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FISCAL DEFICITS AND STOCK PRICES IN NIGERIA: AN EMPIRICAL EVIDENCE

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Abstract

This study investigates the effects of fiscal deficits on stock prices in Nigeria, utilizing vector auto-regression and error-correction mechanisms (ECM) techniques with annual time series data spanning 1984-2010. The results reveal, amongst others, that fiscal deficit is negatively related to stock prices. Therefore, to maintain a robust stock market, the authorities are expected to de-emphasize monetary financing of fiscal deficits in preference for bond-financing, since the former not only promotes the problems of inflation in the economy, but also depresses stock prices as well. Such efforts should be complemented by mounting more vigorous awareness campaigns to help sensitize and attract more investors into the stock market.

Keywords: Stocks, fiscal deficits, Nigeria

1. INTRODUCTION

Over the last few decades, the role of fiscal policy as a tool for stabilizing the economy and its potential effects on stock prices has come under increasing attention in both the developed and emerging economies of the world. This is partly due to the notion that, one way continuously large annual budget deficits (a fall-out of fiscal policy) could affect current and future economic growth of a nation is through its effects on stock markets.

More recently, the renewed interest on the relationship between fiscal deficits and stock prices has been partly informed by the sudden occurrence of the global financial turmoil, its severity and potentially long-lasting impact and, in particular, the apprehension that such large budget deficits could lead to stock market crash (Roley and Schall, 1988).

In contrast however, other analysts claim that budget deficits have little effect on stock prices. Friedman (1987), for example, characterized much of the links between fiscal deficits and stock market crash (via collapse in asset valuation) as reflecting reliance on economic fallacies, as witnessed throughout the 1980s when stock prices surged despite mounting fiscal deficits.

In Nigeria, recurring fiscal deficits have come to be recognized as the bane of the economy. This is so because fiscal deficits have been on the increase year after year with very rare cases of surplus being achieved. For instance, deficits increased from ₦2,660.40 million in 1984 to ₦12,160.90 million in 1988 and further to ₦39,532.50 in 1992. The rising trend of deficits continued except in 1996 when it registered surplus of ₦32,049.40 million. By the year 1999, the overall deficits had reached ₦285,104.70. It rose to ₦301,401.00 million by 2002. As from 2003 however, government fiscal deficits declined moderately from ₦202,724.70 million to ₦161,400.00 million, ₦117,237.10 million and ₦47,378.50 million in 2005, 2007 and 2008, before peaking at ₦810,020.70 million in 2009 (see appendix 1). Such chronic and escalating fiscal deficits not only imposes cost on the economy (which includes both the real and the financial sectors) through some macroeconomic variables as investment, inflation, consumption, etc. but also depress stock prices and undermine investor's confidence. This, in turn, minimizes the ability of firms to raise capital on favourable terms (Adrangi and Allender, 1998). Considering such deleterious effects therefore, the relationship between both phenomena (i.e. budget deficits and stock prices) deserves analysis. In other words, the objective of this study is to examine the nexus between fiscal deficits and stock prices in Nigeria. The rest of the paper is organized as follows. Section II contains a brief review of the relevant literature on the nexus between budget and stock prices. Section III provides the methodology and a discussion of the regression results obtained, while section IV concludes the paper with some pertinent remarks.

2. LITERATURE REVIEW

Vast studies that have been conducted by researchers on the effects of persistent rising fiscal deficits on stock prices have yielded contradictory results. Some researchers, particularly from developed economies, are of the view that large and persistent fiscal deficits can significantly depress stock prices (see, for example, Geske and Roll, 1983; Roley and Schall 1988; Gale and Orszag, 2004; Engen and Hubbard, 2004; Laopodis, 2006; Saleem, et al, 2012; Osamwonyi and Evbayiro-Osagie, 2012).

According to Geske and Roll (1983), the expected directional impact of budget deficits on stock return should be negative. This is because government budget deficits exerts upward pressure on the nominal interest rate which, in turn, lowers expected returns on stocks. They argued further that, increases in risk premia, due to fiscal deficits, expose investors to an uncertainty surrounding the reaction of the Central Bank and thus further confound the equity market.

Laopodis (2006) asserts that, from the investors' perspective, large budgetary deficits adversely impact stock prices because they tend to increase interest rates. The increase in interest rates, in turn, reduces business capital spending as well as consumption expenditures and ultimately undermine real economic activity. These events will affect the financial markets by reducing asset prices, further raising the cost of borrowing and reducing business spending.

In contrast, there is a minority view that believes that deficits, depending on how they are financed, can exert positive impact on stock prices. For instance, if deficits are bond financed, interest rates may rise more significantly, and as individuals try to dispose off their bond or securities holdings to satisfy their increased demand for money, bond prices will fall, while if monetized the effect on stock prices is expected to be positive. Van Aarle, et. al (2003), provide evidence supporting the positive relationship between fiscal policy and stock prices using Structural VAR analysis.

Ardagna (2009) reports that adjustments based on expenditure reduction are related with increases in stock market prices. Darrat (1990) in his examination of the effect of monetary and fiscal policies on shares in Canada concludes that budget deficits determine share returns but did not ascertain whether it is positive, negative or ambiguous. Arin et al (2009) attempts to investigate the effects of various tax policy innovation on stock market returns and finds out that indirect taxes have a larger effect on market returns than labour taxes.

Udegbunam and Oaikhenan (2012), in their empirical study of the effects of persistent rising fiscal deficits on the stock market in Nigeria find out that money- financed deficits have an ambiguously positive effect on stock prices in the short-run. On their part, Asaolu and Ogunmuyiwa (2011) in their study of the impact of macroeconomic variables on stock market movement in Nigeria, observe an inverse relationship between budget deficits and the average share prices for the period 1986-2007.

The results from previous studies on the relationship between fiscal deficits and stock prices are far from conclusive. Besides, it is also evident that literature on the subject matter pertaining to Nigeria is somewhat limited and, as such, further research is needed on the subject matter. This paper helps to fill this gap.

3. MODEL SPECIFICATION AND METHODOLOGY

3.1. THEORETICAL UNDERPINNINGS

Arising from the reviewed literature of the preceding section, we could infer that fiscal deficits, through their effects on macroeconomic variables, can significantly influence stock prices. Such macroeconomic variables include, interest rate, money supply, volume of transaction, and inflation n.

The standard models of stock pricing revolve around the discount rate used in computing the discounted future cash flows earned by the owners of the stock. To this end, Hardouvelis (1988) argues that a higher real interest rate adversely affects stock returns both because it raises the real discount rate at which cash flows are capitalized and because it decreases real output and hence future cash flows.

Essentially, large deficits entail additional risks to the economy which include a loss in investors' (domestic and foreign) confidence and adverse effects on the volume of transactions. Specifically, a loss in investor's (and business) confidence would cause a shift of portfolio away from home currency assets into foreign currency assets which would limit the ability of the country to finance its liabilities and increase the country's exposure to exchange rate fluctuations. This situation could undermine capital spending and ignite a drop in asset prices which would further restrain real economic activity.

Sellin (2001) lays out competing theories on how money supply affects the stock market prices, namely, those of the Keynesian economists and the real activity theorists.

Keynesian economists argue that there is a negative relationship between stock prices and money supply whereas real activity theorists argue that the relationship between the two variables is positive. The real activity theorists argument is based on the fact that increase in money supply means that money demand is increasing in anticipation of increase in economic activity. Higher economic activity implies higher expected profitability, which causes stock prices to rise.

Inflation rate is one macroeconomic variable that determines the stock prices behavior. One way to view the transmission mechanism between these two variables is via the budget deficit. Following the Monetization perspective, a sustained increase in the budget deficit leads to anticipated inflation and an

increase in inflation uncertainty. As the budget deficits persists, real rates are pushed up; and central bank may ease money to reduce these rates, resulting in a rise in inflation and nominal rates. The demand for long-term securities may decrease because financial market participants anticipate a higher rate of inflation or because uncertainty about such an inflationary policy makes long term securities riskier than short-term ones (Feldstein, 1986).

3.2 THE MODEL SPECIFICATION

Within the context of the literature reviewed and the theoretical underpinnings, a simple model of vector autoregressive (VAR) framework is hypothesized to capture the dynamics of the relationship between fiscal deficits and stock prices whilst avoiding the pitfalls of endogeneity and integration of the variables. It takes the following general form:

$$V_t = \sum_{i=1}^{k} A_i V_{t-1} + E_t \ldots\ldots\ldots\ldots (1)$$

Equation (1) when augmented with relevant macroeconomic variables will enable us to specify the generic form for Nigeria's case as:

$Vt = (SP_t, BDEF_t, MS_t, INTR_t, VOT_t, INFL_t, PCE_t)$

Where:

Vt = Vector of variables in the determination of stock prices

A_i = Seven by seven matrices containing coefficients of all variables in stock prices

V_{t-1} = Vector of the lagged variables

E_t = Vector of the usual stochastic error term.

The seven variables contained in the V_t vector are the dependent and independent variables defined as follows:

SP	=	Stock Prices
BDEF	=	Budget or fiscal deficit
MS	=	Broad money supply (M2)
INTR	=	Interest Rate
VOT	=	Volume of Transaction
INFL	=	Inflation rate
PCE	=	Private Consumption Expenditure

3.3 THE DATA

This study uses annual data for the period, 1984-2010 collected from Central Bank of Nigeria (CBN) Statistical Bulletin (2010), National Bureau of Statistics (NBS) and the Nigeria Stock Bulletin. This sample period (1984-2010) was chosen because of the non-availability of data on All share price Index (a proxy for stock prices) before 1985. In fact, All share price Index was first published in the Nigerian Stock market in 1985 with 1984 as the base year (100).

Table 1 presents the data for the variables used in the estimation. Stock prices, in nominal terms averaged N11268.96 million and varied from N100.00 million to N57990.20 million. Budget deficit averaged -148698 and ranged from -1105440 to 32049.40 with a standard deviation of 253282.9. Broad money supply ranged from 12497.10 to 5177901, with a mean of 1077201. Interest rate has a mean 19.34 and varied from 9.25 to 36.09. Volume of transaction averaged 580652.1 and varied from 17444.00 to 3535631. Inflation rate, measured as a change in consumer price index, ranged from 0.22 to 76.76 percent, with a mean of 22.12 percent. Private consumption expenditure, which comprises the value of household expenditures on consumption goods or services plus social transfers in kind, averaged 4847716 and varied from 42858.69 to 18859553.

Table 1

Descriptive Statistics

	SP	**BDEP**	**MS**	**INTR**	**VOT**	**INFL**	**PCE**
Mean	11268.96	-148698.0	11077201	19.34269	580652.1	22.11667	4847716
Median	5672.700	-65158.00	268622.9	18.29000	78089.00	13.67000	2124271
Maximum	57990.20	32049.40	5177901	36.09000	3535631	46.76000	18859553
Minimum	100.0000	-1105440	12497.10	9.250000	17444.00	0.220000	6151069
Std. Dev.	14067.70	253282.9	1613874	5.680231	913918.5	20.63209	1.142695
Observation	27	27	27	27	27	27	27

Source: Author's Computation

From the correlation matrix in Table 2, stock prices show a positive correlation with broad Money Supply (76 percent), volume of transaction (87 percent) and private consumption expenditure (87 percent), a negative correlation with budget deficits (35 percent), interest rate (17 percent) and inflation rate (36 percent). Broad money supply shows a high positive correlation with volume of transaction (VOT) (92 percent) and private consumption expenditure (PCE) (96 percent), while private consumption expenditure shows a high negative correlation with budget deficits (BDEP) (68 percent).

Table 2

Correlation matrix

Variable	SP	BDEP	MS	INTR	VOT	INFL	PCE
SP	1.000000	-0.346361	0.756299	-0.170249	0.869377	-0.362204	0.869885
BDEP	-0.346361	1.000000	-0.728477	0.000631	-0.430581	0.230864	-0.678877
MS	0.756299	-0.728477	1.000000	-0.175928	0.916009	-0.304174	0.964427
INTR	-0.170249	0.000631	-0.175928	1.000000	-0.202357	0.473505	-0.171683
VOT	0.869377	0.430581	0.916009	-0.202357	1.00000	-0.306173	0.911552
INFL	-0.362204	0.230864	-0.304174	0.43505	-0.306173	1.000000	-0.365069
PCE	0.869885	-0.678877	0.964427	-0.171683	0.911552	-0.365069	1.000000

Source: Author's Computation

4. ANALYSIS OF RESULTS AND DISCUSSION OF FINDINGS

4.1 TESTING FOR STATIONARITY

In literature, most time series variables are non-stationary, and utilizing such non-stationary variables in the model might produce spurious results (Granger and Newbold, 1977). Accordingly, the time series data for all variables in the model are tested to determine their stationary status, within the period 1987-2010, since the first or second differenced terms of most variables will usually be stationary (Ramanathan, 1992).

To accomplish this, the Augmented Dicky-Fuller (ADF) and Phillips-Perron (PP) Tests are used. The essence of the ADF test is the null hypothesis of non-stationarity. To reject this, the ADF statistic must be more than the initial values and significant. The Phillips-Perron test is however different because it is a reliable test for serial correlation and time dependent heteroskedasticities. Table 3 presents the results of ADF and PP tests at first and second differences statistic. The asterisk (*) denotes rejection of the unit root hypothesis at the 5% level. The ADF statistics were generated with a test for a random walk against stationary AR(I) with drift and trend with maximum lag of 1, while the PP test on the other hand uses the automatic bandwidth selection technique of Newey-West.

Unit Root Tests Results

Table 3

ADF and pp Statistics

Variables	ADF	PP	Order of Integration
SP	-4.919661*	-6.625749*	1/1
BDEP	-4.208263*	-3.845145*	1/1
MS	-3.803419*	-8.053642*	1/2
INTR	-5.863464*	-6.667138*	1/1
VOT	-7.958972*	-5.553247*	1/1
INFL	-4.977311*	-5.552835*	1/1
PCE	-16.83432*	-4.814405*	2/1

Note: * Significant at the 5 percent level

Source: Author's Computation

4.2 TESTING FOR CO-INTEGRATION

This test seeks to detect the number of co-integrating vectors in non-stationary time series. In other words, it is test for the existence of long-run equilibrium relationship between the variables in the model, as this is very important for the purpose of policy-making. This paper uses the methodology developed by Johansen (1988) and Johansen and Juselius (1990). Following the approach by Johansen and Juselius (1990), two likelihood ratio test statistics, the maximum eigenvalue and trace tests were utilized to determine the number of cointegrating vectors. The cointegrating tests were performed allowing for the absence of linear trends. The cointegrating tests include stock prices (SP), fiscal deficit (BDEP), money supply (MS), Interest Rate (INTR), volume of transaction (VOT), inflation rate (INFL) and private Consumption expenditure (PCE).

Table 4

Johansen Co-integration Test Results
Co-integrating Vector
SP, BDEP, MS, INTR, VOT, INFL, PCE

Null hypothesis	Trace-statistic	Max. eigen-statistic
r = 0	311.2714*	88.8131*
r ≤ 1	222.4583*	86.3528*
r ≤ 2	136.1055*	58.0498*
r ≤ 3	78.0556*	49.0334*
r ≤ 4	29.0222*	19.1832*
r ≤ 5	9.8398	9.1263
r ≤ 6	0.7126	0.7126

Note: * Rejected at the 5 percent level. Both tests indicate 5 co integrating equations at 5% significance level.
Source: Author's Computation

4.3 THE ERROR-CORRECTION MODEL

In a bid to capture the short-run deviations that might have occurred in estimating the long-run co-integrating equation, we formulate a dynamic error correction model. In this respect, we estimate the ECM with respect to the dependent variables, SP, using the Ordinary Least Squares. Essentially, the error correction term shows the speed of convergence to equilibrium once the equation is shocked. Hence, the dynamic error correction formulation is given as:

$$\Delta SP_t = \alpha_0 + \alpha_{1i}\sum_{i=0}^{1}\Delta SP_{t-1} + \alpha_{2i}\sum_{i=0}^{1}\Delta BDEF_{t-i} + \alpha\sum_{i=0}^{1}\Delta MS_{t-1} + \alpha_{4i}\sum_{t=0}^{1}\Delta INTR_{t-1} +$$

$$\alpha_{5i}\sum_{t=0}^{1}\Delta VOT_{t-1} + \alpha_{6i}\sum_{i=0}^{1}\Delta INFL_{t-1} + \alpha_{7i}\sum_{t=0}^{1}PCE_{t-1} + \alpha_{8i}ECM_{t-1} \ldots\ldots\ldots\ldots (2)$$

Where ECM is the error correction term and 'Δ' represents first difference. Since all the variables in the equation are stationary, estimating the equation by ordinary Least Squares (OLS), gives consistent estimates. We therefore utilize OLS method, and the model is tested for stability.

Table 5

The parsimonious Error Correction Model
Dependent variable: D(SP)
Sample (Adjusted): 1985: 2010
Included Observations: 26 after adjustments

Variable	Coefficient	Std. Error	t-statistic	Prob.
DBDEP	-0.019240**	0.06082	-3.163243	0.0054
DINTR	-176.1903*	120.3283	-1.464247	0.1604
DVOT	0.022508**	0.002615	8.607170	0.0000
DINFL	12.12357*	32.68749	0.371505	0.7146
DMS	-0.020890**	0.002287	-9.135023	0.0000
DPCE	0.003774**	0.000610	6.186296	0.0000
C	-2.086971	787.7853	-0.002649	0.9979
ECM(-1)	-1.238423**	0.256361	-4.830778	0.0001
R-Squared				0.890881
Adjusted R-squared		0.848446		
F-Statistic			20.99392	
Akaike info. Criterion		19.18339		
Schwarz Criterion			19.57050	
Durbin-Watson statistic			1.908802	
Notes: ** Significant at 1 percent				
*Not significant at 5 percent				
Source: Author's Computation				

The results of the parsimonious model are reported in Table 5. The parameters estimates along with the standard errors, t-values and the corresponding critical values are given in the table.

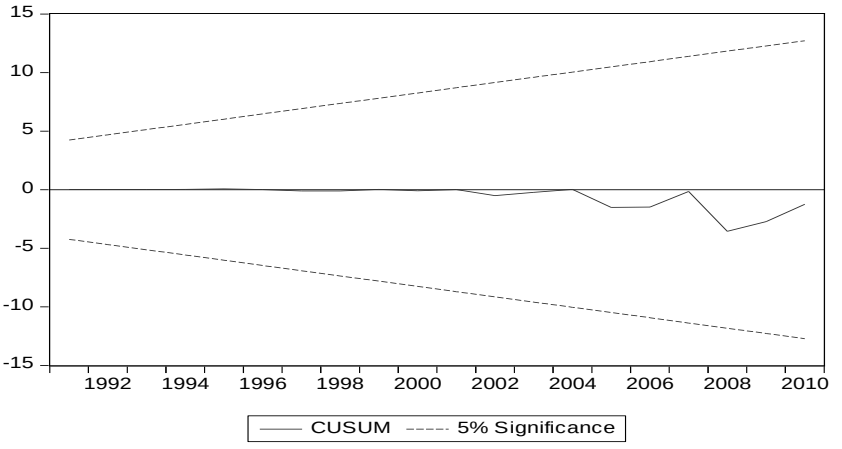
The parameters of all the variables in Table 5 are significant at 1 percent, excepting those of INTR and INFL.

One remarkable feature to notice is the coefficient of the parameter of the error correction term. The coefficient of the error-correction term carries the correct sign and it is statistically significant at 1 percent. Furthermore, the $\overline{R}^2$ value of 0.848 suggests that about 85 percent of the systematic variations in the explained variable (stock prices) can be ascribed to the explanatory variables. This result affirms that at least 15 percent of the changes in stock prices are attributable to factors not included in the model. This is quite revealing and informative.

4.4 PARAMETER STABILITY TEST AND IMPULSE RESPONSE ANALYSIS

In this sub-section, we test for stability properties of the short-run model of stock prices using the Cumulative Sum of the residuals (CUSUM) and the Cumulative Sum of Squares (CUSUM squares). The results from the two tests are provided in figures 1a and 1b. The existence of parameter instability is established if the Cusum of the residuals and the Cusum squares of the residuals go outside the bands represented by the two critical (dotted) lines. From the graphs presented in figure 1, only Cusum (1a) remains within the 5 percent critical line, indicating parameter stability throughout the sample period of study. For the CUSUM squares, fig (Ib), parameter instability is established between 1996 and 2008.

A



B

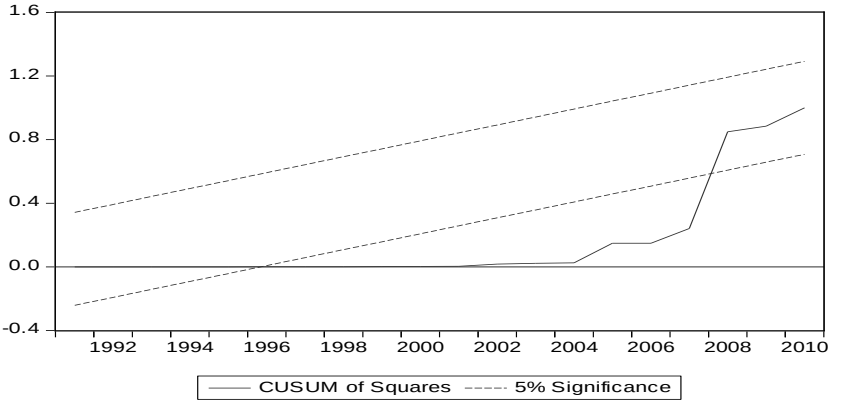


Figure 1: Stability Tests Using CUSUM and CUSUM SQ of Residuals

In our bid to further examine the short-run dynamic properties of stock prices, our result thus far is further supplemented by the forecast error variance decompositions (FEVD) and the impulse response (IR) analysis. Essentially, FEVD provides the proportion of the movements in the dependent variables that are due to their 'own' shocks, versus shocks to the other variables.

Table 6 provides the estimates. From the table, it shows that the forecast error variance of stock prices by own innovations (i.e. stock prices) in the first year are about 100 percent. The innovations of budget deficit, money supply, interest rates, volume of transaction, inflation and private consumption expenditure in this period was zero percent, an indication that the shocks of these other variables were insignificant on stock prices. Own shock variations ranged from 21.5 percent to 100 percent. The innovations of budget deficits which accounts for the forecast error variance of stock prices, ranged from zero to 6.9 percent over the ten-year period, while the innovations of money supply, interest rate, volume of transaction, inflation and private consumption expenditure ranged from 0 - 63.1%, 0 – 0.65%, 0 -2.66%, 0-3.62% and 0-14.3%, respectively.

The salient feature of the variance decompositions results, in this study, is that, the predominant sources of stock price fluctuations are due largely to own shocks, and to a lesser degree, to other variables.

Table 6
Variance Decomposition of Stock prices (SP)

Period	S.E.	SP	BDEP	MS	INTR	VOT	INFL	PCE
1	3250.554	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	5110.513	46.33075	5.559700	28.23709	0.362569	1.603208	3.615898	14.29079
3	9599.035	21.45279	5.774981	63.05819	0.401705	2.656937	1.025406	5.629988
4	16156.15	47.43552	2.330240	43.11756	0.144943	1.127280	0.930263	4.914190
5	44192.50	71.82942	1.085290	16.56940	0.111790	0.415760	1.883478	8.104860
6	92329.20	23.52349	6.864758	57.99680	0.654416	0.103779	1.631205	9.225554
7	187258.5	23.21556	4.673049	61.83607	0.299253	0.247535	1.238520	8.490016
8	437102.9	40.62922	3.046219	45.12705	0.221019	0.050676	1.598278	9.327542
9	1018088.	35.92784	4.024853	48.37360	0.332981	0.011591	1.730117	9.599022
10	2316077.	30.26569	4.439570	53.90466	0.317801	0.029756	1.591455	9.451073

The impulse response functions, on the other hand, help to trace out the responsiveness of the dependent variables in the VAR to shocks to each of the variables. Table 7 presents the estimates from the impulse response function of stock prices as against its "own shocks" and the shocks of budget deficits, money supply, interest rate, volume of transaction, inflation and private consumption expenditure over the time period. The result shows that stock prices had a negative relationship with its past on the long-run, though the 1st, 5th, 7th and 9th periods were positive. In its response to the shocks of budget deficits, it was observed that there was a negative relationship on the long run with the 3rd, 5th, 7th and 9th periods being negative.

Also, in its response to the shocks of private consumption expenditure, stock prices did not respond in the first period, just like the case of the other

variables, but there was a long run positive relationship between them, with just the 3rd, 5th, 7th and 9th periods being negative.

Table 7

Impulse Response of stock prices to one S.E. Shock in its Expanatory Variables

Period	Response of SP: SP	BDEP	MS	INTR	VOT	INFL	PCE
1	3250.554	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	(459.698)	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
2	-1238.652	-1205.009	2715.654	307.7230	-647.0822	971.7904	1931.936
	(1333.97)	(1062.31)	(1102.00)	(994.685)	(540.266)	(678.209)	(574.575)
3	-2768.854	1967.004	-7122.357	-524.8267	-1424.579	-21.14359	-1206.307
	(2301.19)	(2062.21)	(2160.75)	(1403.08)	(563.029)	(941.770)	(1008.44)
4	-10200.49	-872.5079	7378.569	-90.53059	703.0656	1217.933	2763.970
	(3894.63)	(3135.58)	(4366.54)	(2575.92)	(1161.12)	(1839.05)	(1943.87)
5	35763.04	3887.549	-14527.58	-1343.467	2275.359	-5861.374	-12060.64
	(14010.4)	(6091.58)	(10421.5)	(4969.87)	(3154.18)	(3962.65)	(5218.69)
6	-24545.68	-23748.75	67973.86	7321.450	852.7297	10112.92	25063.18
	(32703.8)	(21224.3)	(33483.6)	(13171.9)	(6905.63)	(11111.1)	(16954.0)
7	78328.81	32456.75	-129380.2	-7010.589	-8829.099	-17182.58	-46804.24
	(68169.3)	(45722.1)	(87744.3)	(26614.4)	(14049.2)	(23195.0)	(38390.4)
8	-263600.2	-64664.02	254039.4	17814.06	3165.550	51179.65	121836.0
	(182535.)	(96685.1)	(209562.)	(55822.5)	(32300.6)	(53347.3)	(93440.3)
9	542924.8	189466.7	-644340.4	-55037.13	-4828.994	-121979.8	-285785.0
	(493349.)	(238907.)	(531429.)	(133496.)	(75631.4)	(135561.)	(250280.)
10	-1118536.	-443204.5	1546016.	116602.6	38419.26	259685.0	638342.8
	(1160716)	(603487.)	(1398550)	(311471.)	(168907.)	(330803.)	(633970.)

5. SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

The issue of whether fiscal deficits affects stock prices and how this happens have important implications for policy-makers and of course, should be subject to relevant empirical studies. Consequently, in this study, the role of fiscal deficits in the determination of stock prices in Nigeria was examined using vector auto regression and error-correction mechanism (ECM) technique with annual time series data spanning 1984 – 2010. Results from the error correction model reveals that, budget deficits, money supply and interest rate are negatively related to stock prices, and are highly significant at one percent level, with the exception of interest rate. Also, the coefficient of the error correction term is negative, significant at one percent level, which is appropriate.

The results of variance decomposition and impulse response functions show that the predominant sources of fluctuations in stock prices are due largely to own shocks and to a lesser extent, to other variables under consideration.

In the light of the foregoing, we make the following recommendations:

First, since fiscal deficits spending can have multiplier effect by way of increase in stock prices, the government should place greater premium on the

implementation of fiscal stimulus package accompanied by fiscal discipline. Such measures should be complemented by emphasizing greater transparency and accountability, simplification of administrative procedures and merit-based human resources management in public administration aimed at curbing unnecessary extra budgetary government expense and fiscal indiscipline.

Second, monetary financing of government deficits, which is usually done through the Central Bank, should be de-emphasized since it not only accentuates the problem of inflation in the economy, but also deepens stock prices as well. Third, realistic limits on debt service payments should be enforced to allow for internal development. This would ensure that debt service payments do not crowd out resources which could ultimately stunt the growth of the economy. Lastly, there is the need for a more vigorous awareness campaign to help sensitize more indigenous and foreign companies to list and quote in the stock exchange market as well as introducing to the market new securities such as derivatives and mortgage-backed securities.

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FISKALNI DEFICITI I CIJENE DIONICA U NIGERIJI: EMPIRIJSKI DOKAZI

Sažetak

U radu se istražuju utjecaji fiskalnih deficita na cijene dionica u Nigeriji koristeći tehnike vektorske auto-regresije i mehanizam korekcije odstupanja (ECM) uz godišnji niz podataka u razdoblju 1984-2010. Rezultati pokazuju, između ostalog, da se fiskalni deficit negativno odražava na cijene dionica. Stoga, kako bi se zadržala snažna burza dionica, od vlasti se očekuje da smanje monetarno financiranje fiskalnog deficita u korist financiranja dionica jer fiskalni deficit, ne samo da potiče probleme inflacije u gospodarstvu, već i smanjuje cijene dionica. Takvi napori trebali bi biti popraćeni intenzivnijim informativnim kampanjama kako bi se senzibilizirali i privukli investitori na burzu dionica.

Ključne riječi: dionice, fiskalni deficit, Nigerija

JEl klasifikacija: H62, H68, G10