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Bank Loan Loss Provisioning During Election Years In Nigeria



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Abstract

The paper investigates the behavior of loan loss provisions during election years in Nigeria. Election events create uncertainties in the business environment. Election and post-election events may amplify credit risks for banks, requiring banks to keep higher loan loss provisions. Using country-level data, it was revealed that the election year did not have a significant effect on the level of loan loss provisions in the Nigerian banking sector. However, the banking sector had high provisions when it is undercapitalized during election years.

Keywords: loan loss provisions; income smoothing; election; Nigerian banks,
JEL Classification: G21, G28.

1. Introduction

The objective of this paper is to investigate the behaviour of loan loss provisions in the Nigerian banking. Loan loss provisions (LLPs) are used to mitigate expected losses arising from banklending (Curcio and Hasan, 2015; Leventis et.al., 2011). LLPs when reported in financial statements have a signaling effect on the financial statements of banks in that they convey valuable information on the quality of banks' loan portfolio. The size of LLP can have significant effects on the size of reported earnings and regulatory capital (Ozili and Outa, 2018). In Nigeria, the loan loss provisions of banks are significantly influenced by credit risk considerations, prudential regulation requirements and accounting standards (Ozili and Outa, 2019).

Apart from credit risk, there are other risk factors that banks take into account. One of such risk factor is the impact of elections on banks' ability to recover loans from politically-connected obligors as well as the effect of elections on banks' ability to conduct business in the election year. This is tagged the "election year" effect. The 'election-year effect' is a country risk factor which banks take into account if banks believe that a change in the current government following general elections may affect their ability to recover loans from politically-connected obligors. Such banks will keep additional provisions to mitigate credit risk arising from the 'election year' effect. Surprisingly, the extant literature has not examined the characteristics of bank financial reporting during the election year despite the fact that banks are often the largest borrowers to fund election campaigns in most countries and in Nigeria, and there is the risk that the loans issued to election campaigners may not be repaid in full, or at worst, will be written off.

The empirical results show that, although there was no significant direct impact of election year on bank provisioning, however, there is a strong negative and significant association between LLP and bank capital during election years which implies that loan loss provisions are higher when the banking

sector is undercapitalised especially during election years. This finding supports the capital management hypothesis. The capital management hypothesis states that banks will increase loan loss provisions when they have low capital in order to compensate for their low capital levels, and banks will keep fewer loan loss provisions when they have sufficient (or high) capital.

This study makes two contributions to the literature. Firstly, this study contributes to the literature that investigate the influence of external and institutional factors on bank financial reporting behaviour (e.g., Ozili, 2019; Bikker and Metzger, 2005; Laeven and Majnoni, 2003). By controlling for election year effect, political stability and level of corruption, insights were provided to understand how unique factors in a country can influence the behaviour of loan loss provisions in banks.

Secondly, this study examines loan loss provisioning behaviour in the banking sector of a country that, arguably, has non-transparent general elections, and a country that is prone to economic fluctuations (i.e., booms and recessions) due to exposure to crude oil prices. This therefore provides a natural setting to test for the effect of a peculiar country's risk factor on banks' financial reporting, focusing on loan loss provision in this study.

The remainder of the paper is organised as follows. Section 2 provides an overview of the relevant literature. Section 2 develops the hypotheses. Section 3 presents the data, model specification and empirical methods. Section 4 discuss the empirical results. Section 5 concludes the paper.

2. Literature review

In the literature, country-specific studies report some determinants of the level of loan loss provisions. For instance, in the United States, Morris et.al., (2016) examine the economic determinants and value relevance of US banks' loan loss provisions during the global financial crisis. They find that discretionary provisions are used for income

smoothing and signaling when the two incentives reinforce each other, but income smoothing occurs more frequently. Kanagaretnam et.al., (2005) show that US banks use loan loss provisions to signal information about banks future prospects but the propensity to use provisions for signaling purposes is greater among smaller banks. In Italy, Caporale et.al., (2018) examine the determinants of loan loss provisions among 400 Italian banks during 2001 to 2015. They find that loan loss provisions in Italian banks were significantly influenced by the non-discretionary components of loan loss provisions.

However, the procyclicality of loan loss provisions was less pronounced for local banks because their loans were well collateralised and their behaviour was more strongly affected by supervisory activity. In China, Wang et.al., (2019) examine whether bank loan loss provisions affect credit fluctuation in China's banking system, and find that non-discretionary loan loss provisions have a significant impact on credit fluctuation whereas discretionary loan loss provisions have no significant impact on credit fluctuation for Chinese banks.

In South Africa, Ozili and Outa (2018) show that South African banks do not use LLPs to smooth income when they are: undercapitalised, have large non-performing loans and have a moderate ownership concentration; however, using LLP to smooth income is pronounced when South African banks are more profitable during economic boom years, when they are well-capitalised and is pronounced among banks that adopt International Financial Reporting System (IFRS) and have a Big 4 auditor. In Poland, Borsuk (2019) conducted a set of stress test scenario to determine how different economic scenarios would affect loan loss provisions among other financial ratios. Borsuk find that economic growth, the labour market, and market interest rates have a significant influence on the loan loss provision ratio of banks in Poland. Although the literature has examined the behavior of LLP in several contexts, the extant literature has not examined the behaviour of bank

financial reporting during election years, particularly the behaviour of loan loss provisions in election years.

3. Data and Methodology

3.1 Data

Financial data for Nigeria was obtained from the World Bank database. The sample period is from 2003 to 2016 and is sufficient to cover at least 4 general election cycles. Data for real gross domestic product growth rate was collected from the World Economic Forum archived in the World Bank database, while institutional data was collected from the World Governance Indicators database of the World Bank's database. See Appendices A1 & A2 for descriptive statistics of the sample data and the variable descriptions.

3.2. Methodology

The baseline model is specified below: The model is adapted from the models used in Curcio and Hasan (2015) and Ozili (2019).

$$LLPt = c + CARt + NPLt + Cct + Pst + ELECTt + GDPt + e$$

Where, LLP = loan loss provisioning; NPL = ratio of nonperforming loans to gross loans; CAR = ratio of total regulatory capital to total risk-weighted assets (%); ELECT = a binary variable that equal one in election year and zero in non-election year; ?GDP = real domestic product growth rate; CC = control of corruption index; PS = political stability/absence of terrorism index; t = year. See Appendix for detail variable description.

A positive sign for the ELECT coefficient is expected if banks anticipate that a change in the current government following general elections will make it difficult to recover their loans from politically-connected obligors, and banks would respond to this by keeping higher provisions in the election year. Prior studies control for other determinants of loan loss provisions (see Ahmed et.al, 1999; Ozili and Outa, 2017). The first variable is nonperforming loan (NPL). Banks will keep higher provisions when they expect high loan defaults (Laeven and Majnoni, 2003; Bikker and Metzmakers, 2005). Hence, a positive sign is predicted for NPL coefficient. The

second variable is the capital management (CAR) variable. CAR controls for capital management incentive to influence provisions estimates. Banks with low capital levels tend keep higher provisions to compensate for their low capital levels and vice versa, and this describes the capital management hypothesis (Ozili and Outa, 2017); thus, a negative relationship is predicted for CAR coefficient. The third variable is the real gross domestic product growth rate (?GDP) which control for bank provisioning behaviour that depends on the state of the economic cycle. Bank provisions are generally higher during recessionary periods and relatively lower during economic booms (Laeven and Majnoni, 2003, Ozili, 2018); implying a negative relationship between ?GDP and LLP. Next, two institutional factors were introduced (the corruption control (CC) indicator and the political stability (PS) indicator) that play a significant role during elections in Nigeria.

High corruption levels and political instability are considered to be detrimental to general elections (Dupas and Robinson, 2012; Callen and Long, 2015). For the PS variable, a negative relationship between LLP and PS was expected because banks in politically unstable environments will keep higher provisions especially higher general provisions to mitigate credit risk in the environment. For the CC variable, a positive relationship between LLP and CC was expected because banks in less corrupt environments tend to keep fewer general provisions (where general provisions are the smaller component of total provisions).

4. Results

4.1. Regression Results

The results are reported in Table 1 and the variables of interest are the ELECT coefficient and the coefficient of interaction variables. The ELECT coefficient is not statistically significant in all models (1) to (6). The ELECT*CAR coefficient is negative and statistically significant, indicating that bank provisions are higher when the banking sector is undercapitalised during election years. Also, ELECT*NPL, ELECT*PS, ELECT*CC and ELECT*?GDP coefficients are not statistically significant, hence no meaningful conclusion can be drawn.

Table 1

Provisioning during election years

Variables	Coefficient (t-statistic)	Coefficient t	Coefficient (t-statistic)	Coefficient nt	Coefficient nt	Coefficient (t-statistic)
c	0.554	0.269	-15.871	-1.425	0.109	-1.49
NPL	-2.281	0.675***	0.779***	0.667***	0.668***	0.694***
CAR	-0.208*	-0.202*	0.016	-0.190	-0.203	-0.175*
ELECT	0.688	0.866	12.093*	7.318	-0.532	1.446
?GDP	0.205***	0.199**	0.231***	0.226**	0.210*	0.191**
CC	-2.281	-2.681	-0.924	-0.937	-1.910	-3.398
PS	0.543	0.692	-6.044*	-0.998	0.166	0.495
ELECT*NPL		-0.024				
ELECT*CAR			-0.593*			
ELECT*PS				3.428		
ELECT*CC					-1.083	
ELECT*?GDP						0.939
Adjusted R-	99.02	99.79	99.40	98.86	98.78	98.88
Akaike info	2.85	3.34	2.31	2.95	3.02	2.93

Estimations are based on ordinary least squares (OLS) regression. 'White heteroscedasticity-consistent standard errors & covariance' is applied to correct for autocorrelation and heteroscedasticity. NPL = ratio of non performing loans to gross loans: the lower the better; CAR = ratio of total regulatory capital to total risk-weighted assets (%); ELECT = a binary variable that equal one in election year and zero in non-election year. ?GDP = real gross domestic product growth rate; CC = control of corruption index: the higher the better; PS = political stability/ absence of terrorism index: the higher the better; t-statistics is reported in parenthesis. *, **, *** denotes significance at the 10%, 5% and 1% levels .

4.2. Correlation analysis

In the Pearson correlation results in Table 2, the focus is on the correlation between the loan loss provisions (LLPs) and the election year (ELECT) variable which tells us whether election years are characterised with higher (or fewer) provisions in the Nigerian banking sector. The correlation analysis shows that the correlation between LLP and the ELECT is statistically insignificant, indicating that there is no significant correlation between bank provisions and election years. As can be observed, loan loss provisions (LLP) is

significantly correlated with regulatory capital ratio (CAR) and business cycle (?GDP). However, CAR is negatively correlated with LLP while ?GDP is positively correlated with LLP. This indicates that lower regulatory capital levels are associated with higher loan loss provisions in the Nigerian banking sector, while higher loan loss provisions are associated with periods of economic prosperity (i.e., positive GDP growth). However, loan loss provisions (LLP) is not significantly correlated with corruption control (CC) and political stability (PS) variable although PS is positively correlated with LLP while CC is negatively correlated with LLP.

Table 2: Correlation Matrix

Variables	NPL	LLP	CAR	CC	PS	ELECT	? GDP
NPL	1.000 ----- -----						
LLP	0.977*** (14.51) (0.00)	1.000 ----- -----					
CAR	-0.710*** (-3.19) (0.01)	-0.712*** (-3.21) (0.01)	1.000 ----- -----				
CC	0.005 (0.014) (0.99)	-0.131 (-0.41) (0.68)	-0.103 (-0.32) (0.74)	1.000 ----- -----			
PS	0.240 (0.782) (0.45)	0.251 (0.82) (0.43)	0.348 (1.17) (0.26)	-0.293 (-0.97) (0.35)	1.000 ----- -----		
ELECT	-0.157 (-0.50) (0.62)	-0.170 (-0.54) (0.59)	0.421 (1.46) (0.172)	-0.145 (-0.46) (0.65)	0.345 (1.16) (0.27)	1.000 ----- -----	
?GDP	0.368 (1.25) (0.23)	0.526* (1.95) (0.07)	-0.083 (-0.26) (0.79)	-0.524* (-1.94) (0.08)	0.389 (1.33) (0.21)	-0.139 (-0.44) (0.66)	1.000 ----- -----

Estimations are based on Pearson correlation analysis. T-statistics are reported in single parenthesis. P-values are reported in double parenthesis.

4.3. Descriptive statistics

The mean values of the variables are reported in Table 3. The mean value of the LLP ratio is 8.02 which is much lower than the NPL ratio and indicates that bank provisions is lower than the level of nonperforming loans (NPLs) during the period of analysis. The standard deviation of NPL and LLP shows that the NPLs had higher variability than LLPs in the Nigerian banking sector. Also, the mean of the regulatory capital ratio (CAR) is higher than the means of LLP and NPL which suggest that the Nigerian banking sector has sufficient regulatory capital to mitigate expected losses. The CAR variable has lower variability than NPL and LLP which indicate the regulatory capital ratio of the Nigerian banking sector is relatively stable

Table 3: Descriptive statistics for all variables from 2003 to 2016

	NPL	LLP	CAR	CC	PS	ELECT	GDP
Mean	12.16	8.02	15.55	-1.14	-1.94	0.28	7.53
Median	9.30	4.20	17.47	-1.14	-1.97	0.00	6.28
Maximum	37.30	27.90	23.40	-0.89	-1.63	1.00	33.73
Minimum	2.95	0.00	1.75	-1.36	-2.21	0.00	-1.61
Std. Dev.	10.13	8.51	6.41	0.13	0.16	0.46	8.06
Observations	13	14	12	14	14	14	14

5. Conclusion

The bank provisioning behaviour during election years in Nigeria was examined. The main message of this paper is that, although there was no significant direct impact of election year on bank provisioning, loan loss provisions are higher when the banking sector is undercapitalised, especially during election years. One implication of the findings is that political events, such as elections, may affect other accounting numbers in banks other than loan loss provisions which was insignificant in this case. Secondly, bank supervisors should understand how election events might affect banks' loan portfolio in their assessment of the appropriate level of regulatory provisions that banks should keep. One idea is to require banks to increase its stock of 'general provisions' in election years to act as a cushion to mitigate expected and unexpected losses arising from election and post-election events. It is recommended that future research should investigate other national events that can affect the stability of the Nigerian banking sector. Future research may also focus on the effect of elections on bank provisioning in microfinance banks.

Appendix

A2: Variable Description

Indicator	Short definition	Source
?GDP	Change in Gross Domestic Product in percentage	World Bank national accounts data, and OECD National Accounts data files.
CAR	The capital adequacy of deposit takers. It is a ratio of total regulatory capital to its assets held, weighted according to risk of those assets.	Financial Soundness Indicators Database (fsi.imf.org), International Monetary Fund (IMF)
NPL	Ratio of defaulting loans (payments of interest and principal past due by 90 days or more) to total gross loans (total value of loan portfolio). The loan amount recorded as nonperforming includes the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue.	Financial Soundness Indicators Database (fsi.imf.org), International Monetary Fund (IMF)
PS	Political stability and absence of terrorism index	World Governance Indicator database
CC	Control of corruption index	World Governance Indicator database

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