

Economic Policy, Institutional Quality, and Bank Deposit Growth in Nigeria

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Abstract

This paper pinpoints how economic policy efficiency and quality of institution have influenced bank deposit growth in Nigeria during the period 1995-2023, after incorporating Taylor's Principle to assess the responsiveness of policy through different economic regimes. Application of a Markov switching model allows the differential impacts of periods of economic expansion and contraction to be depicted on bank deposit growth, the loan-to-deposit ratios, and liquidity ratios. The findings show that the monetary policy rate, interacting with fiscal variables of government expenditure and tax revenue, exerts regime-sensitive effects on banking resilience. Simultaneously, institutional quality variables of regulatory quality and government effectiveness were observed to be highly influential in shaping bank deposit behavior over the cycle. Other determinants of the stability of banks include economic uncertainty and financial development, the latter suggesting deposit protection during contraction. The study, therefore, facilitates priorities in adaptive policy frameworks in Nigeria by striking a proper balance between strong institutional frameworks and flexible economic policies that would ensure resilience in the banking sector across economic fluctuations.

Keywords: Economic Policy Effectiveness, Institutional Quality, Bank Deposit Growth, Markov Model, Nigeria

1. Introduction

The interrelationship between the economic policy and the quality of the institutions is important in the direction of growth within the financial sector, particularly in an emerging economy like Nigeria. Growth in bank deposits is basically one of the signals of stability in the financial sector and the health of the economy and is thus directly linked to the effectiveness of economic policies and strength in institutional frameworks (Alalade et al., 2022; Ejem et al., 2020). While good economic policy provides an enabling environment to save and invest, strong institutions provide the supporting structures for policy delivery and confidence in financial systems. In each of these ways, Nigerian conditions have often been compromised by inconsistent policy, institutional fragility, and economic volatility—things that have constituted a major drag on bank deposit growth (Obioma & Onyebueke, 2017). Since the banking sector acts as an intermediary between savers and borrowers, deposit mobilization becomes a source of finance for productive investments (Bermpei et al., 2018). In that regard, economic policies and the quality of institutions are vital in determining the growth or stagnation of deposits within the banking system.

Nigeria's banking sector has experienced significant growth in recent years, but the country's economic development remains hindered by inadequate institutional quality and ineffective economic policies. The lack of robust institutions and poor policy frameworks have contributed to a volatile business environment, discouraging investment and hindering the growth of bank deposits. Despite the importance of bank deposits in facilitating economic growth, Nigeria's bank deposit growth has been slow, averaging 21.83% percent per annum between 2021 and 2023. Furthermore, the country's economic policies have been criticized for being inconsistent, and institutional quality has been weakened by corruption, inadequate regulatory frameworks, and inefficient judicial systems. This study seeks to investigate the impact of economic policy and institutional quality on bank deposit growth in Nigeria, with a view to identifying policy recommendations that can enhance the growth of the banking sector and contribute to the country's economic development (Agu et al., 2022).

The economy of Nigeria is beset by a host of structural issues such as inflationary pressures, volatility of the exchange rate, political instability, and institutional inefficiencies in forms of corruption, bad governance, and weak regulatory frameworks (Ejem et al., 2020). These have remained potent factors that continue to undermine the efficacy of policy measures at improving financial sector performance. While the government of Nigeria has come up with a number of monetary and fiscal policies, such as banking sector reforms, exchange rate management, and an inflation-targeting framework, in efforts toward ensuring stability in finance and encouraging saving amongst its citizens, the policies have still failed to yield positive effects on bank deposit growth due to sustained policy inconsistency and weaknesses in institutional frameworks (Alalade et al., 2022). Furthermore, while the BVN system, among other regulatory efforts (such as NIN) geared towards entrenching transparency and reducing financial fraud, has been progressing, the impact they have had on bank deposit growth remains uneven due to weak mechanisms for enforcement and bottlenecks in institutions (Anthony-Orji et al., 2019). Nonetheless, there have been different studies on the relationship of macroeconomic factors with financial sector development (Alalade et al., 2022; Anthony-Orji et al., 2019; Eriemo, 2014); a limited number of studies have analyzed how effectiveness in economic policy and quality of the institutional environment together influences bank deposit growth in Nigeria.

Although various international studies (Nguyen et al., 2020; Shabir et al., 2021; Bordo et al., 2016) have focused on the impact of institutional quality and economic policy uncertainty on bank performance, most have placed more focus on uncertainty rather than effectiveness. While other

countries' research focuses on how uncertainty affects financial stability, there is little emphasis on effectiveness in policy implementation, which is very important in an environment that is suffering from institutional weaknesses such as Nigeria. Furthermore, in Nigeria, the available studies on mechanisms of monetary policy single and concerted effort by Ejem et al. (2020) and Anthony-Orji et al. (2019), and also the macroeconomic factors by Eriemo (2014) are just but a few works of authors, but none of them integrated the institutional quality and policy effectiveness as drivers of bank deposit growth. In contrast to the prevalent focus on uncertainty in global studies (Nguyen et al. 2020; Ashraf & Shen, 2019), there is a dire need for a study on the effectiveness of economic policies in Nigeria, where policy inconsistency is always an issue and an impediment to growth in the financial sector. The role that efficient economic policy can play in securing deposit growth, especially within the institutional environment of volatility, has not been addressed. This may, therefore, constitute the lacuna that should be filled in the literature; hence, this study would contribute to exiting knowledge by shifting the focus from policy uncertainty to policy effectiveness, perhaps giving more actionable insight into better improvements in bank deposit mobilization and financial stability in Nigeria.

Hence, the motivation for this study stems from the fact that deposit mobilization occupies a very critical role within the broader framework of economic development. Banks form a basic pillar of financial intermediation, and failure to mobilize deposits effectively may have spillover effects on credit creation and, consequently, investment and economic growth in general (Nguyen, 2022; Bermpei et al., 2018). It is the manner of formulation and effectiveness in implementation of economic policies, coupled with the quality of institutions governing their operations, that deposit growth is determined. Since inconsistency and frailty of policy and institutional frameworks remain persistent challenges in Nigeria (Manasseh et al., 2017), there is an imperative need for an understanding of the nature of influence these factors exert on bank deposit growth. As a result, this study seeks to objectively decipher how effectiveness in economic policy and institutional quality affect bank deposit growth in Nigeria between 1995 and 2023. The findings of this paper shall add to the more critical understanding of how policy and institutional factors influence the banking sector and give recommendations for improving the resilience of the financial sector and deposit mobilization in Nigeria's volatile economic environment.

The remainder of the paper is organized as follows: Section 2 highlights the review of relevant literature, with emphasis on the conceptual and empirical background of economic policy, institutional quality, and bank deposit growth. Section 3 provides details about the methodology, covering the theoretical framework, model specification, estimation technique, data sources, and variable definitions. Empirical results and discussions of findings are outlined in Section 4, while conclusions and policy recommendations are presented in Section 5.

2. Literature Review

Economic Policy

Economic policy is usually defined in general terms as the actions of governments that guide and regulate economic activity, furthering growth, stability, and prosperity. It encompasses fiscal policy—spending and taxation—monetary policy—interest rates and money supply controlled by the central banks—and regulatory policies, including laws and standards that govern industries (Bénassy-Quéré et al., 2018). The objective of economic policy is to achieve the highest possible level of the various macroeconomic objectives like low inflation, full employment, and sustainable growth while duly paying attention to other important issues like income inequality and environmental sustainability (Shabir et al., 2021). Effective economic policy manages the tension between short-run needs and

long-run objectives, taking proper account of newly emerging challenges and opportunities brought about by global trade, the pace of technological change, and shifting demographics (Alalade et al., 2022). To influence the outcomes within the economy and ensure a state of economic well-being for their citizens, the governments employ certain economic instruments that may include taxation, subsidy provision, and public investment.

Institutional Quality

Institutional quality means efficiency and accountability of the institutional matrix comprising the legal framework, pattern of governance, and regulatory agencies of a country or organization. High institutional quality alone could ensure rule of law, protection of property rights, transparency in processes, and control of corruption—all the factors that would promise stability and predictability for business, attract investment, stimulate economic growth, and bring about rising living standards (Nguyen, 2022; Bermpei et al., 2018). The key institutional quality indicators involved in this article include bureaucratic effectiveness, regulatory quality, and control of corruption. Good institutions foster human capital development, innovation, and social cohesion, whereas the reverse, being poor institutions, often determines economic stagnation, social unrest, and poverty (Anthony-Orji et al., 2019). Institutional quality has been monitored through indices such as the Worldwide Governance Indicators and Corruption Perceptions Index by the World Bank, World Economic Forum, and Transparency International.

Bank Deposit Growth

Bank deposit growth refers to the increase in the funds deposited by customers into commercial banks. Such deposits reflect financial stability and, hence, the confidence of a population in the economy. Healthy deposit growth is supportive of lending and economic expansion and also encourages financial inclusion (Nguyen, 2022). The factors affecting deposit growth relate to interest rates, economic conditions, consumer confidence, and bank competition. Strong deposit growth will provide ample opportunities for the banks to extend credit facilities, finance businesses, and undertake investments in the productive sectors. Central banks use the growth of deposits to gauge monetary policy effectiveness and financial system stability (Eriemo, 2014). Strong deposit growth at banks signifies strength in the financial systems, while weak deposit growth might be indicative of economic slowdowns or financial distress.

Empirical Review

Although well-established in international contexts, the literature on economic policy, institutional quality, and bank deposit growth remains relatively unexplored within the Nigerian context. For instance, Nguyen (2022) examined how institutional quality, such as the rule of law, together with other macroeconomic determinants, influences bank deposit growth in European transition economies. Using the generalized method of moments approach, the study indicates that high institutional frameworks positively influence deposit growth, while bank-specific factors related to efficiency and branch expansion have limited influences. This therefore provides a yardstick for investigating similar relationships in Nigeria, where improvements within the overall macroeconomic environment are viewed as being neutralized by various institutional weaknesses that hamper bank deposit growth. Moreover, Shabir et al. (2021) noticed that the role of economic policy uncertainty (EPU) is to influence bank stability, where EPU has a negative impact on bank stability, but this negative effect is reduced by institutional quality. Therefore, economic uncertainty and institutional quality may show a relationship critical for Nigeria since this country is usually seen as politically and policy volatile.

On a related note, Nguyen et al. (2020) examine the impact of both domestic and global EPU on bank credit growth for 22 economies. The findings indicate that higher uncertainty-suppressed credit growth is particularly prominent in emerging economies. In other words, high uncertainty, one common in developing countries like Nigeria, poses serious risks to financial development. The research also notes that the referred adverse effects can be lessened by improvements in policy. Other related studies, like Ashraf & Shen (2019), extend the findings to link higher economic policy uncertainty to higher loan interest rates, attributing a rise in rates to borrower default risk, hence emphasizing the importance of stable economic policies with strong institutional frameworks toward taming financial risks when events are not predictable.

Bermpei et al. (2018) shift attention to the role of institutional quality regarding determining bank regulations' impact on stability. Using data from 69 emerging economies, the study finds that strong institutions enhance the degree to which capital regulation and activity restrictions improve bank stability, while where institutions are weak, stability cannot be achieved by regulatory measures alone. This has very important implications for Nigeria, whose continuous institutional weaknesses, in forms such as corruption, are seen as hostile to financial reforms. Strong institutional frameworks can multiply the stabilizing effects of regulations; hence, reforming the institutional framework remains one of the key requirements for Nigeria's banking industry.

Dewenter (2018) supports this argument, showing how the quality of institutions determines the effectiveness of deposit insurance in changing bank risk. While increasing deposit insurance is a destabilizing factor in tranquil times, the overall riskiness of such policies is decreased when banks are strong; this may be reversed during crisis periods when the risk becomes very high. Taking into consideration that the Nigerian banking sector has passed through instability periods and is characterized with a weak institutional oversight, more enhanced regulatory measures will be imperative since, by reason of these studies, solid institutional quality mitigates the moral hazard risks associated with deposit insurance.

The degree of uncertainty in economic policymaking is another major influence on banking sector outcomes. Bordo et al. (2016) have discussed the effect of EPU on U.S. bank credit growth during the post-Great Recession period and found that uncertainty significantly dampened bank lending. Both loan supply and demand factors are significant in this context, which again shows the strong interaction between economic policy and banking behavior. Consequently, EPU can restrain bank lending in Nigeria as it does in most other developing and emerging market economies where economic policies change rather frequently along unpredictable lines. This therefore underlines the importance that stability and transparency in economic policies play for deposit growth and subsequent lending.

Evidence of institutional reforms reinforcing bank stability exists, especially in transitional economies. These findings, therefore, suggest that institutional reforms might just play a vital role in enhancing the stability of banks in Nigeria, a country still struggling to shake off the shackles of weak legal and governance structures. Fang et al. (2014) examine how reforms in legal institutions, corporate governance, and banking liberalization enhance financial stability by reducing asset risk and nonperforming loans. These reforms may therefore have even more pronounced effects for domestic banks, which tend to be more susceptible to institutional inefficiencies.

In the Nigerian setting, empirical works have looked at the role of institutional quality and economic policy in influencing bank deposits and investment growth. Alalade et al. (2022) assessed the impact of the quality of institutions on the investment growth rate. For this, they resorted to using time series data from 2006 to 2022. They reported that the interest rate, money supply growth rate, and quality of

institutions were the significant long-run drivers of investment growth. These findings suggest that policies aimed at strengthening institutions and appropriately modulating monetary policy—which, in Nigeria's case, has oftentimes meant interest rate adjustment—could also motivate the growth of bank deposits to investment in strategic sectors of the economy.

Additionally, Ejem et al. (2020) examine how monetary policy transmission mechanisms affect deposit money banks in Nigeria. They observe that the cash reserve ratio has a significant effect on bank performance, while other monetary policy variables have varying influences. These findings indicate that monetary policy tools should be feathered in proper balance to attain good deposit growth and perform well. Using a related study, Anthony-Orji et al. (2019) develop evidence that institutional quality is an important determinant of financial inclusion, thus further appreciating the role of institutions in shaping the Nigerian financial landscape.

Finally, Eriemo (2014) investigates macro-economic determinants of bank deposits in Nigeria, using annual data from 1980 to 2010. The interest rate, bank investments, and branch expansion emerge as significant in influencing deposit mobilization. These findings tally somewhat with previous literature on the quality of institutions, in the sense that what would improve deposit growth in Nigeria is necessarily a combination of good institutions with appropriate economic policies.

3. *Methodology*

Data and Scope

This study examines the interaction of economic policy, institutional quality, and bank deposit growth in Nigeria between 1995 and 2023. The choice of Nigeria is informed by its atypical economic history of recurring policy reforms, oscillating institutional quality, and a vibrant banking industry that make it a very interesting case study for the evaluation of the impact of economic policies and institutional quality on bank deposit growth. The selected period covers almost all the economic cycles, that is, pre- and post-liberalization periods, oil price volatility, and the era of significant reforms in banking and economic policies. In addition, the data were sourced from prestigious organizations, including the Central Bank of Nigeria, World Bank Development Indicators, the Federal Reserve Economic Database, and the International Monetary Fund. Variables used, their sources, and specific proxies taken for the study are summarized in the following Table 1.

Table 1: Summary of Variable Description, Measurement, and Source

Category	Variable	Proxy	Data Source
Dependent Variable	Bank Deposit Growth	Bank Deposit to GDP Ratio	FRED
		Loan-to-Deposit Ratio	CBN
		Banks' Liquidity Ratio	CBN
Economic Policy	Fiscal Policy	Government Expenditure as % of GDP	IMF
	Monetary Policy	Monetary Policy Rate	CBN
	Economic Policy Effectiveness	Taylor's Principle using Various Indicators	CBN
Institutional Quality	Control of Corruption	Control of Corruption Estimate	WDI
	Government Effectiveness	Government Effectiveness Estimate	WDI
	Regulatory Quality	Regulatory Quality Estimate	WDI
Control Variables	Savings	Total Savings to GDP Ratio	CBN
	Financial Development	Money Supply (M3) as % of GDP	CBN
	Economic Uncertainty	Economic Uncertainty Index	GUI

Source: Author's Compilation 2025.¹

Theoretical Model

This paper deploys a theoretical framework that relies on the endogenous growth theory to analyze the nexus between economic policy, institutional quality, and bank deposit growth. Perhaps the best description of the emergence of endogenous growth theory, pioneered by Romer (1986) and Lucas (1988) and later advanced by Barro and Sala-i-Martin (1992), is that it was revolutionary in emphasizing the fact that economic growth was an essentially endogenous product rather than a result of external influences. In this context, bank deposit growth serves as an indicator of financial deepening, while effective economic policy and institutional quality are viewed as conducive to mobilizing and maintaining deposits that stimulate economic growth. Accordingly, in reduced form, the endogenous growth model of output is specified as:

$$Y_t = AK_t^\alpha H_t^{1-\alpha} \quad (1)$$

Where Y_t is aggregate output, A is technology, K_t is physical capital, H_t is human capital, and α is elasticity of output.

Following the structure provided by Romer's model, we expect bank deposit growth rates will depend on the interaction of financial capital, policy-driven economic stability, and institutional quality. The modified model is:

$$BDG_t = AK_t^\beta P_t^\gamma I_t^\delta \quad (2)$$

¹ Federal Reserve Economic Database (FRED), Central Bank of Nigeria Statistical Bulletin (CBN), International monetary Fund (IMF), World Bank Development Indicators (WDI), and Global Uncertainty Index (GUI) database.

Where BDG is bank deposit growth, P is composite of policy factors, I is the composite of institutional quality factors, and β , γ , and δ are elasticities of capital, policy effectiveness, and institutional quality, respectively.

Fiscal and monetary policy are combined into the policy variable in Barro's model of government spending, as developed in his paper from 1990. In particular, but not unusually, here we represent economic policy as a function of government expenditure relative to GDP and the monetary policy rate:

$$P_t = \vartheta G_t^\theta MPR_t^\rho \quad (3)$$

Where ϑ is a scaling coefficient, G represents government expenditure, MPR is the monetary policy rate, and θ and ρ capture the sensitivities of deposit growth to fiscal and monetary policies, respectively.

Furthermore, institutional quality is represented by the composite term, which includes regulatory quality, control of corruption, and government effectiveness. We specify institutional quality as:

$$I_t = \tau (COC_t^\varphi . GEF_t^\omega . REQ_t^\pi) \quad (4)$$

φ , ω , π denote the elasticities with respect to each institutional quality variable. Consequently, the fully modified model is given as:

$$BDG_t = AK_t^\beta . G_t^\theta MPR_t^\rho . COC_t^\varphi . GEF_t^\omega . REQ_t^\pi . X_t^\gamma . \varepsilon_t \quad (5)$$

By transformation, the econometric form of the model is given as:

$$BDG_t = \alpha + \beta K_t + \theta G_t + \rho MPR_t + \varphi COC_t + \omega GEF_t + \pi REQ_t + \gamma X_t + \varepsilon_t \quad (7)$$

$$BDG_t = f(BDG, LIQUIDITY, LOAN) \text{ Whereas; } X_t = f(SAV, FID, EUI)$$

Economic Policy Effectiveness: Taylor's Principle

This study further incorporated an augmented version of the Taylor Principle, which was developed by John Taylor in the early 1990s, to assess how bank deposit growth is affected by effective economic policy. The Taylor Principle is a monetary policy rule that links the changes of interest rates by the central bank to deviations in inflation and output from their target values. In this paper, we adopt the Taylor Principle in an attempt to catch the broader perspective of economic policy effectiveness in reflecting both inflation targeting and economic growth for an effective monetary and fiscal policy mix. Taylor's Rule originally takes the form:

$$Taylor: i_t = \pi_t + r_t^* + \alpha_\pi (\pi_t - \pi_t^*) + \alpha_y (y_t - y_t^*) \quad (8)$$

Where i_t is the target interest rate, π_t is the actual inflation rate, r_t^* represents equilibrium interest rate, π_t^* is the target inflation rate, y_t is the actual output growth rate, y_t^* signifies the target output growth rate, α_π and α_y are the policy response coefficients for inflation and output, respectively.

The Taylor Principle applied to our context, where fiscal and monetary policies are considered on par with inflation targeting, will need certain adjustments to include both fiscal and monetary adjustments. In this model, effectiveness in economic policy is considered a factor that will stabilize the economic environment and create a niche for bank deposit growth. More precisely, we will suggest an augmented form of Taylor's Rule in order to incorporate the following indications:

$$Taylor: i_t = \pi_t + (m_t - m_t^*) + \alpha_\pi(\pi_t - \pi_t^*) + \alpha_y(y_t - y_t^*) + \alpha_f(Tax_t - GEXP_t) \quad (9)$$

Where m_t is the actual money supply growth, m_t^* is the target money supply growth, Tax_t is the tax revenue, $GEXP$ represents government expenditure, and α_f is the policy response to fiscal effectiveness. Notably, $\alpha_\pi = \alpha_y = \alpha_f = 0.5$.

Estimation Technique

In this regard, the Markov Switching Regression (MSR) model is utilized to unearth the dynamic linkages that exist between economic policy and institutional quality in relation to bank deposit growth in Nigeria, allowing for regime-dependent effects that may shift during economic expansion and contraction. The MSR model, first proposed by Hamilton (1989), provides a mechanism for switching between unobserved states—or regimes—of the underlying data, which is a nonlinear relationship. These regimes correspond, in the present study, to periods of expansion and contraction, unobserved but inferred from data. The general form of the model, considering two regimes, is represented as:

$$y_t = \mu_{S_t} + \beta_{S_t}X_t + \varepsilon_t \quad (10)$$

Where y_t is the dependent variable, μ_{S_t} is the regime-specific intercept, β_{S_t} is a vector of regime-specific coefficients associated with the independent variables X_t , S_t represents the unobserved state (regime), and ε_t is the error term, assumed to be normally distributed with mean zero and variance.

The model supposes that there are two values of the state variable, usually 1 and 2, which correspond to expansion and contraction regimes, respectively. The transition between these states is drawn from a transition probability matrix given by:

$$\rho = \begin{pmatrix} p_{11} & p_{12} \\ p_{21} & p_{22} \end{pmatrix} \quad (11)$$

Where $\rho_{ij} = P(S_t = j | S_{t-1} = i)$, p_{11} is the probability of remaining in the expansion regime, p_{22} is the probability of remaining in the contraction regime, p_{12} and p_{21} are the probabilities of switching from one regime to the other.

We estimate the model by MLE, at each point in time updating the probability of being in each state using the Hamilton filter. This recursive filtering algorithm provides a likelihood of being in each state—expansion or contraction—at each point in time given the data observed up to that point.

$$L(\theta) = \sum_{t=1}^T \log \left(\sum_{S_t} P(y_t | S_t, \theta) \cdot P(S_t | S_{t-1}) \right) \quad (12)$$

Where $P(y_t | S_t, \theta)$ is the probability density of y_t conditional on state S_t , and $P(S_t | S_{t-1})$ is the probability of transitioning to state S_t , from state S_{t-1} .

4. Result and Discussion

Result

Table 2 below provides descriptive statistics on key variables influencing bank deposit growth in Nigeria. The bank deposit growth rate is highly volatile, with an average of 14.168 and a standard deviation of 5.326, hence fluctuating within the range of a minimum of 5.844 to a maximum of 22.450. The loan-to-deposit ratio has also recorded large fluctuation relative to deposits, with an average and

a high standard deviation of 65.914 and 13.574, respectively. The monetary policy rate averages 13.328 with a relatively moderate dispersion of 3.379. The series of fiscal-monetary policy effectiveness is highly dispersed around the mean of 20.697, positively skewed at 1.020, whereas government expenditure averages 15.779, though highly right-skewed at 1.499 with high kurtosis of 5.308, indicating extreme values in spending patterns. Tax revenue indicates a moderate dispersion with a mean of 14.630 and a standard deviation of 6.679. The qualitative institutional indicators of control of corruption, government effectiveness, and regulatory quality all show negative skewness, thus indicating the general nature of governance problems. The economic uncertainty variance is very small, with a mean of 0.095 and a narrow range, hence indicating low inconsistency in the uncertainty. Also, the depth of finance represented by the mean of 17.927 and the saving habits, as shown by a mean of 9.311, have moderate standards of deviation, hence indicating fluctuations in financial development and savings across years.

Table 2: Summary of Descriptive Statistics

VAR.	FIS_MO											
	BANK	LTDR	MPR	N	GEXP	TAX	COC	GEF	REQ	EUI	FID	SAV
Mean	14.168	65.914	13.328	20.697	15.779	14.630	-1.166	-1.047	-0.919	0.095	17.927	9.311
Median	16.409	63.607	13.500	16.889	14.393	14.712	-1.166	-1.041	-0.919	0.098	20.014	10.632
Maximum	22.450	96.817	20.500	79.910	30.857	28.807	-0.901	-0.897	-0.682	0.229	27.093	20.209
Minimum	5.844	37.559	6.000	-10.656	9.761	5.117	-1.502	-1.213	-1.293	0.012	8.464	3.292
Std. Dev.	5.326	13.574	3.379	22.150	4.621	6.679	0.123	0.086	0.148	0.059	5.864	4.402
Skewness	-0.076	0.033	-0.051	1.020	1.499	0.432	-0.850	-0.274	-0.782	0.385	-0.231	0.311
Kurtosis	1.561	2.876	3.130	3.932	5.308	2.152	4.185	2.341	3.522	2.215	1.480	2.308
Observatio												
ns	29	29	29	29	29	29	29	29	29	29	29	29

Source: Author's Computation.²

Table 3 below presents the correlation between the variables of bank deposit growth in Nigeria. Bank deposit growth is observed to be strongly and positively correlated with financial development at 0.931 and savings at 0.928, respectively, which are those that could ensure deposits are grown. Bank deposit growth is also observed to be inversely correlated with a loan-to-deposit ratio, standing at -0.330 and government expenditure at -0.346, which signals that a rise in the deposit-to-loan ratio or an increase in public expenditure might inhibit deposit growth. Bank deposit growth and the monetary policy rate are negatively correlated, only at -0.135, which would suggest that tighter monetary policy reduces deposits only marginally. On the other hand, tax revenue also shows a quite high negative correlation with the growth of bank deposits at -0.642, explaining that the higher the tax burden, the fewer funds available for bank deposits. Bank deposit growth is positively related to the control of corruption with a correlation coefficient of 0.215, while a positive relation of regulatory quality is slightly stronger at -0.230, thus setting tones that better quality of institutions contributes to an increase in deposits. Fiscal-monetary policy effectiveness is also positively related to government effectiveness and government expenditure with a correlation coefficient of 0.345 and 0.262, respectively, thus tending to reflect positive influences by way of governance on policy outcomes.

² Banks deposit growth (BANK), banks liquidity ratio (LIQ), loan-to-deposit ratio (LTDR), monetary policy rate (MPR), economic policy effectiveness for fiscal-monetary policy mix (FIS_MOS), government expenditure (GEXP), tax revenue (TAX), control of corruption (COC), government effectiveness (GEF), regulatory quality (REQ), economic uncertainty index (EUI), financial development (FDI), and saving (SAV).

Table 3: Summary of Correlation Statistics

<i>VAR</i>	<i>BANK</i>	<i>LTDR</i>	<i>MPR</i>	<i>FIS_MON</i>	<i>N</i>	<i>GEXP</i>	<i>TAX</i>	<i>COC</i>	<i>GEF</i>	<i>REQ</i>	<i>EUI</i>	<i>FID</i>	<i>SAV</i>
<i>BANK</i>	1.000												
<i>LTDR</i>	-0.330	1.000											
<i>MPR</i>	-0.135	-0.223	1.000										
<i>FIS_MON</i>	-0.233	0.229	0.379	1.000									
<i>GEXP</i>	-0.346	-0.239	0.379	0.262	1.000								
<i>TAX</i>	-0.642	0.028	0.174	0.334	0.767	1.000							
<i>COC</i>	0.215	0.466	-0.580	-0.129	-0.641	-0.439	1.000						
<i>GEF</i>	-0.392	-0.042	0.390	0.345	0.373	0.457	-0.351	1.000					
<i>REQ</i>	0.230	-0.029	-0.577	-0.329	-0.323	-0.135	0.504	-0.299	1.000				
<i>EUI</i>	0.358	-0.085	-0.493	-0.390	-0.443	-0.345	0.203	-0.216	0.240	1.000			
<i>FID</i>	0.931	-0.249	-0.094	-0.211	-0.366	-0.684	0.272	-0.510	0.178	0.273	1.000		
<i>SAV</i>	0.928	-0.187	-0.042	-0.103	-0.413	-0.712	0.346	-0.435	0.204	0.198	0.956	1.000	

Source: Author's Computation.

In Table 4 below, unit root tests for stationarity using ADF and PP tests at levels and first differences reveal that growth of bank deposits is non-stationary at levels in both tests but reaches stationarity upon first differencing. The monetary policy rates, government expenditure, tax revenue, control of corruption, financial development, and savings are, however, nonstationary at levels but rather stationary at first differences with high significance of 1%, as shown by the high ADF and PP values. Significant ADF and PP values at 5% and 10% levels drawn for economic policy efficiency, government effectiveness, regulatory quality, and economic uncertainty index insinuate the fact that the series are stationary at levels, showing stability in these institutional quality and policy indicators. This may indicate that the order of integration is between the I(1) and I(0) series; Markov switching regression, therefore, may be appropriate for robust modelling of regime-change relationships governing deposit growth in Nigeria.

Table 4: Summary of Unit Root Tests

VAR.	<i>Augmented Dickey Fuller</i>		<i>Phillips Perron</i>		Order
	<i>Level</i>	<i>1st Diff.</i>	<i>Level</i>	<i>1st Diff.</i>	
	-1.656	-4.034**	-0.287	-3.693**	
<i>BANK</i>	(0.441)	(0.005)	(0.915)	(0.010)	I(1)
	-4.153**	-4.805**	-2.435	-4.805**	
<i>LTDR</i>	(0.004)	(0.001)	(0.142)	(0.001)	I(0)
	-1.970	-6.563***	-1.960	-6.563***	
<i>MPR</i>	(0.298)	(0.000)	(0.302)	(0.000)	I(1)
	-4.047**	-6.901***	-4.274**	-7.597***	
<i>FIS_MON</i>	(0.004)	(0.000)	(0.002)	(0.000)	I(0)
	-1.733	-0.990	-2.243	-6.888***	
<i>GEXP</i>	(0.404)	(0.737)	(0.197)	(0.000)	I(1)
	-1.511	-5.219***	-1.382	-5.631***	
<i>TAX</i>	(0.514)	(0.000)	(0.576)	(0.000)	I(1)
	-2.563	-5.727***	-2.508	-6.608***	
<i>COC</i>	(0.112)	(0.000)	(0.124)	(0.000)	I(1)
	-3.703**	-7.093***	-3.712**	-9.097***	
<i>GEF</i>	(0.010)	(0.000)	(0.010)	(0.000)	I(0)
	-2.664*	-6.740***	-2.664*	-6.739***	
<i>REQ</i>	(0.093)	(0.000)	(0.093)	(0.000)	I(0)
	-3.612**	-9.659***	-3.719**	-11.358***	
<i>EUI</i>	(0.012)	(0.000)	(0.009)	(0.000)	I(0)
	-0.786	-4.578***	-0.229	-4.521**	
<i>FID</i>	(0.808)	(0.001)	(0.924)	(0.001)	I(1)
	0.480	-3.311**	0.492	-3.241**	
<i>SAV</i>	(0.983)	(0.024)	(0.983)	(0.028)	I(1)

Source: Author's Computation.³

Table 5 below presents the Markov model estimates of bank deposits growth, loan-to-deposit ratio, and banks' liquidity ratio for two economic regimes—expansion and contraction—markedly differing in the role of fiscal policy, monetary policy, economic policy effectiveness, and institutional quality. For Regime 1, bank deposit growth was significantly negatively influenced by the monetary policy rate, implying that with higher interest rates, deposits are relatively less attractive and tend to grow slower. However, the monetary policy rate significantly negatively influences the loan-to-deposit ratio and positively influences the banks' liquidity ratio, indicating that tight monetary policy encourages retaining liquidity over lending. The effectiveness of economic policy negatively influences bank deposit growth. This suggests that the more effective fiscal-monetary policy in expansionary periods, the lower the deposits can be due to very attractive alternatives for investment. Government expenditure, on its part, significantly boosts up bank deposit growth, hence reflecting fiscal support during the expansion phase. Tax revenues have a significant impact on the loan-to-deposit ratio, indicating a positive relationship between the tax collections and lending practices.

The monetary policy rate in Regime 2, representing the economic contraction, positively influences the loan-to-deposit ratio and that of the banks' liquidity ratio. Contractionary phases make the banks

³ P-values are in parentheses. *** is the 1% significance level, ** implies 5% significance, and * denotes 10% significance level.

practice cautious lending by raising the liquidity reserves. Such a strategy in times of economic contraction could be due to risk aversion. Thus, the economic policy effectiveness, which is in relation to the loan-to-deposit ratio, stands at -0.198 with a significance of 0.069. In the meantime, the fiscal-monetary policy mix has a higher influence on the banks' liquidity ratio, standing at -1.050 with a significance of 0.000. It suggests that the effectiveness of the policy mix could hamper bank lending during downturns, tempering risk exposure. Bank deposit growth is adversely affected by government expenditure and significantly reduces the liquidity ratio of the banks, indicating fiscal problems during the contractionary phase. Deposit growth is significantly influenced by the tax revenue when it has a reverse effect on a loan-to-deposit ratio. On the other hand, control of corruption shows a highly significant positive impact on the loan-to-deposit and liquidity ratios, probably signaling that better governance is an important prerequisite for maintaining stable financial indicators in contractionary phases.

The non-switching variables reveal that economic uncertainty significantly raises the growth of bank deposits while decreasing the loan-to-deposit ratio, suggesting that a higher uncertainty may be oriented toward retention of deposits but limits lending. Financial development significantly decreases the loan-to-deposit ratio, suggesting an inverse relationship between financial sector growth and lending habits. Savings was also found to exert a positive influence on bank deposit growth and on the loan-to-deposit ratio, hence indicating that savings support deposits and credit. The significance of the log of sigma across all models provides evidence of good model fit and stability of parameters under differing economic conditions.

Table 5: Summary of Model Estimations

<i>Variable</i>	<i>Bank Deposit Growth</i>	<i>Loan-to-Deposit Ratio</i>	<i>Banks Liquidity Ratio</i>
<i>Regime 1: Economic Expansion</i>			
	-0.273*	-2.469**	2.794***
<i>MPR</i>	(0.068)	(0.039)	(0.000)
	-0.044**	0.050	-0.095
<i>FIS_MON</i>	(0.014)	(0.752)	(0.394)
	0.262**	-2.320	-0.029
<i>GEXP</i>	(0.013)	(0.171)	(0.978)
	0.059	2.183**	0.099
<i>TAX</i>	(0.375)	(0.028)	(0.885)
	-2.299	-2.449	18.720
<i>COC</i>	(0.614)	(0.939)	(0.432)
	1.677	-86.485***	-16.861
<i>GEF</i>	(0.589)	(0.000)	(0.302)
	2.958	-49.517**	-7.073
<i>REQ</i>	(0.260)	(0.016)	(0.693)
<i>Regime 2: Economic Contraction</i>			
	0.198**	5.131***	5.692***
<i>MPR</i>	(0.037)	(0.000)	(0.000)
	0.003	-0.198*	-1.050***
<i>FIS_MON</i>	(0.488)	(0.069)	(0.000)
	-0.127**	0.732	-2.104**
<i>GEXP</i>	(0.003)	(0.500)	(0.008)
	0.105**	-1.675*	1.718**
<i>TAX</i>	(0.004)	(0.061)	(0.018)
	-7.246**	145.888***	39.407***
<i>COC</i>	(0.001)	(0.000)	(0.000)
	7.451***	-93.661***	-34.340
<i>GEF</i>	(0.000)	(0.000)	(0.620)
	2.855**	-126.463***	-50.531
<i>REQ</i>	(0.001)	(0.000)	(0.504)
<i>Common: Non-switching</i>			
	12.285***	-117.173**	-8.488
<i>EUI</i>	(0.000)	(0.024)	(0.794)
	0.126	-3.692**	1.284
<i>FID</i>	(0.248)	(0.018)	(0.337)
	1.194***	4.393**	-1.577
<i>SAV</i>	(0.000)	(0.054)	(0.407)
	-0.959***	1.451***	1.553***
<i>LOG(SIGMA)</i>	(0.000)	(0.000)	(0.000)

Source: Author's Computation.⁴

⁴ P-values are in parentheses. *** is the 1% significance level, ** implies 5% significance, and * denotes 10% significance level.

Table 6 below shows the transition probabilities and expected duration between two regimes for bank deposit growth, loan-to-deposit ratio, and banks' liquidity ratio. Bank deposit growth is expected to continue in Regime 1 with a probability of 0.396 and switch to Regime 2 with a probability of 0.604, implying an expected duration of 8.696 and 5.059 periods, respectively, in Regime 1 and 2. The loan-to-deposit ratio shows very strong persistence in Regime 1 at 0.885 with very short average regimes at 1.655 and 1.627, while banks' liquidity ratio exhibits very high regime persistence with the durations of 7.572 and 1.318.

Table 6: Transition Summary

<i>Markov Switching Transition Probabilities and Expected Durations</i>						
<i>Constant Transition Probabilities: $P(l, k) = P(s(t) = k s(t-1)=i)$</i>						
<i>(row = i/column = k)</i>						
<i>Regime</i>	<i>Bank Deposit Growth</i>		<i>Loan-to-Deposit Ratio</i>		<i>Banks Liquidity Ratio</i>	
	1	2	1	2	1	2
1	0.396	0.604	0.885	0.115	0.868	0.132
2	0.615	0.385	0.198	0.802	0.759	0.241
<i>Constant Expected Duration:</i>						
	8.696	5.059	1.655	1.627	7.572	1.318

Source: Author's Computation.

Discussion

Nonetheless, it can be observed that the findings depict the two-way function of monetary policy rate in expansion and contraction, considering its depressing effect on bank deposit growth when the economy is in an expansionary cycle, which is in tandem with theories postulating that high interest rates decrease the tendency to save in banks, as argued by Ejem et al. (2020). However, the monetary policy rate was observed exerting a positive influence on times of contraction, possibly an indication that banks prefer risk aversion and preserving liquidity during times of tight monetary conditions and thus should give credence to previous findings on the sensitivity of Nigeria to policy adjustments (Nguyen, 2022). Hence, the variability therefore underscores the need for a more adaptive and responsive monetary policy; inflexible policies could inadvertently slow down economic activity and spur deposit mobilization in the case of African emerging markets (Shabir et al., 2021).

The interaction between fiscal-monetary policy is important in deposit mobilization, where economic expansions have been witnessed to contribute negatively to the fiscal policy toward bank deposits. This could suggest crowding-out effects, whereby increases in government spending pressured interest rates and access to private sector credit (Obioma & Onyebueke, 2018). However, the fact that the fiscal and monetary policy shock was positively significant for contractionary periods suggests its role as a stabilizer in the stimulation of bank deposits when private sector growth is not performing well. Government expenditure, as mentioned earlier, performs a dual role of deposit augmentation during expansion and its reduction during contraction, which indicates some inefficiency in public spending and dependence on deficit financing. This implies that government expenditure is also less directed toward those sectors of the economy that would result in productive banking activity, hence partially influencing the resistance of the sector to shocks during contractions (Alalade et al., 2022).

The governance indicators show their detailed effects on the liquidity and lending potentials of the banking sector. High regulatory quality is found to be positively correlated with deposit growth during expansions, though it has mixed effects on loan-to-deposit ratios, presumably due to a regulatory

bottleneck in credit facilitation. This is in line with Obioma & Onyebueke (2018), who stated that "the erratic regulatory regime in Nigeria's financial sector inspires inefficiency in credit intermediation." The high negative relation of government effectiveness to loan-to-deposit ratios underlines further the governance issues where the execution of policies has not been effective, and such inefficiency might be pointless in liquidity gaps that shrink the ability of banks to lend optimally.

Indeed, economic uncertainty has always had a positive contribution to deposit growth in banks. Such evidence proves that in times of uncertainty, the flight-to-safety behavior dominates among Nigerians: they save more than spend. This is in line with extant literature on emerging markets, in which increased uncertainty heightens demand for liquid assets as individuals and businesses alike seek safety more than investment (Ashraf & Shen, 2019). Savings also record a positive and stable relationship with bank deposit growth; this is very important, as the deepening of the savings culture in Nigeria is imperative, especially in these inflationary times. These findings reiterate the interaction of economic and policy variables in determining banking outcomes and, therefore, help in identifying the need for the Nigerian financial sector to have policies that ensure the easing of structural constraints so that economic resilience can be fostered during expansionary and contractionary phases.

5. Conclusion and Policy Implications

The conclusion of this study reflects on how economic policies interact with institutional governance and performance in the banking sector in Nigeria, focusing especially on factors that influence bank deposit growth, liquidity ratios, and loan-to-deposit ratios. From the empirical results, monetary and fiscal policies manifest their dual role of encouraging and constraining the resilience of the banking sector throughout the economic cycle. These asymmetric effects of variables such as monetary policy rate, government expenditure, and regulatory quality bring to the fore that Nigeria's institutional and macroeconomic structures underpin banking stability and their respective lending behavior. It also brings to light how governance quality, as captured by metrics including regulatory quality, control of corruption, and government effectiveness—holds as much relevance to the health of the banking sector as does direct monetary intervention. Thirdly, the flight-to-safety behavior observed in times of economic turmoil is a pointer that the Nigerian populace is risk-averse and, therefore, would require increased demand for safety-net policies in the banking industry.

Thus, the study proposes a policy framework that is going to gear the Nigerian banking sector toward the dual path of improving governance structures and raising regulatory efficiency as very important for financial stability. Improved regulatory frameworks and government effectiveness are bound to ensure that there is an allocation of capital efficiency and reduction in credit constraints, especially in expansionary phases of the economic cycle. The study also notes that countercyclical monetary policies support bank deposits in economic contractions, sustaining liquidity. Therefore, improvement in the general financial literacy of the public would probably reduce the flight-to-safety tendencies in times of uncertainty in the economy and increase a consistent savings culture toward deposit mobilization. Finally, increasing transparency in fiscal expenditure may reduce crowding out and improve private sector growth along with banking stability.

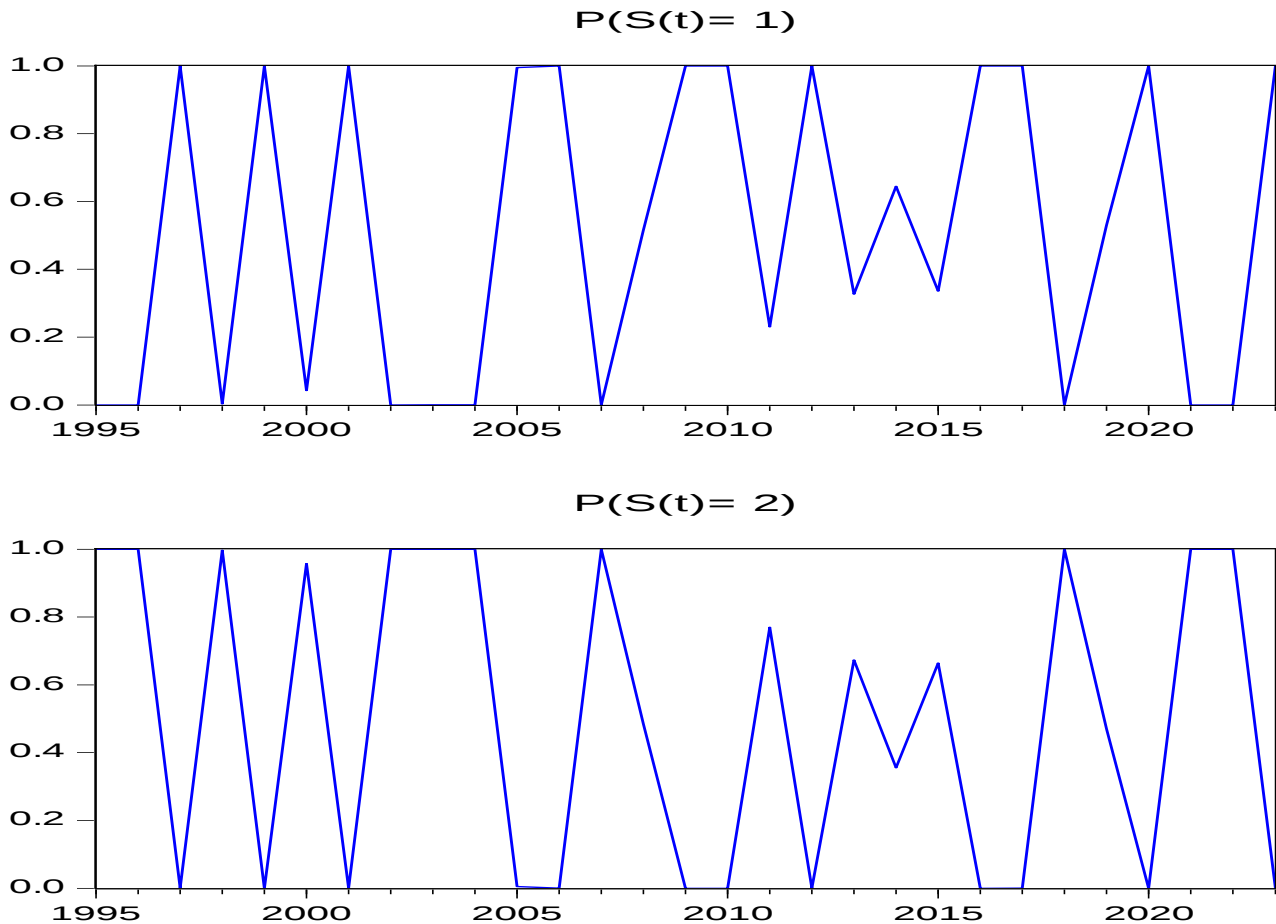
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Appendix

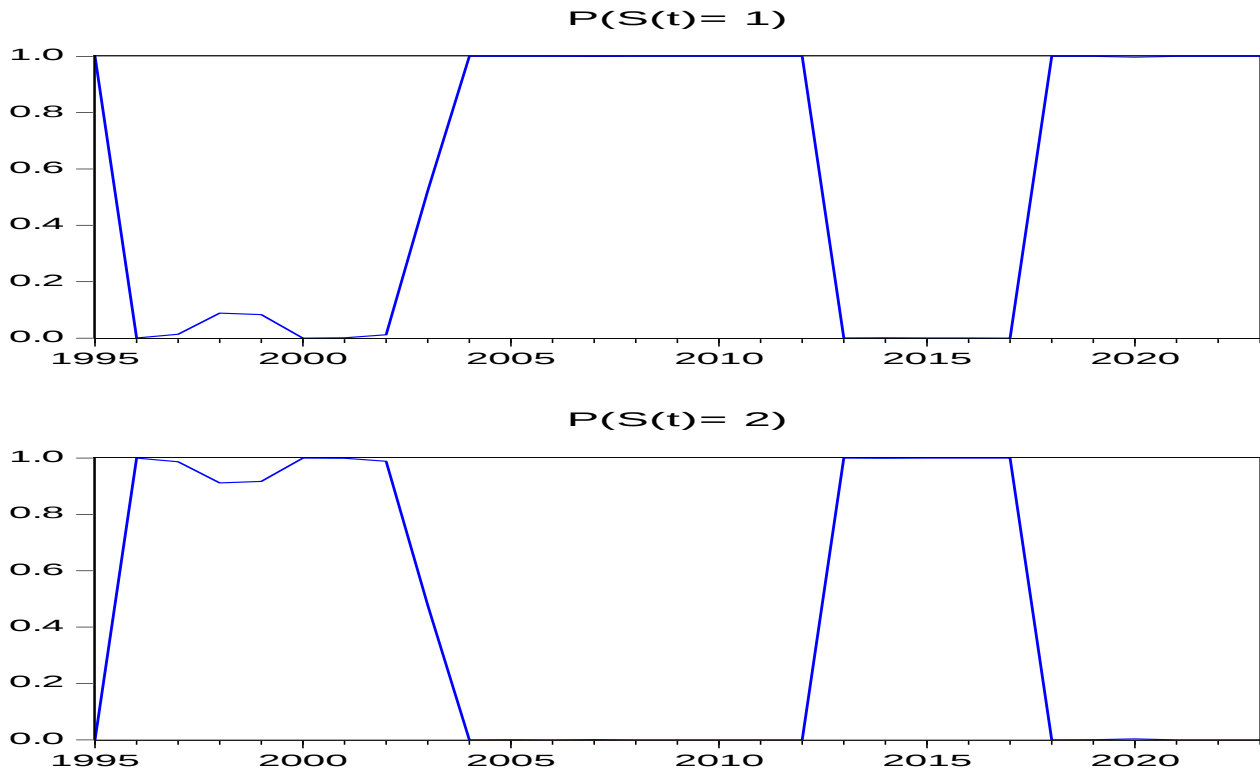
**Figure 1: Graphical Representation of Regime Probability for Bank Deposit Growth
Markov Switching Smoothed Regime Probabilities**



Source: Author's Computation.

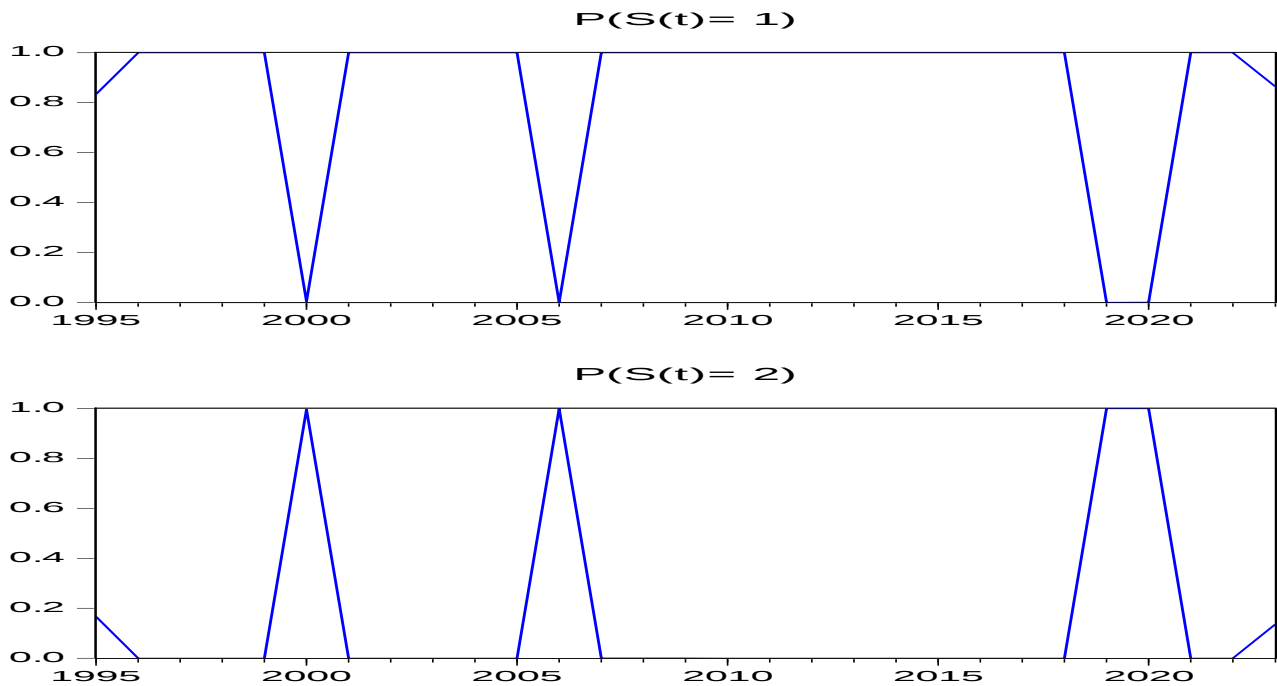
Figure 2: Graphical Representation of Regime Probability for Loan-to-Deposit Ratio

Markov Switching Smoothed Regime Probabilities



Source: Author's Computation.

Figure 3: Graphical Representation of Regime Probability for Liquidity Ratio
Markov Switching Smoothed Regime Probabilities



Source: Author's Computation.