



Impact of corruption on bank profitability in Nigeria

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This study sought to econometrically analyze the impact of corruption on bank profitability in Nigeria. Using a panel data set comprising 358 observations of 48 unique banks over the 1996 - 2006 time period, backward stepwise regression results reveal that corruption has a significant positive impact on bank profitability in Nigeria. The results lend credence to accusations that banks in Nigeria are thriving from corruption in the country.

Keywords: Banking, Profitability, Corruption, Nigeria

JEL Classification: C23, G21

1 Introduction

The importance of bank profitability can be appraised at the micro and macro levels of the economy. At the micro level, profit is the essential prerequisite of a competitive banking institution and the cheapest source of funds. It is not merely a result, but also a necessity for successful banking in a period of growing competition on financial markets. Hence, the basic aim of a bank's management is to achieve a profit, as the essential requirement for conducting any business (Bobáková, 2003: 21). At the macro level, a sound and profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial system. The importance of bank profitability at both the micro and macro levels has made researchers, academics, bank managements and bank regulatory authorities to develop considerable interest on the factors that determine bank profitability (Athanasoglou et al., 2005: 5).

The broad aim of this paper is to analyze, on the basis of empirical evidence, the relationship between corruption and bank profitability in Nigeria. In the main, the paper has three motivations. First, though some researchers (e.g. McCartney, 2008) have asserted that corruption is bad for business, none of them has empirically analyzed the relationship between corruption and bank profitability. Considering the vital importance of the banking sector to an economy, it is imperative that we have an insight as to how this important issue affects them. Second, the Central Bank of Nigeria (CBN), though currently concerned about enhancing the performance of banks operating in Nigeria, has never rendered an answer to the following question: To what extent does corruption influence the profitability of banks operating in Nigeria? Third, banks in Nigeria have severally been accused of thriving from, as well as being complicit in, the high rate of corruption in the country (Dike, 2004; Ribadu, 2006: 4-5; and Leba, 2007: 17). An

empirical study of the true nature of the relationship between corruption and bank profitability in Nigeria may help refute or reinforce these accusations.

To achieve its broad aim, the remainder of this paper is organized in the following manner. The next section builds up a theoretical framework for the study. Section 3 outlines the empirical estimation methods. Section 4 presents the results. Section 5 concludes the paper.

2 Theoretical Framework

2.1 Conventional Corruption Theory

Researchers have offered various definitions of corruption. McCartney (2008) defined corruption as the misuse of entrusted power for private gain. Dike (2004) defined it as the violation of established rules for personal gain and profit. However, all definitions of corruption point to the fact that it is always associated with some form of dishonesty for personal gain.

Since the mid 1970s, corruption has infiltrated virtually every country in the world and become a global phenomenon (Frisch, 1996: 68). The problem cuts across all ethnic groups, faiths, religious denominations and political systems. It is found in democratic and dictatorial politics; feudal, capitalist and socialist economies. Christian, Muslim, Hindu, and Buddhist cultures are equally bedeviled by corruption. This does not, however, mean that the magnitude of corruption is equal in every society. Some countries, ethnic groups, religious denominations, and political systems are more corrupt than others (Dike, 2004).

There are five pre-conditions necessary for corruption to flourish under any economic, social or political order. First and foremost, it needs to be accepted by the highest level of government. A corrupt president is a guarantee of a corrupt government. Second, political office has to be widely perceived as the primary means of gaining access to wealth. Third, there has to exist a set of imperatives and incentives which encourage individuals to engage in corrupt transactions. These include widespread societal obsession with materialism, great inequality in distribution of wealth, glorification and approbation of ill-gotten wealth by the general public, widespread poverty, and low / irregular salaries for government officials with large dependent families (Frisch, 1996: 69). Fourth, corrupt individuals need to have access to and control over the means of corruption. These might include control over an administrative process such as tendering or having access to offshore accounts and the techniques of money laundering. Finally, there must be limited risks of exposure and punishment. This is the case when an ineffective taxing system is in place (making it difficult to track down people's financial activities); acts of corruption go unreported (because virtually everyone is perceived to be corrupt in one way or the other), uninvestigated (due to weakened state structures), and / or unpunished (due to powerlessness on the part of the judicial system as a result of corrupt judges or lack of appropriate legislation); and when there is widespread ignorance of the consequences of corruption.

Many economists (e.g. Asiedu, 2003; and Dike, 2004) agree that corruption, when pervasive and deeply entrenched, has significant adverse effects on an economy. At the macroeconomic level, corruption is said to distort the composition of public expenditure by focusing spending on activities likely to yield large bribes, for example major public construction works and defence contracts. Corruption also discourages potential foreign direct investment (FDI) as a result of cost additions and uncertainty creation (Gastanaga et al., 1998; Ugwuodo, 2002; Asiedu, 2003; and Dike, 2004); discourages potential public donors; increases ineffective and unserviceable foreign debts (Frisch, 1996: 68); and helps distort markets by redirecting economic activity from one sector to another, thus destroying the structure and pattern of economic development and reducing the efficiency of economic activity. Via fiscal, budgetary and debt effects, corruption negatively impacts the scale, form and growth rate of private sector development. Corruption also increases poverty.

At the microeconomic level, widespread corruption culminates in low institutional quality and inefficient institutions (Asiedu, 2003). Corruption destroys companies by promoting bad management; significantly raising the costs of doing business (Frisch, 1996: 68); increasing the risk and uncertainties of doing business; discouraging and reducing investment in general and capital investment in particular (Dike, 2004); creating unfair competition by penalizing successful, yet honest, undertakings; encouraging production of substandard goods and services; diverting resources away from productive investment; complicating and delaying business transactions; and destroying long-term profitability and growth. Where businesses lose out on contracts because they have chosen not to engage in corrupt behaviour, there can be consequences not only for the profitability of the businesses concerned but, indirectly, for their shareholders, employees and lenders of finance. At the same time, a company that accedes to an act of corruption once is likely to be faced with further demands of a similar nature in the future (McCartney, 2008). Thus, the company has permanently subscribed to a commercial disadvantage.

2.2 Corruption in Nigeria

Since corruption is a global phenomenon, it is not peculiar to Nigeria. However, corruption is pandemic in Nigeria. It has been termed “Nigeria’s number one problem” (Ugwuodo, 2002). It is probably the main means to accumulate quick wealth in Nigeria. It occurs in many forms and has contributed immensely to the perpetual collapse of infrastructure and institutions, and to the poverty and misery of a large segment of the Nigerian population. The menace has led to slow movement of files in offices, late payment for services executed, police extortion tollgates and slow traffics on the highways, port congestion, business diversion to neighboring countries, queues at passport offices and gas stations, ghost workers syndrome, loss of tax revenue, relative economic underdevelopment, election irregularities, and even ritual murders for money-making (Dike, 2004).

The history of corruption in Nigeria is strongly rooted in the over 29 years of military rule. Successive military regimes subdued the rule of law, facilitated the wanton looting of the public treasury, decapitated public institutions and free speech and instituted a secret and opaque culture in the running of government business (Ribadu, 2006: 1).

Corruption thrived on this platform. It was therefore hoped that the return of Nigeria to democracy in May 1999 would have gone some way to reducing corruption. Through increased openness resulting from governmental accountability and the freedom of the press, the process of democratization should, under normal circumstances, have mobilized efforts to overcome corruption (Frisch, 1996: 68). But, in 2001, the corruption perception index (CPI), a corruption ranking (to one decimal place on a scale of 0 – 10 with 0 being the most corrupt) published annually by Transparency International (a non governmental organization created in 1993), included 91 countries and showed Nigeria as the country where corruption was thought to be most prevalent in Africa. This ranking may not have been far from the truth since stolen public funds running into billions of US Dollars and Nigeria Naira have been discovered over the years. For instance Joshua Dariye, a Nigerian state governor, was found to have stolen millions of pounds from Nigerian funds meant to provide drinking water for the people of Plateau State (McCartney, 2008: 3). Indeed, many government officials, before being elected or appointed into offices, had little or modest income. But they are now owners of many properties around the world which they acquired through proceeds of corrupt practices.

Most recently, Human Rights Watch (HRW), the global watchdog, castigated the administration of President Umaru Musa Yar'Adua for its massive failure in addressing the “endemic corruption” that has engulfed Nigeria. In a wide-ranging rebuke, HRW asserted that the President, despite his initial declaration of zero tolerance on corruption, has undermined the country's foremost anti-corruption body, the Economic and Financial Crimes Commission (EFCC). Also, whilst commending the President for publicly declaring his assets upon assumption of office, HRW noted with dismay that he has so far not managed to persuade other senior government officials to emulate him (Izeze, 2009).

Dike (2004) and Ribadu (2006: 4-5) have given several reasons for the high rate of corruption in Nigeria. These include obsession with materialism, widespread poverty, great inequality in distribution of wealth, poor reward system, greed, glorification and approbation of ill-gotten wealth by the general public, perception of political office as the primary means of gaining access to wealth due to brazen display of wealth by public officials, complicity of bankers, ineffective taxing system, weakness of social and governmental enforcement mechanisms, absence of a strong sense of national community, and availability of safe havens for corrupt Nigerian officials to keep their loot abroad.

Banks in Nigeria, being microeconomic units, are not alienated from pervading corruption in the country. Reports are rife of their wanton violations of regulations and guidelines. In 2002, twenty-one of them had their foreign exchange dealership licenses suspended due to irregularities in their transactions (NDIC, 2002: vii). In 2004, 54 banks contravened various CBN regulations and guidelines 99 times, as against 37 banks that contravened 66 times in 2003. Routine examinations of foreign exchange operations of these banks revealed various breaches. Anti-money laundering examinations revealed that they were splitting remittances to evade reporting transactions stipulated under Section 2 of the Money Laundering Act (CBN, 2004: 15-16).

Some members of the Nigerian public have a bad impression of some of the banks in Nigeria. Perennially, they have complained of manipulations, fraudulent practices and non-refund of wrong debits by the banks on their accounts (CBN, 2004: 17; CBN, 2005: 39; and CBN, 2006: 36). They also widely perceive that banks in Nigeria are veritable fences for looted public funds and profit therefrom (Leba, 2007: 17). The Guardian Newspaper, in Page 6 of her Friday 28th December 2007 edition, carried a report titled ‘EFCC Fingers 10 Banks in Looting by Ex Governors’. The report stated that “*not less than 10 banks have been linked with illegal transfer of public funds abroad by some former governors under investigation or trial by the EFCC ... most of the huge funds being recovered by the EFCC from the former state executives were transferred out of the country through some officials of the banks*”. Unfortunately, to my knowledge, no study has ever been conducted to econometrically examine the relationship between corruption and bank profitability in Nigeria. This is the gap in the existing body of literature sealed by this study.

3 Empirical Estimation Methods

3.1 The Framework

To econometrically analyze the relationship between corruption and bank profitability in Nigeria, a multiple regression model (Eq. 1) was predicted. Regression estimates were derived using the ordinary least squares (OLS) method (Kahane, 2001). Koutsoyiannis (2003: 100-116) statistically demonstrates that least squares estimates are the most reliable regression estimates because of their general quality of minimized bias and variance. To minimize suppressor effects (Field, 2005: 161), the backward stepwise regression method was used to analyze Eq. 1.

The data set used for the purpose of this study comprised company-level indices of banks in Nigeria, Nigerian banking industry indices, Nigeria’s macroeconomic indices, and Nigeria’s CPI, over the 1996 - 2006 period. While the CPIs were downloaded from Transparency International’s website, the company-level, industry-level, and macroeconomic indices were derived from the public financial statements of an unbalanced panel of 48 unique banks in 358 individual observations over the 1996 - 2006 period, and various issues of CBN statistical bulletin, CBN annual report and statement of accounts, CBN monetary policy circulars, Nigeria Deposit Insurance Corporation (NDIC) annual report and statement of accounts, Securities & Exchange Commission (SEC) annual report and accounts, and The Little Data Book of the World Bank, over the same period. During the data screening process, extreme outliers were detected by means of box and whiskers plots and excluded from the data set.

3.2 The Predicted Model

$$P_{i,t} = \alpha_0 + \delta_1 \sum C_{i,t} + \delta_2 \sum I_t + \delta_3 \sum M_t + \delta_4 \text{CORRUPTION}_t + \varepsilon_{i,t} \quad (1)$$

where $i = \text{bank } 1, \dots, \text{bank } 48$; $t = 1996, \dots, 2006$; $P_{i,t}$ is predicted profits of bank i at time t ; $\sum C_{i,t}$ represents a cluster of company-level explanatory variables of bank i at time t ; $\sum I_t$ represents a cluster of industry-level explanatory variables at time t ; $\sum M_t$ represents

a cluster of macroeconomic explanatory variables at time t ; $CORRUPTION_t$ is level of corruption at time t ; α_o is the regression intercept; $\delta_{1...4}$ represent variable coefficients; while $\varepsilon_{i,t}$ is an error term.

In this model, the focal point of interest was on the coefficient of corruption. $\sum C_{i,t}$, $\sum I_t$, and $\sum M_t$ were infused into the model as control variables. Table 1 (see Appendix) is a compressed exposition of the predicted model's variables.

4 The Results

The final regression results via the backward stepwise regression method are contained in Table 2 (see Appendix). The standard errors of the regression coefficients are highlighted in brackets. Individually, the models explain about 75.1% and 75% of the variation in BTP / TA and ROA, respectively, of banks in Nigeria over the 1996 - 2006 period. Therefore, on the average, the empirical estimations explain about 75% of bank profits variation in Nigeria over the period. Significant F statistics indicate statistical significance of the estimations.

In the main, four reliable inferences can be drawn from the results. First and foremost, the coefficients of corruption in the models are significantly negative, implying that as CPI increases (indicating reduction in corruption), bank profitability in Nigeria significantly decreases. Conversely, as CPI reduces (indicating increase in corruption), bank profitability in Nigeria significantly increases. The significance of the corruption coefficients indicates that banks in Nigeria are significantly thriving from, and may also be complicit in (being benefactors), the high rate of corruption in the country.

The second inference to be drawn from the results is that capital size is a significant negative determinant of bank profitability in Nigeria. In a previous study (Aburime, 2008a), I discovered that capital size had a negative relationship with bank profitability in Nigeria. But, in that study, the relationship was insignificant. I opine that the inconsistency is due to the controlling of suppressor effects in the more recent estimations. However, in both studies, the negative regression coefficients reinforce my assertion of reduced profitability whenever there is an increase in bank minimum share capital requirements in Nigeria.

The third inference is that the composition of credit portfolios significantly influences bank profitability in Nigeria. When credit portfolios are performing, banks' profits are improved and vice versa. This finding is consistent with the one in my previous paper (Aburime, 2009b). Hence, to maximize profitability, banks in Nigeria need to take vibrant steps to minimize occurrence of bad and doubtful debts. Effective credit evaluation and monitoring, at all times, is recommended.

The fourth inference is that risk is a significant negative determinant of bank profitability in Nigeria. This finding is consistent with those of Koehn and Santomero (1980), Kim and Santomero (1988), Bobáková (2003: 21) and Athanasoglou et al. (2005: 14, 25). The profitability of banks in Nigeria partly depends on their ability to foresee, avoid and monitor risks. Hence, in making decisions on the allocation of

resources to asset deals, banks in Nigeria need to always consider the level of risk to their assets.

5 Conclusion

In this paper, I have specified an empirical framework to investigate the impact of corruption on bank profitability. Based on the results of the empirical analysis, banks in Nigeria are significantly thriving from, and may also be complicit in, the high rate of corruption in the country. Therefore, the EFCC and other organizations saddled with the task of eradicating corruption in Nigeria should earnestly beam their searchlights on banks in Nigeria, being possible conduit pipes for corrupt financial flows. Bank officials should be compelled to always act in accordance with existing laws and maintain high technical and ethical standards. Managements of banks in Nigeria should be made to look inward and rid their rank and file of thieves and other dubious persons possessing criminal instincts (Ketefe, 2006: 11). Banks should be enjoined to take, and continue to take, a closer look at their own operations, declining to provide tolerant environments for corrupt financial flows. Bankers who come across corrupt financial transactions during the course of their work must not be party to it. Rather, they should report these transactions to the Independent Corrupt Practices and Other Related Offences Commission, the EFCC, the Code of Conduct Bureau, and other organizations saddled with the task of eradicating corruption in Nigeria. Failure to do so should be met with dire consequences; and CBN sanctions for indicted errant banks should extend beyond the status quo of merely slapping their wrists (Leba, 2007: 17). The Senate Committee on Banking, Insurance and Financial Institutions and the House Committee on Banking and Currency should contribute their quota towards ensuring that banks in Nigeria are no longer linked to acts of corruption. Even though these anti-corruption measures would lead to a decline in the profitability of banks in Nigeria, they would engender professionalism and market discipline, encourage potential FDI, encourage potential public donors, positively impact the scale, form and growth rate of private sector development, and enhance the efficiency of economic activity (Gastanaga et al., 1998; Ugwuodo, 2002; Asiedu, 2003; and Dike, 2004). Undoubtedly, the entire Nigerian society would end up much better.

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Table 1. Variables Exposition

VARIABLE		DEFINITION(S)	SOURCE
Regressand	$P_{i,t}$	Ratio of before tax profits to total assets (BTP/TA) (1)	Athanasoglou <i>et al.</i> (2005)
		Ratio of after tax profits to total assets (ROA) (2) Following Athanasoglou <i>et al.</i> (2005: 13), for the calculation of each regressand, I use the average value of assets of two consecutive years and not the end-year values, since profits are a flow variable generated during the year.	Jiménez <i>et al.</i> (2007: 14)
Determinants	$\sum C_{i,t}$	Company-level variables that could influence the profitability of bank <i>i</i> at time <i>t</i>	Aburime (2008a) and Aburime (2009b)
	$\sum I_t$	Industry-level variables that could influence the profitability of bank <i>i</i> at time <i>t</i>	Aburime (2008b)
	$\sum M_t$	Macroeconomic variables that could influence the profitability of bank <i>i</i> at time <i>t</i>	Aburime (2009a)
	$CORRUPTION_t$	Transparency International's CPI for Nigeria at time <i>t</i>	

Table 2 Final Regression Results

VARIABLES		BTP/TA AS REGRESSAND	β	ROA AS REGRESSAND	β
<i>ao</i>		.357 (.061)***	-	.352 (.061)***	-
$\sum C_{i,t}$	$CAP_{i,t-1}$ (<i>SC to TA</i>)	-.322 (.103)**	-.193	-.333 (.103)**	-.202
	$CCP_{i,t}$ (<i>PL to TL</i>)	.110 (.037)**	.206	.106 (.037)**	.200
	$R_{i,t}$	-.354 (.045)***	-.618	-.351 (.045)***	-.619
	$O_{i,t}$ (<i>FB/DB</i>)	-.039 (.021)	-.124	-.037 (.020)	-.121
$CORRUPTION_t$		-.057 (.025)*	-.135	-.057 (.025)*	-.136
R^2 / Adj R^2		.751 / .734	-	.750 / .734	-
Durbin-Watson		2.165	-	2.162	-
ANOVA (F)		44.658***	-	44.490***	-

Note * $p < .05$, ** $p < .01$, and *** $p < .00$