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Fiscal Discipline, Financial Development & Economic Growth in Nigeria

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Abstract

Fiscal discipline is very vital to the development and growth of all the countries of the world. The literature, nonetheless, stresses that developing nations such as Nigeria are mostly prone to challenges emanating from fiscal indiscipline. The current study therefore empirically investigates the effects of fiscal discipline in the form of policy uncertainty, corruption, budgeting reforms, fiscal policy sustainability and crowding-out on financial development and economic growth using the ARDL bounds testing approach for the case of Nigeria in the 1980-2017 period. The study shows that policy uncertainty, corruption and fiscal deficits have significant negative relationship with financial development and economic growth both in the short and long-run. Higher levels of uncertainty, corruption and fiscal deficits will lead to reduced levels of financial development and economic growth. In other words, fiscal policy crowds out financial development. Also, debts have significant negative relationship with financial development and economic growth in the long run, meaning that non-sustainable fiscal policy have damaging effects on financial development and economic growth in the long run. However, budget reforms have significant positive relationship with financial development and economic growth in the long run. Further, financial development has significant positive relationship with economic growth in the short- and the long-run, meaning that financial development in itself is important for economic growth.

JEL Classification: E22, G21, H50, H62, P35, P43, E62

Keywords: Fiscal discipline; non-sustainable fiscal policy; financial development; policy uncertainty, corruption, budgeting reforms, crowding-out effects, economic growth

1. Introduction

Most observers and economists place poor fiscal discipline at the core of the low levels of financial development and economic growth in developing countries. Some of the characteristics of poor fiscal discipline in these countries are policy uncertainty, corruption, poor budgeting, non-sustainable fiscal policy and the crowding-out effects of fiscal policy. As suggested by the literature, increasing levels of policy uncertainty, corruption, poor budgeting, non-sustainable fiscal policy and crowding-out can have substantial adverse implications for financial development and economic growth in these countries (Alli, 2001; Ciocchini, Durbin and Ng, 2003; Adam and Bevan, 2005; Romp and De Haan, 2007; Ahlin and Pang, 2008; Romero-Avila and Strauch, 2008; Everhart, Vazquez and McNab, 2009; Barbier, 2010; Furceri and Sousa, 2011; Wenquan, 2011; Alenoghena and Evans, 2015).

The current study empirically investigates the effects of fiscal discipline in the form of policy uncertainty, corruption, budgeting reforms, fiscal policy sustainability and crowding-out effects on financial development and economic growth using the case of Nigeria. Nigeria is a particularly interesting case to study in the light of the extent of fiscal indiscipline in terms of corruption, poor budgeting, non-sustainable fiscal policy and policy uncertainty, and, perhaps more interestingly, the consequences for financial development and economic growth (see Obadan and Edo, 2008; Ojong, Owui and Effiong, 2012; Olaiyiwola and Osabuohien, 2010; Uduah, 2010; Brimah, Bolaji and Ibikunle, 2013; Jimmy, 2014; Oyadiran and Success, 2015). Policy analysts and the media have all claimed that one of the factors inhibiting Nigeria's economic growth and development over the years is the lack of transparency, accountability and fiscal discipline in day-to-day governance. It has been argued that the country cannot attain meaningful development if drastic measures are not employed to reposition the national economy through appropriate and translucent budgeting reforms. An important question therefore is "Do such sentiments actually reflect the reality of the relationship between policy uncertainty, corruption, poor budgeting, non-sustainable fiscal policy, crowding-out, financial development and economic growth, especially in a developing country such as Nigeria?"

It is important to note that budgeting is at the core of economic and public sector reform programs in most countries around the world. With the challenges of budgeting crises and non-sustainable

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fiscal policy, and the growing pressures for enhanced service delivery, the need for improved budget processes has become critical in Nigeria. This led to the enactment of the Fiscal Responsibility Act and the Medium Term Expenditure Framework. The Fiscal Responsibility Act and the Medium Term Expenditure Framework serve to protect against financial profligacy and reckless spending by the government. Fiscal profligacy at different levels of government is a major contributor to corruption and unsustainable fiscal policy. Although different levels of government have adopted the Fiscal Responsibility Act, the effort has not been matched with concrete reforms that can enhance fiscal discipline and stem the tide of corruption.

In the literature, various studies have disparately and singly examined the effects of policy uncertainty, corruption, budgeting reforms, non-sustainable fiscal policy and the crowding-out effects on financial development and economic growth (Alli, 2001; Adam and Bevan, 2005; Ahlin and Pang, 2008; Furceri and Sousa, 2011; Alenoghena and Evans, 2015). However, there are some inconsistencies and gaps in the literature, which merit further investigation. First, the literature is not clear about how policy uncertainty, corruption, budgeting reforms, non-sustainable fiscal policy and crowding-out influence financial development and economic growth. The lack of a systematic explanation is evident also from the existing inconclusive empirical findings. A rigorous analysis of this nature is therefore important for a number of reasons. First, gaining insights into this issue will shine light on the controversial empirical results in the literature. Second, this is important because ascertaining how these factors influence the financial development and economic growth will aid the assessment of the growth effects of financial development more accurately.

The rest of the paper is organized as follow. Section two describes the theory and existing literature. Section three describes the framework for fiscal discipline, financial development and economic growth. Section four describes the data and the empirical methodology. Section five discusses the results while section six dwells on the implications. Section seven concludes with the main findings.

2. Theory & Literature

Theories of government intervention in the economy highlights three contrasting viewpoints. The neoclassical theory argues against government intervention because of the crowding out effects (Voss, 2002; Ganelli, 2003). The Keynesian theory argues for government intervention because of the complementary effects (Baldacci, Hillman and Kojo, 2004). The Ricardian equivalence theorem argues that budget deficits are not relevant in financial decisions without any crowding out or crowding in effects (Barro, 1978; Ghatak and Ghatak, 1996). The different perspectives have underpinned government interventions in the economy in the past few decades. However, government interventions in the economy have unintended ramifications such as fiscal indiscipline which surfaces in various forms of policy uncertainty, corruption, poor budgeting, non-sustainable fiscal policy and the crowding-out effects.

For example, policy uncertainty is an integral part of decision making which has strong implications for financial development and economic growth (See Lensink, 2000; Fatima and Waheed, 2011; Farooq and Yasmin, 2017). Fiscal policy effects are intensified in the presence of uncertainties and gets reflected in lower economic growth. Policy uncertainty worsens fiscal policy in terms of budget uncertainty as uncertain budget imposes restrictions for subsequent fiscal years. Alli (2001) showed that the effect of political instability on economic growth is not yet conclusive and that the most of the commonly used proxies for political instability have failed to explain growth differences across countries. The author showed that almost all policy uncertainty variables have significantly negative correlation with economic growth. Kumar and Ter-Minassian (2007) explored the role of discretion in fiscal policy, and the extent, consequences, and causes of procyclicality, and further examined how institutional approaches such as fiscal rules, fiscal responsibility laws, and fiscal agencies help to improve fiscal discipline. The authors showed that a strategy combining fiscal rules, fiscal responsibility laws, and fiscal agencies is likely to be particularly beneficial in bolstering political commitment by emphasizing the restraints on government.

Bolgorian (2011) focused on the role of stock market development on corruption. The author showed that there exists a power-law dependence between corruption and stock market development. He also observed a negative relation between corruption and financial development. Ciocchini et al (2003) showed that countries that are perceived as more corrupt pay a higher risk

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premium when issuing bonds. The global bond market ascribes a significant cost to corruption and this is true even after controlling for macroeconomic effects correlated with corruption. Everhart, et al (2009) found that the effect of corruption on the accumulation of private capital is significantly more detrimental than what has been previously found in the literature. They showed that the impact of corruption on governance is unambiguously negative, which further daunts economic growth. Alenoghena and Evans (2015) investigated the impact of corruption on key sectors of the Nigerian economy and found that corruption affects almost all sectors of the economy.

Barbier (2010) modeled how the supply and demand for bribes influences resource use by an economy, and the reinvestment of resource rents in other assets. The author found that corruption rather than resource dependency affects negatively the ability to reinvest resource rents in the short term in Africa. He found that corruption influences long-run growth in adjusted net savings rates in all countries, and is also the “pathway” through which this growth is affected by patterns of resource use, trade and abundance. Ahlin and Pang (2008) developed a simple model in which low corruption and financial development both aid the undertaking of productive projects, but act as substitutes in doing so. The substitutability arises because “corruption raises the need for liquidity and thus makes financial improvements more potent; conversely, financial underdevelopment makes increased corruption more onerous and thus raises the gains from reducing it” (p. 414).

Adam and Bevan (2005) examined the relationship between fiscal deficits and growth for a panel of 45 developing countries and found evidence of a threshold effect at a level of the deficit around 1.5% of GDP. “While there appears to be a growth payoff to reducing deficits to this level, this effect disappears or reverses itself for further fiscal contraction. The magnitude of this payoff, but not its general character, necessarily depends on how changes in the deficit are financed (through changes in borrowing or seigniorage) and on how the change in the deficit is accommodated elsewhere in the budget” (p. 571). Hauner (2006) found empirical evidence that too much public sector borrowing harms financial deepening, and these effects add to the costs of fiscal prolificacy. Gupta, Clements, Baldacci and Mulas-Granados (2005) found that strong budgetary positions are generally associated with higher economic growth in both the short and long-run. They also showed that the composition of public outlays also matters: “countries where spending is concentrated on wages tend to have lower growth, while those that allocate higher shares to capital

and nonwage goods and services enjoy faster output expansion” (p. 441). Romero-Avila and Strauch (2008) found that government size measured with either total expenditure/revenue shares, government consumption or direct taxation negatively affect growth rates of GDP per capita. Wenquan (2011) showed that financial development driven by governments’ expanding expenditure may contribute little to sustainable economic growth, as this kind of financial development is as a result of enhancing capital accumulation rather than improving capital efficiency.

A stream of the literature examines crowding out effects. For example, Furceri and Sousa (2011) showed that government spending produces important crowding-out effects, by negatively affecting both private consumption and investment. Cumming and MacIntosh (2006) analyzed whether tax advantages crowd out or displace venture capital funds. Their finding is highly consistent with crowding out. crowding-in. Brender and Drazen (2008) investigated whether good economic conditions and expansionary fiscal policy help incumbents get reelected in a democracy. They found no evidence that deficits help reelection, independent of level of democracy, or government or electoral system. Romp and De Haan (2007) provided an overview of both theoretical and empirical literature on the relationship between public investment (capital) and economic growth. They found that, although not all studies find a growth-enhancing effect of public capital, there is now more consensus than in the past that public capital promotes economic growth. Dumitru and Stanca (2010) studied the structural budget deficit in Romania during 2000-2009 and evaluated the role of fiscal policy during the business cycle. They showed that fiscal policy in Romania was highly procyclical, thus worsening the economic cycle.

Since the contribution of Schumpeter (1934), the relationship between financial development and economic growth has been analyzed at great extents, however, still with mixed results regarding causal direction (e.g., Samargandi, Fidrmuc and Ghosh, 2015; Asteriou and Spanos, 2018; Fetai, 2018; Khan, Ahmed and Bibi, 2018; Madsen, Islam and Doucouliagos, 2018; Pan and Mishra, 2018). For example, Fetai (2018) showed a positive relationship between financial development and real GDP per capita growth, thus supporting the hypothesis that finance leads economic growth. Samargandi et al (2015) studied the relationship between financial development and economic growth in a panel of 52 middle-income countries. They showed that there is an inverted U-shaped relationship between finance and growth in the long run. In the short run, the relationship is insignificant. Ayadi, Arbak, Naceur and De Groen (2015) examined the

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relationship between financial development and economic growth across the Mediterranean. They showed that credit to the private sector and bank deposits are negatively associated with growth. Stock market size and liquidity play a role in growth, especially when accounting for the quality of institutions. Valickova, Havranek and Horvath (2015) analyzed 1334 estimates from 67 studies that examined the effect of financial development on economic growth. They showed that the studies imply a positive and statistically significant effect, but individual estimates vary a lot. While the effect seems to be weaker in poor countries, the effect decreases worldwide after the 1980s. Their results suggest that stock markets support faster economic growth than other financial intermediaries.

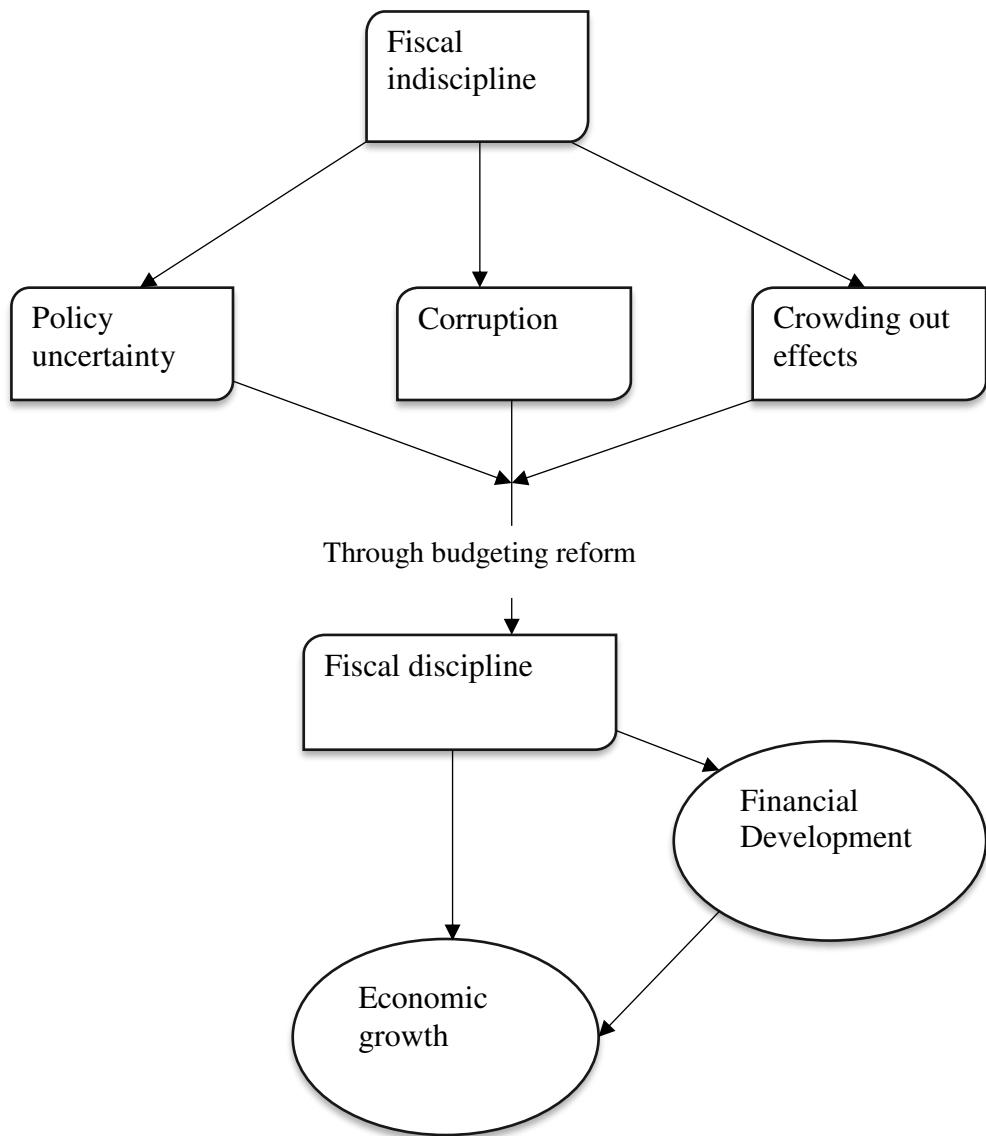
Overall, the existing literature is mostly limited to the determination of the effects of economic uncertainty and fiscal policy on financial development and economic growth. The empirical determination of the potential effects of policy uncertainty, corruption, budgeting, fiscal policy sustainability and crowding-out for financial development and economic growth is a neglected issue. While policy uncertainty, corruption, budgeting, fiscal policy sustainability and crowding-out is expected to have huge impacts on financial development and economic growth, existing studies in the literature have explored various determinants of financial development and economic growth, to the disregard of the importance of these factors. This study fills that gap in the literature. Hence, this study attempts to show empirically the effects of fiscal discipline in the form of policy uncertainty, corruption, budgeting, fiscal policy sustainability and crowding-out on financial development and economic growth.

3. Framework of Fiscal Discipline, Financial Development and Economic Growth

One of the key contributions of this study is in terms of the role of fiscal discipline in financial development and economic growth. As depicted in Figure 1, fiscal discipline and budgeting reforms is crucial to reduce vulnerabilities (e.g., corruption, non-sustainable fiscal policy and crowding out), improve and sustain financial development, as well as increase and maintain economic growth. As reported in studies like Kumar and Ter-Minassian (2007), fiscal discipline is important in an economy. Fiscal indiscipline could manifest in form of non-sustainable fiscal policy, corruption, policy uncertainty, and crowding-out. In the literature, increasing levels of non-sustainable fiscal policy, corruption, policy uncertainty, and crowding-out can have severe

consequences for financial development and economic growth (Alli, 2001; Romp and De Haan, 2007; Romero-Avila and Strauch, 2008; Furceri and Sousa, 2011; Alenoghenya and Evans, 2015).

Figure 1. Framework of Fiscal Discipline, Financial Development and Economic Growth



Source: Author's own

Among other factors, policy uncertainty, non-sustainable fiscal policy, corruption, policy uncertainty, and crowding-out are integral parts of fiscal policy decision making which have strong implications for financial development and economic growth (See Lensink, 2000; Fatima and Waheed, 2011; Romero-Avila and Strauch, 2008; Furceri and Sousa, 2011; Alenoghenya and Evans, 2015; Farooq and Yasmin, 2017). For example, it is well argued in the literature that fiscal

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policy effects are intensified in the presence of uncertainties and gets reflected in lower economic growth. Policy uncertainty worsens fiscal policy in terms of budget uncertainty. For example, Alli (2001) showed that policy uncertainty has significantly negative correlation with economic growth.

Corruption is harmful for financial development and economic growth. Ciocchini et al (2003) showed that countries that are perceived as more corrupt pay a higher risk premium when issuing bonds; the global bond market ascribes a significant cost to corruption. Alenoghena and Evans (2015) found that corruption affects almost all sectors of the economy. Barbier (2010) found that corruption influences long-run growth in adjusted net savings rates in all countries. Hauner (2006) found empirical evidence that excessive public sector borrowing harms financial deepening.

In line with the neoclassical theory which argues against government intervention because of the crowding out effects (Voss, 2002; Ganelli, 2003), fiscal deficits are detrimental for financial development and economic growth. Adam and Bevan (2005) found evidence of a threshold effect at a level of deficit around 1.5% of GDP. Gupta et al (2005) found that budgetary positions are positively associated with economic growth in the short and long-run. Wenquan (2011) showed that financial development driven by governments' expanding expenditure may contribute little to sustainable economic growth. Furceri and Sousa (2011) showed that government spending produces significant crowding-out effects. Caballero and Krishnamurthy (2004) showed that crowding out is larger in developing countries than in developed economies.

While policy uncertainty, non-sustainable fiscal policy, corruption, policy uncertainty, and crowding-out can have detrimental effects, budget reform can reverse the trend and bring about fiscal discipline with many potential benefits for financial development and economic growth. Reforms can reduce wasteful expenses, lessen government deficit, and potentially result in funding for beneficial programs and help stimulate economic activity. Financial development in itself is an important factor for growth. Meta-analytic studies such as Valickova et al (2015) have shown a positive and statistically significant effect of financial development on economic growth though the effect seems to be weaker in poor countries.

To this end, it makes sense to report that fiscal discipline and budgeting reforms are essential to reduce corruption, non-sustainable fiscal policy and crowding out, and to improve financial development and economic growth. Moreover, financial development is important for economic growth.

4. Data & Methodology

4.1. Model

Consistent with the theory and the empirical literature, the empirical specification of the relationship between policy uncertainty, corruption, budget reform, fiscal policy sustainability, crowding-out, financial development and economic growth may be expressed as:

$$Fd_t = \rho_0 + \rho_1 Fd_{t-1} + \rho_2 Pu_t + \rho_3 Co_t + \rho_5 Db_t + \rho_6 Fdc_t + \rho_7 Fra_t + \rho_8 Mtef_t + \rho_9 Gef_t + \varphi_t \quad (1)$$

$$Gr_t = \tau_0 + \tau_1 Gr_{t-1} + \tau_2 Fd_t + \tau_3 Pu_t + \tau_4 Co_t + \tau_5 Db_t + \tau_6 Fdc_t + \tau_7 Fra_t + \tau_8 Mtef_t + \tau_9 Gef_t + \tau_{10} Lb_t + \tau_{11} Cap_t + \epsilon_t \quad (2)$$

Where Fd is financial development; Gr is the growth of real GDP per capita, Pu is policy uncertainty; Co is corruption; Db is debt to GDP ratio; Fdc is fiscal deficits; Fra is the dummy for the Fiscal Responsibility Act (2004-2017); $Mtef$ is the dummy for the Medium Term Expenditure Framework (2004-2017); Gef is government effectiveness; Lb is labour and Cap is capital.

Identification and proxies of the variables are based on the existing literature. In line with the literature (e.g., Dogan and Turkekul, 2016; Adeola and Evans, 2017; Shahbaz, Bhattacharya and Mahalik, 2018), credit to private sector (% of GDP) and stocks traded (% of GDP) are combined to form a robust index of financial development through principal component analysis. The

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government enact different policies concerning budget balance, economic growth, external debt, domestic investment, oil price, inflation, interest rate and current account balance. In this study, the conditional variances (estimated from GARCH) of budget balance, economic growth, external debt, domestic investment, oil price, inflation, interest rate and current account balance were combined to form a composite index of policy uncertainty through principal component analysis.

The proxy for crowding out effects is fiscal deficits. The key budgetary reforms variables are the Fiscal Responsibility Act and the Medium Term Expenditure Framework (Egbide, Sola and Francis, 2014). As well, the main sustainability variable is the total debt to GDP ratio (Méndez-Marcano, and Pineda, 2014). One of the key institutional variables is government effectiveness. It measures quality of bureaucracy, institutional effectiveness, and excessive bureaucracy. Since theories of growth (e.g., the Solow growth model) point to capital and labour as determinants of growth, we also include capital formation and labour force in the second model. In line with the literature, the proxy for labour is secondary school enrollment (i.e., skilled labour) and for capital is gross capital formation as a share of GDP (see Noorbakhsh, Paloni and Youssef, 2001; Ebenstein, Harrison, McMillan and Phillips, 2014; Carstensen and Toubal, 2004; Wang, 2009)

4.2. Method

As developed by Pesaran and Shin (1999) and Pesaran, Shin and Smith (2001), the ARDL bounds testing approach of cointegration has numerous advantages: “(i) It is efficient estimator even if samples are small and some of the regressors are endogenous, (ii) it allows that the variables may have different optimal lags, and (iii) it employs a single reduced form equation and thus it has less loss in degree of freedom, (iv) no need for all the variables in the system be of equal order of integration, therefore it does not require the pre-testing of the variables, included in the model, for stationary analysis” (Acaravci, Erdogan and Akalin, 2015). However, the ARDL bounds testing approach of cointegration methodology has critical bounds provided by Pesaran et al. (2001) and Narayan (2005) which are computed on the basis that the variables are I(0) or I(1). It is therefore necessary to test for unit root so as to satisfy the underlying assumptions before proceeding to estimation. The second step is to investigate the existence of long-run relationship among all variables in the equation. The final step is the ARDL model estimation.

4.3. Data

This study employs annual data between 1980 and 2017. The data are collected from the world development indicators (WDI) online database of the World Bank, except corruption and government effectiveness which are sourced from the Economic Intelligence Unit. Eviews 9 is used for estimation.

5. Empirical Results

Considerable evidence exists in the literature that time series data are often non-stationary (see Nelson and Plosser, 1982, Chatfield, 2016). To test for stationarity therefore, this study uses the Elliott, Rothenberg and Stock Point Optimal unit root test (ERS). As shown in Table 1, the ERS test show that some variables are stationary at I(0) and some at I(1), implying that the variables are a mix of $I(0)$ and $I(1)$ and suitable for the ARDL approach. Moreover, the bounds F-test for cointegration test suggests evidence of a long-run relationship (Table 2).

Table 1. Elliott-Rothenberg-Stock Unit Root Test

	I(0)	I(1)
Fd	7.32	2.09**
Gr	34.11	2.85**
Pu	88.45	2.43**
Db	9.88	0.87*
Co	8.07	0.44*
Fdc	11.78	1.56*
Fra	7.81	1.84*
$Mtef$	3.32***	2.24*
Gef	6.01	2.32**
Lb	3.71***	1.55*
Cap	5.65	2.54**
Test critical values:	1% level	1.87
	5% level	2.97
	10% level	3.91

Note: * significant at 1%; ** significant at 5%. Lag length is selected using Spectral OLS AR based on SIC, maxlag=9.

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Table 2. ARDL Bounds Test

	$Fd = f(Fd_{t-1}, Pu, Co, Db, Fdc, Fra, Mtef, Gef)$	$Gr = f(Gr_{t-1}, Fd, Pu, Co, Db, Fdc, Fra, Mtef, Gef, Lb, Cap)$
F-statistic	5.09*	4.71**
Critical Value Bounds		
Significance	I ₀ Bound	I ₁ Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52

Note: * significant at 2.5%; ** significant at 5%.

Having established that the variables are a mix of $I(0)$ and $I(1)$, and are cointegrated, the final step involves estimating the coefficients of the optimal ARDL model based on Schwarz Bayesian Information Criteria, and making inferences about the estimates (Pesaran and Pesaran, 1997). Consistent with a number of empirical studies, the results show that policy uncertainty, corruption and fiscal deficits have significant negative relationship with financial development both in the short and long-run. In other words, the higher the levels of policy uncertainty, corruption and fiscal deficits, the less financial development. Further, debts have significant negative relationship with financial development in the long-run, meaning that higher debts lead to less financial development in the long-run. The Fiscal Responsibility Act and the Medium Term Expenditure Framework have significant positive relationship with financial development in the long-run, meaning that budget reform leads to higher financial development in the long-run. The institutional variable, government effectiveness, has positive relationship with financial development in both the short- and the long-run.

Table 3. Model 1

Dependent Variable: *Financial development*

	Short run	Long run
<i>Financial Development_{t-1} (Fd_{t-1})</i>	0.92***	

	(0.49)	
<i>Policy uncertainty (Pu)</i>	-2.64*	-1.40*
	(0.55)	(0.20)
<i>Corruption (Co)</i>	-1.17*	-2.00*
	(0.57)	(0.54)
<i>Debt (Db)</i>	0.43***	-3.32*
	(0.24)	(0.18)
<i>Fiscal Deficits (Fdc)</i>	-3.14*	-1.08**
	(0.37)	(0.49)
<i>Fiscal Responsibility Act (Fra)</i>	0.18	1.63***
	(1.10)	(1.01)
<i>Medium Term Expenditure Framework (Mtef)</i>	1.25	3.00*
	(1.48)	(0.93)
<i>Government Effectiveness (Gef)</i>	0.70***	0.04***
	(0.41)	(0.02)
<i>Ect_{t-1}</i>	-0.51*	
	(0.13)	
R-squared	0.99	0.87
Breusch-Godfrey Serial Correlation LM Test	2.65***	9.73*
Heteroskedasticity Test: Breusch-Pagan-Godfrey	2.24**	1.92**

Note: * , ** and *** indicate 1%, 5% and 10% levels of significance.

The results of the estimation of the growth model is shown in Table 2. The results show that policy uncertainty, corruption and fiscal deficits have significant negative relationship with economic growth both in the short and long-run. In other words, the higher the levels of uncertainty, corruption and fiscal deficits, the less economic growth. Further, debts have significant negative relationship with economic growth in the long-run, meaning that higher debts lead to less economic growth in the long-run. The Fiscal Responsibility Act and the Medium Term Expenditure Framework also have significant positive relationship with economic growth in the long-run, meaning that the reforms lead to increased economic growth in the long-run. The institutional variable, government effectiveness, has positive relationship with economic growth. Further,

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secondary school enrollment and gross capital formation as a share of GDP have significant positive relationship with economic growth.

Table 4. Model 2

Dependent Variable: *Economic Growth*

	Short run	Long run
<i>Economic Growth_{t-1} (Gr_{t-1})</i>	2.41*** (1.34)	
<i>Financial Development (Fd)</i>	1.42* (0.37)	2.36* (0.77)
<i>Policy uncertainty (Pu)</i>	-0.92* (0.14)	-2.20* (1.07)
<i>Corruption (Co)</i>	-3.35*** (2.01)	-3.15* (1.02)
<i>Debt (Db)</i>	2.51 (0.51)	-2.44** (2.20)
<i>Fiscal Deficits (Fdc)</i>	-0.39** (1.15)	-2.00* (0.45)
<i>Fiscal Responsibility Act (Fra)</i>	1.35 (1.32)	2.57 * (0.38)
<i>Medium Term Expenditure Framework (Mtef)</i>	1.52 (2.47)	2.43*** (1.28)
<i>Government Effectiveness (Gef)</i>	1.94*** (1.07)	1.49* (0.54)
<i>Secondary school enrollment (Lb)</i>	0.94* (0.31)	0.64* (0.13)
<i>Gross capital formation as a share of GDP (Cap)</i>	0.26*** (0.16)	0.36* (0.11)
<i>Ect_{t-1}</i>	-0.10** (0.04)	

R-squared	0.98	0.88
Breusch-Godfrey Serial Correlation LM Test	9.08*	11.60*
Heteroskedasticity Test: Breusch-Pagan-Godfrey	5.83*	1.56***

Note: *, ** and *** indicate 1%, 5% and 10% levels of significance.

As a matter of principle, the speed of adjustment, Ect_{t-1} , should be between 0 and -1 for a stable error correction mechanism. All the Ect_{t-1} are within this interval, meaning that the models are well-specified, the data is adequate and, the error correction mechanism is stable. The significance of the Ect_{t-1} in all the models indicate a long-run convergence to equilibrium of the variables. The high R-squared values indicate the models are well fitted. Breusch-Godfrey LM test shows that the models are not susceptible to multicollinearity while the Breusch-Pagan-Godfrey test shows that the models are not subject to heteroskedasticity.

6. Discussion & Implications

Consistent with a number of empirical studies, the results show that policy uncertainty has a significant negative relationship with financial development and economic growth both in the short and long-run. In other words, elevated levels of uncertainty will lead to sluggish financial development and economic growth. This is comparable to Ali (2001) who found that policy uncertainty variables are significantly and negatively correlated with economic growth. Policy uncertainty casts doubts over future government policies which results in immediate decline in financial development and economic growth. One implication of this finding is that policy uncertainty retards growth in policy sensitive sectors like finance, and this sector is important enough for policy uncertainty to matter at the aggregate level. This finding is broadly consistent with theories that highlight negative macroeconomic effects of uncertainty shocks.

Consistent with studies such as Evans and Alenoghena (2015), the results show that corruption has a significant negative relationship with financial development and economic growth both in the short and long-run. In other words, higher levels of corruption will lead to reduced levels of financial development and economic growth. This finding is comparable to Bolgorian (2011) who showed that a negative relation exists between corruption and financial development, and Ciocchini et al (2003) who showed that countries that are perceived as more corrupt pay a higher risk premium when issuing bonds, meaning that the global bond market ascribes a significant cost

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to corruption. In fact, Everhart et al (2009) showed that the impact of corruption on governance is unambiguously negative, which further deters economic growth.

In line with the neoclassical theory which argues against government intervention because of the crowding out effects (Voss, 2002; Ganelli, 2003), the study has shown that fiscal deficits have a significant negative relationship with financial development in the short and the long-run, meaning that higher fiscal deficits lead to reduced financial development. In other words, fiscal policy crowds out financial development in the short and the long-run. Consistent with studies such as Wenquan (2011), fiscal deficits have a significant negative relationship with economic growth in the short and the long-run, meaning that higher fiscal deficits lead to reduced economic growth. This finding is also comparable to Hauner (2006) who found that too much public sector borrowing harms financial deepening. These effects add to the costs of fiscal profligacy

The study also provides some surprising findings. Debts have significant positive relationship with financial development in the short run, but it is negative in the long-run, meaning that non-sustainable fiscal policy can have positive effects on financial development in the short run but will have deleterious effects on financial development in the long run. As well, debts have significant negative relationship with economic growth in the long-run, meaning that non-sustainable fiscal policy have damaging effects on economic growth in the long run. In other words, non-sustainable fiscal policy leads to reduced levels of financial development and economic growth in the long run. This finding may be as a result of the fact that, year after year, a large chunk of the nation's budget is used to service government's daily expenditure, while a small fraction is only left to fund vital national needs.

The study shows that fiscal Responsibility Act and Medium Term Expenditure Framework have significant positive relationship with financial development and economic growth in the long-run. This suggests that the reforms have significant positive relationship with financial development and economic growth. Budget reform has many positive benefits for financial development and economic growth by reducing wasteful expenses, lessening government deficit, and thereby stimulating economic activity.

The study has also shown that the institutional variable, government effectiveness, has positive relationship with financial development and economic growth, meaning that higher government effectiveness leads to higher financial development and economic growth in the short- and the

long-run. The significant coefficients of the corruption and government effectiveness variables show that institutions are very important for financial development and economic growth both in the short- and the long-run. Stronger institutions will lead to increased financial development and economic growth (See Chinn and Ito, 2006; Ketterer and Rodríguez-Pose, 2018; Emenalo, Gagliardi and Hodgson, 2018; Law, Kutan and Naseem, 2018; Shahbaz, Bhattacharya and Mahalik, 2018).

Further, the study shows that financial development has significant positive relationship with economic growth in the short- and the long-run, meaning that increased levels of financial development leads to economic growth in the short- and the long-run. This finding is in line with Ayadi et al (2015) who showed that stock market size and liquidity play a role in growth, especially when accounting for the quality of institutions, and Fetai (2018) who showed a positive relationship between financial development and real GDP per capita growth. It is also comparable to Valickova et al (2015) who showed a positive and statistically significant effect of financial development on economic growth though the effect seems to be weaker in poor countries.

7. Concluding Remarks

This study has shown that policy uncertainty, corruption and fiscal deficits have significant negative relationship with financial development and economic growth both in the short and long-run. Higher levels of uncertainty, corruption and fiscal deficits will lead to reduced levels of financial development and economic growth. The study shows that fiscal policy crowds out financial development. Also, debts have significant negative relationship with financial development and economic growth in the long run, meaning that non-sustainable fiscal policy have damaging effects on financial development and economic growth in the long run. However, budget reforms have significant positive relationship with financial development and economic growth in the long run. Also, financial development has significant positive relationship with economic growth in the short- and the long-run, meaning that increased levels of financial development leads to economic growth in the short- and the long-run.

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7.1. *Practical Contributions*

The results of this study have important policy implications. The study has shown that increased corruption, policy uncertainty, fiscal deficits, debts and crowding out will lead to reduced levels of financial development and economic growth. These points reinforce the policy message of this paper: there are costs to fiscal indiscipline and fiscal profligacy in developing countries. Policy makers must consider these costs in weighing the pros and cons of domestic/external deficit financing, and over-budgeting and in assessing the costs and benefits of fiscal deficits.

The government needs to be aware that their expenditure and policies need to be executed out prudently, since any increase in policy uncertainty, corruption and fiscal deficits could severely impinge on financial development and growth prospects. Hence, this study suggests that the government make policies to control uncertainty, corruption, fiscal deficits and non-sustainable fiscal policy, and allocate more resources to budgeting reforms and fiscal policy sustainability to stimulate higher financial development and economic growth rates. As a federal nation, the government needs to reconcile the economic rationale for fiscal responsibility with the political demands of fiscal federalism so as to stem the tide of non-sustainable fiscal policy.

The study has also shown that reforms have positive effects on financial development and economic growth in the long run. Reforms such as the Fiscal Responsibility Act of 2007 serve to protect against financial profligacy and reckless spending by the government. In order to tap the potential benefits for financial development and economic growth, the federal government should be able to persuade all levels of government to control spending and co-ordinate macro-economic policies in line with the provisions of the Fiscal Responsibility Act. Since fiscal profligacy at different levels of government is a major contributor to corruption and unsustainable fiscal policy, significant effort must be made to implement concrete reforms that can enhance fiscal discipline and public expenditure transparency in this regard.

Reforms such as the Medium Term Expenditure Framework can be used to influence budget effectiveness in order to overcome the short-sighted planning, reckless resource allocation, and to coordinate the linkage between policy and budgeting which can lead to improved financial development and economic growth. Under the Medium Term Expenditure Framework, the government can commit to more credible budget ceilings which can produce legitimate budgetary decision making, greater budgetary predictability and greater political accountability for spending

outcomes. The Medium Term Expenditure Framework should also endeavor to make public spending more efficient and effective, essentially by allowing greater flexibility in managing budgets based upon policies and programs. It is important to discover what constitutes bottlenecks in the budget execution process. It is also worthwhile to note that the predominance of poor management and irresponsible fiscal expansion can lead to unstable fiscal environment, where all new reforms may quickly fall hostage to the large self-serving system. With the limited resources available, budget preparation and allocation should be embedded in discipline, thriftiness and accountability.

The study has also shown that institutional variables have significant relationship with financial development and economic growth. This impact should give pause to policymakers: the country requires strong institutions that will make the regulatory environment conducive for effective operation of financial development and economic growth. It is important that the task of building such strong institutions start today (i.e., in the short run) for the benefit of the long run. Reforms may not produce the desired results when institutions in the country are weak. Strengthening institutions cannot happen overnight (in the short run), therefore governments need political will and commitment. Political will on the part of the governments to embrace reforms and see them through is important because changing existing governance systems in a developing country like Nigeria can be daunting, especially when easy communication of the changes, the rationale behind them, and the planned/expected results are not noticeable. The key to overcome the weaknesses of government agencies and make the system more efficient therefore is to re-institutionalize fiscal policy sustainability, place greater premium on reducing corruption and crowding out effects, and evolve budgeting reforms that deliberately set performance benchmarks for public officers.

In sum, the government needs to be dedicated to reforms, such as to improve governance, fight corruption, adopt medium-term budgets, and take adequate steps to maintain fiscal discipline and pursue efficient budget outcomes. Efforts in these directions will lead to enhanced financial development and economic growth.

7.2. Limitations and Future Directions

This study has a number of limitations which future studies can address. The study has instigated important insights into the empirical determination of the potential effects of fiscal discipline for financial development and economic growth from a developing country perspective. The findings

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are based on a single-country analysis, meaning that the results may not be generalizable, though likely to be applicable to other developing country contexts. Future research can therefore examine the complex interfaces of policy uncertainty, corruption, budget reform, fiscal policy sustainability and crowding-out with financial development, as well as with economic growth in different country/region contexts.

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