p*) is determined

Step 3: Johansen cointegration test with (p) lag is performed to find out if there exists a long-run linear equilibrium relationship between the variables.

Step 4: VECM is specified with (p - 1) lag to find out the speed of adjustment towards the equilibrium relationship

Other appropriate tests like unit root test, regression, correlation, etc. are conducted wherever necessary.

Determination of Stationarity of Data

There are a range of tests to determine the stationarity of data. Here Augmented Dickey-Fuller (ADF) test is used to establish the stationarity of the variables. The results are shown in Table 1. It is observed that all the variables are integrated in order (I), i.e. they change their place with the first difference.

TABLE 1. Determination of optimal lag length (the author)

	Variable At Level		ADF test	
			1 st difference	
	t-Statistic	p-value	t-Statistic	p-value
lnP	-2.519617	0.1185	-5.530518	0.0000
lnFD	-0.023450	0.9510	-9.455995	0.0000
lnTBB	-1.565352	0.4913	-5.766071	0.0000
lnRGDP	-1.217048	0.6588	-6.944292	0.0000
lnER	-2.464726	0.1312	-9.986648	0.0000

The optimum lag length for three variables is determined before performing cointegration analysis. The variables are P, FD, and TBB. The result is shown in figure 1.

TABLE 2. Vector autoregression estimates on P, FD, and TBB (the author)					
Lag Lo	ogL I	R FPE	AIC	SC	HQ
0 -118	.2865 N	JA 0.07448	3 5.916415	6.041798	5.962073
1 -29.9	93793 159.	4584* 0.001555	5* 2.045753*	\$ 2.547286*	2.228383*
2 -21.2	27828 14.3	6234 0.00159	5 2.062355	2.940038	2.381959
3 -13.9	95998 11.0	0.00176	6 2.144389	3.398223	2.600966
4 -4.77	76466 12.5	4334 0.00181	7 2.135437	3.765421	2.728987

*indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion



Since the observations are less than 60, SC (Schwarz information criterion) estimation is taken into consideration, and the determined optimum lag is 1.

IV. RESULTS AND DISCUSSION

Cointegration Analysis

The cointegrating vector is found as shown in the results shown in Table 3. A proper form of VAR is determined along with optimal lag for the system.

_	Unrestricted Cointegration Rank Test			
_	Trace		Max-E	igen
-	Trace	p-value	Max-Eigen	p-value
	Statistic	-	Statistic	-
None	61.34262	0.0000	46.35761	0.0000
At most 1	14.98501	0.0596	14.97846	0.0385
At most 2	0.006546	0.9350	0.006546	0.9350

The null hypothesis is rejected, according to both Trace Statistic and Max-Eigen Statistic, that there is 'None' or 'At most 1' cointegrating equation only. Therefore, there is more than 1 cointegrating equation and a linear long-run equilibrium relationship. Table 4 shows the normalized cointegrating coefficients.

TABLE 4. Normalized cointegrating coefficients (the author)

1 Cointegrating Equation	(s):	Log likelihood	-81.4314
lnP	lnFD		lnTBB
1.000000	-0.193892		0.170232
	(0.07408)		(0.07774)

*standard error in parentheses

The normalized cointegrating coefficients (standard error in parentheses) suggest that inflation is negatively related to fiscal deficit and positively to total bank borrowing. The latter relationship with TBB is quite intuitive whereas one is not sure about the negative relationship with FD. It is suggested that there is a long-run positive relationship between TBB and inflation.

Vector Error Correction Model

There are three variables in the cointegration system here, so a valid vector error correction model can be constructed. From the equations, the fact that $\varphi_k \neq 0$, is a representation of the underlying variables for a valid error correction model as well as that a cointegration exists between underlying variables. The coefficient on the lagged value of the errors represents the speed of adjustment towards the long-run relationship between variables. This means that the size of the correction is expressed by the coefficient in the short term. The long-run relationship and the short-run corrections are shown in figure 4. The VECM is run by taking three main variables – *P*, *TBB*, and *FD*, and keeping the other two variables as exogenous variables in the model.

R-squared of the model is 70% (see Table 5). The cointegrating equation being examined here has an error of 1.55 in the negative which tells that the relationship is valid. It also tells the speed of adjustment is 1/1.55 or 0.65 years. That is, the changes in fiscal deficit (FD) and total bank borrowing

(TBB) are absorbed by inflation (P) every 8 months thus the short-run disequilibrium is corrected into equilibrium in the long-run. It can also be seen from the results that FD affects P negatively which apparently is counterintuitive given that TBB affects P positively. However, from the casualty test in figure 6, it can be seen that the first difference of TBB is significant at a 5% level whereas FD is not significant at all.

TABLE 5	. VECM results a	nd correction speed (the a	author)
Cointegrating Eq: CointEq1		Error Correction:	D(LNP)
	-		-1.547696
LNP(-1)	1.000000	CointEq1	(0.19222)
			[-8.05159]
	-0.638540		0.312719
LNFD(-1)	(0.22191)	D(LNP(-1))	(0.13055)
	[-2.87743]		[2.39544]
	0.238749		-0240479
LNTBB(-1)	(0.07602)	D(LNFD(-1))	(0.54408)
	[3.14050]		[-0.44200]
			0.195092
С	5.824923	D(LNTBB(-1))	(0.08389)
			[2.32557]
			5.966164
		С	(1.04079)
			[5.73235]
R-squared	0.704518		
Adj. R-squared	0.655271		
F-statistic	14.30582		
Akaike AIC	2.011760		
*standard error in p	arentheses		
*t-statistic in brack	ets		

V. SUMMARY OF THE FINDINGS

It is found that the first data set has an optimum lag of 1 which means that there is a time trend in the variables. Each observation t is affected by maximum t-1 of the respective variable. Cointegration analysis on the non-stationary data finds that there is a long-run equilibrium relationship between inflation, fiscal deficit, and total bank borrowing. Real GDP and exchange rate are treated as exogenous variables. VECM is performed to confirm the long-run relationship and determine the short-run rate of adjustment to the long-run relationship. Interestingly, in the case of Bangladesh, inflation is not directly affected by the fiscal deficit but it is affected by the total bank borrowing of the government for budgetary support. So, the summary finding is that the government borrowing from banking channels causes inflation to increase. Also, that fiscal deficit causes the money supply to increase and inflation increases thereafter forging a relationship between fiscal deficit and inflation.

VI. CONCLUSION AND POLICY RECOMMENDATION

It is established that inflation is surely affected by that portion of fiscal deficit which is financed by total bank borrowing. But one wonders why fiscal deficit itself affects inflation negatively. The researcher argued earlier that this is counterintuitive given that a portion of fiscal deficit affects inflation positively through total bank borrowing's relationship found in the results.

In the case of Bangladesh, several macroeconomic variables are surging very quickly. The variables are GDP



growth rate, budget, and fiscal deficit. But the general inflation level, even after rebasing the CPI, is kind of stagnant. There might be two reasons behind this -

- 1. Food and non-food inflation are collaborating in a friendly way not to let the general inflation level become bigger than themselves. That is when one is increasing, the other is decreasing, and vice versa.
- 2. There is a time lag for inflation adjustment. Large government expenditure thus a higher budget thus a higher fiscal deficit will start showing effects on inflation shortly.

The first scenario is unlikely because the difference between food and non-food inflation should be negligible. If the second holds, the economy soon is going to enter an age of high inflationary pressure. But as of now, the inflation seems to be well under control. However, given the point of time since the government mega projects, higher government expenditure, higher budget, and higher fiscal deficit started getting off the ground, the researcher argues, it is nearly 'not possible' for inflation to sit tight on the ground and see all its peers fly off. Because events mentioned here started as early as 10 years ago. Inflation should have been showing some symptoms of such development, the researcher argues. Fiscal deficit affected inflation in all the developing countries as argued in the literature review section of this paper. However, the findings of this paper suggest that fiscal deficit affects inflation negatively. It is to be noted that the variable is 'not significant' in the model.

But the researcher is concerned that there will be inflationary pressure in the economy when the mega projects finish and a huge amount of money is disbursed into the economy with little being invested into producing goods and services. Therefore, keeping into mind the ever-increasing government expenditure, waning private sector credit growth, huge unemployment problem, corruption in and prolonging of mega projects implementation, Vision-2021 & 2041, corruption in the banking sector, crowding out effect, and finally mishandling of the current demographic dividend, following policy recommendations are made –

- A transparent coordination between monetary and fiscal policy be introduced
- A proper and transparent implementation of the budget be ensured to facilitate the next budget to be reasonable with a manageable budget deficit.
- The CPI basket be reconsidered along with the price collection and estimation procedure of the same.

Finally, the researcher is optimistic that all the government plans would work out in Bangladesh and that the current government expenditure-driven GDP growth would result in higher private-sector investment and a higher rate of employment generation in the future to curb the possible inflation spiral during the same period.

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