CAPITAL ADEQUACY REGULATION AND BANK ASSET QUALITY: THE NIGERIAN EMPIRICAL EVIDENCE

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Abstract: The recent arbitrary increase of bank minimum capital base from the current N2 billion to N25 billion with effect from December, 2005, has raised the question of whether or not capital adequacy requirement affects bank asset quality, and hence limit risk concentrations in the banking industry. The theoretical and empirical evidence provides mixed results. In spite of the various contentions based on the grounds of moral hazards and the standard prudential paternalistic models, Dowd (1999) argues that there is nothing wrong with laissez faire banking that capital adequacy regulation will put right. From the empirical data of 23 Nigerian banks, we show that well-capitalised banks reveal poor asset quality characteristics, while undercapitalised banks display better asset quality in their loan portfolios. The computed correlation coefficients show negative linear relationships between capital adequacy and asset quality. The rank correlation measures fall within the region of ± 0.42 at the 5 percent of significance to necessitate accepting the null hypothesis of no significant association between capital adequacy and bank asset quality. What is rather needed is a collective action to facilitate loan repayment behaviour, inculcate sound lending practices, and provide an appropriate policy environment for improving per capita income and savings.

Key Words: Capital ratios, Asset quality, Bank lending, Risk concentration, Monetary policy.

INTRODUCTION

The recently pronounced N25billion minimum capital base for banks by the Central Bank of Nigeria (CBN) scheduled to be effective from December, 2005 has generated heated controversies. The CBN in conjunction with the Presidency have argued with little success that the new minimum capital base would check the fragility of the industry and lack of transparency and rent-seeking behaviour among the banks. They argue that it is a paradox that despite the size of the economy, local banks cannot be assigned the additional responsibility of managing the nation's reserves because of their low capacity. On the other hand, bank chiefs have expressed concern that the new CBN minimum capital requirement could set off a chain reaction that would threaten the entire banking system, if the new policy direction is not well managed.

It is a statement of fact that maintaining confidence is probably the primary function of bank capital. Uninsured depositors must be confident that their money is safe, and borrowers must be confident that the bank will be in a position to give genuine consideration to their credit needs in bad times as well as good. Regulatory capital requirements may prevent a bank from growing beyond the ability of management to manage, may control the ability of a bank to leverage its growth, and may lead to higher bank earnings on assets. Indeed, capital requirements have been used to prevent unjustified expansion in several recent bank holding company decisions. However, one warning is that to rely solely, or even primarily, on bank capital requirements to achieve all of these tasks of bank capital is obviously unsound. The question of the connection between banking problems and bank capital became even more intense after the widely publicised bank failures and reorganisations that characterised the global financial system in the 1980s and 1990s. While some of the troubled or failing banks had below-

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average amounts of capital, it was poor management, large loan losses, and poor liquidity that seemed to be the primary causes of these problems. It is, therefore, highly questionable whether more capital alone would have kept banks such as Penn Square, Continental Illinois, First Republic or Mcorp open in their existing forms. Consequently, the concensus of scholarly research is that the level of bank capital has not been causally related to the incidence of bank failure. Historically, banking crises occurred in periods of prolonged cyclical instability. Failures resulted from a loss of public confidence in the banking system (see Hempel, et al, 1994). Moreover, current empirical research shows that a stringent capital adequacy regulation can limit the effectiveness of the monetary transmission mechanism, thus curtailing the level of investment in the economy (see Misa, 2002).

It has been argued that the bank distress era of 1993-97 reveals that lending defaults was essentially responsible for over 75 per cent of the casualties suffered by the Nigerian banking sector (Tilije, 2003). The survival of banks and their ability to compete depends primarily on their ability to manage credit risks. While financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management or a lack of attention to changes in economic or other circumstances that can lead to a deterioration in credit standing of a bank's counterparties. In a critical review of 13 banks, Aminu (2003) has noted that in majority of the banks, the level of provisioning has increased markedly in line with the growing rate of deterioration in loan portfolio.

Within this framework, the question that is not yet asked and answered is whether or not capital adequacy regulation improves asset quality in banks. It is strongly opined in Litan (1993) that more market discipline is rather necessary to limit the level of risk concentration in the banking industry. This study is not however intended to investigate the market discipline of bank risk, but we intend to show empirical evidence on the seeming trends in bank capital adequacy and asset quality ratios in Nigeria. Our results would enable us to re-appraise the current supervisory and regulatory framework in Nigeria with a view to strengthening the banking industry.

The next part of this paper presents the background to the Nigerian macroeconomic policy framework and asset quality of banks. The third part of the article presents the theoretical and empirical debate on capital adequacy regulation, and the role of bank lending in the monetary transmission mechanism. The fourth section presents the hypothesis to be tested and the research methods, while part five summarises the empirical evidence. The final section concludes the paper with far-reaching recommendations.

THE BACKGROUND

The data in Table 1 show that the Nigerian macroeconomic environment has constrained the performance of the banking industry in a number of ways.

First, an average GDP per capita of N1,060.20 in the 1996-2000 period, has resulted to a Gross National Savings rate of 11.1 per cent within the same period. Hence, the marginal propensity to consume is always greater than the marginal propensity to save.

Second, those who save, particularly in the commercial banking sub-sector, do so on a short-term basis. Hence, the gross fixed capital formation rate, with an average of 5.8 per cent in the 1996-2000 period, lags behind savings. In the absence of any viable development finance institution in the country, the commercial banks have had to lend to the productive sector from a highly time-constrained deposit liabilities portfolio.

Although, the banks overshot the Minimum Liquidity Ratio (MLR) of 35-40 per cent, aggregate credit to the domestic economy has been on the decline due to an unprecedented record of loan defaults experienced by banks in recent times. Tilije (2003) has shown that over the past five years, industry-wide asset quality has continued to deteriorate. The proportion of non-performing loans to total loans increased from 16.90 per cent in 2001 to 21.27 per cent in 2002.

However, the money supply average of 23.1 per cent for M1, and 27.1 per cent for M2, overshot the targets of 10.0 per cent for 1999, and 14.6 per cent for 2000. This excess liquidity could have been caused by massive public sector borrowings from the banking sector, especially in 1998, and the expansionary average liquidity ratios of both commercial and merchant banks. From Table 2, we observe that 52.2 per cent of the banks in the data set had their percentage of classified loans' portfolio below the average of 17.6 per cent. In terms of loan loss reserves to classified loans, 69.6 per cent of the selected banks in Panel 1 had inadequate loan loss reserves, while 30.4 per cent of the banks had their loan loss reserves ratio above the average of 95.5 per cent. From Panel data II, we observe 60.9 per cent of the selected banks exhibiting the percentage of classified loans below the average of 21.1 per cent. On the whole, we observe that, while majority of the selected banks endeavoured to reduce their percentage of classified loans portfolio below the group average, they also showed inadequate provision for loan loss reserves. The overall average percentage of classified portfolio increased from 17.6 per cent in the 1997-99 period to 21.1 per cent in the 2000-2002 period. However, the overall loan loss reserves ratio declined from 95.5 per cent in the 1997-99 period to 81.2 per cent in the 2000-2002 period.

REVIEW OF RELATED LITERATURE

This part of the article reviews the theoretical and empirical debate surrounding capital adequacy regulation vis-à-vis market discipline of bank risk. We also summarise the controversy about the importance of bank lending for the transmission of monetary policy.

Asymmetric Information and Bank Capital Regulation

One of the more important developments in modern central banking is the rise of capital adequacy regulation – the imposition by regulators of minimum capital standards on financial institutions. Most bank regulators see capital adequacy regulations as a means of strengthening the safety and soundness of the banking system, and many see it as a useful – perhaps even necessary-response to the moral hazard[1] problems created by deposit insurance and the existence of a lender of last resort to assist banks in difficulties. If deposit insurance and a lender of last resort encourage banks to take excessive risks and run down their capital, then forcing banks to strengthen their capital positions is a fairly regulatory response.

Yet arguments for capital adequacy regulation are relatively sparse and not particularly convincing. Traditionally, there are three main arguments for capital adequacy regulation. The first is that capital adequacy regulation is needed for prudential reasons, but most advocates of this position only take the argument to explain why the prudential "need" is there in the first place.

The second argument posits that capital adequacy regulation is needed to counter moral hazard problems created by the regulators themselves (see, for example, Benston and Kaufman, 1996). However, this argument – whatever its merits – gives us no reason to prefer

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[1]   Moral hazard is the loss exposure an insurer faces when providing insurance, and this encourages the insured to take more risks.

capital adequacy regulation to laissez faire. The final argument, more popular in Europe than in the United States, is that capital adequacy regulation is needed to protect small depositors. This argument boils down to pure paternalism but is also open to other objections. For example, the objection that protecting depositors undermines the market discipline that would otherwise force banks to be strong. In any case, even if one were sympathetic to paternalistic considerations, it is still unclear why the "small" depositors should benefit at the expense of the taxpayer, since the typical taxpayer is just as "small" as the typical depositor.

Perhaps the most important argument is the one put forward by David Miles (1995). He suggests that an information asymmetry between bank managers and depositors could produce a market failure that provides a rationale for government (or central bank) intervention in the financial system. This intervention would take the form of capital adequacy regulation to force banks to maintain a stronger capital position than they otherwise would. However, Miles' defence is not too convincing: (1) He doubts that banks have the "right incentives" to provide adequate information, and claims that, given this information asymmetry, banks would have an incentive to play up the size of their capital positions, (2) He acknowledges the possible role of private rating agencies, but instead of seeing it as restoring the optimality of laissez faire, he dismisses it on the grounds it "is much harder to show how such an equilibrium becomes established", (3) Finally, he suggests that regulation "cuts through" these problems of "establishing the right incentive for banks to reveal their true default risks by using the legal system" (Miles 1995:1376-77).

However, Miles' work has been criticised on the following grounds. First, banks do have strong incentives to signal their individual capital strengths, as explained in the text, and the fact that banks have an incentive to exaggerate their strengths if the public cannot tell them apart proves nothing. The relevant issue is not whether banks have an incentive to play up their capital positions, given that the public cannot tell them apart, but whether an individual bank would wish to signal its true capital position, if it had the means to do so. Second, Miles still fails to explain why a rating agency could not (or would not) provide the information that enables depositors to assess their banks, assuming that they could not otherwise assess them and that the information is technologically attainable as Miles assumes. Thirdly and finally, the incentives to provide information already exist in the free market, since good banks will always want to signal their quality. We therefore deny that regulation "cuts through" any problems, in a way that could not otherwise be done. In any case, regulation creates a whole new set of problems, since the regulatory process is not costless and we ought not to ignore the regulators' own interests or their record.

In his critique of regulators, Dowd (1999) has noted as follows:

> Bank regulators are deluding themselves if they think that there is any compelling economic justification for capital adequacy regulation. No one has yet provided a convincing case for it on market failure grounds, and the standard prudential paternalistic arguments usually cited to defend such regulation do not meet even basic standards of economic analysis. No one has yet shown that there is anything wrong with laissez faire banking that capital adequacy regulation will put right.

Perhaps the best argument for capital adequacy regulation – and even that is highly problematic[2] is that it might help counter the moral hazard created by the regulatory authorities themselves. But this is an argument based on government failure rather than market failure, and it is surely better for regulators to stop creating moral hazard problems in the first place. Regulators should

get their own house in order. Government failure does not constitute a good argument for government intervention.

Bank Lending and the Transmission of Monetary Policy

Bank lending has received increasing attention as an important component of the transmission of monetary policy. Proponents argue that changes in banks assets as well as bank liabilities influence the future course of the economy. Because financial constraints may alter firms' investment, employment and financing decisions, it is important to understand which firms might be constrained and under what circumstances. Many economists remain skeptical of the role of banks, however, believing that a focus on interest rates or money aggregates is sufficient for understanding the transmission of monetary policy.

Himmelberg and Morgan (1995) contend that not only are bank loans special but a surprisingly large percentage of firms continue to depend on banks for financing. Despite much previous work emphasising the dwindling role of banks, they show that the reliance of manufacturers on banks has not declined over the past decade, and that small manufacturers remain especially dependent on banks. In another study Peek and Rosengren (1995) find evidence consistent with both monetary and bank regulatory policy altering the supply of bank loans. However, they emphasise that to the extent a distinct lending channel exists, its magnitude is likely to be dependent on the financial condition of banks. Using data from New England banks, Peek and Rosengren provide evidence that capital-constrained and unconstrained banks react differently to changes in the federal funds rate. A major implication of their findings is that the capital requirement constraint faced by banks, as well as the bank reserve constraint, should be taken into account in determining the likely effect of monetary policy.

The works of Hubbard (1995) and James (1995) also help to explain how monetary policy and regulatory policy affect bank loans. Hubbard emphasised that it was difficult to distinguish fully between the effects of changes in the federal funds rate on constrained banks and on unconstrained banks, using only a limited time series for one region in the country. He cautions that examining bank reactions to monetary policy shocks is only a small part of the lending view, and that more complete tests would match borrowers, loans, and lender characteristics. James suggests that a discussion of banks' reactions to monetary policy must carefully consider more than just the leverage ratio constraints.

HYPOTHESIS AND RESEARCH METHODS

The major null hypothesis (Ho) in this study is that there is no significant association between capital adequacy and bank asset quality. Our test results would be complemented by descriptive statistical measures such as simple averages.

Data Sources

The data for this study was generated from secondary sources published in several issues of the *Financial Standard*. The capital adequacy ratios were equity-to-total assets, equity-to-loans and advances, and permanent assets-to-equity ratios. The commonly employed indices for asset quality are proportion of classified loans, loan loss reserves-to-classified loans, and classified loans-to-equity stock. The average values of these

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[2] · It is highly questionable whether capital adequacy regulation even does this. Capital adequacy regulation creates a moral hazard of its own, and it is doubtful whether the particular regulatory system actually used (most particularly, the "building block" system approved by the Basle regulatory framework) does much to improve banks' capital positions (see Dowd 1997: 99-105).

measurement criteria were computed for twenty-three banks for 1997-99, and 2000-2002. The results are reported in Appendices I, II, III and IV, also referred to as Panel Data I, II, III and IV

In our analysis, those banks with capital adequacy ratios in excess of the average are regarded as well capitalised, while those below average are treated as undercapitalised. These banks are then compared with the asset quality ratios calculated for the same period. These results are reported in Table 3 from Appendices III and IV.

The choice of the twenty-three banks was based on the availability of data for the periods under investigation. There were some exceptions, however. For some banks we used readily available data for close periods since our aim is to examine the extent capital adequacy helps to improve asset quality and hence limit risk concentration in the Nigerian Banking industry. Generally, it is difficult to obtain up-to-date balance sheet data on Nigerian banks.

Correlation Measures and Significance Testing

To establish the degree of association between capital adequacy and bank asset quality, two measures of correlation were adopted. The usual correlation coefficient, denoted as r, is represented in equation (1) as follows:

$$r = \frac{n \sum\limits_{i=}^{n} x_i y_i - \left[\sum\limits_{i=1}^{n} x_i\right]\left[\sum\limits_{i=1}^{n} y_i\right]}{\sqrt{n \sum\limits_{i=1}^{n} x_i^2 - \left[\sum\limits_{i=1}^{n} x_i\right]^2} \sqrt{n \cdot \sum\limits_{i=1}^{n} y^2 - \left[\sum\limits_{i=1}^{n} y_i\right]^2}} \quad (1)$$

where x is the ratio of equity to total assets, and y is the proportion of classified loans in the total loan portfolio. The value of n is the 23 banks under consideration. The selected ratios are the most widely used measures of capital adequacy and bank asset quality in Nigeria.

The rank correlation coefficient, r', was also calculated to enable us test the significance of the computed degree of association between x and y without an assumption of our sample being drawn from a normal distribution as is required under r. The rank correlation coefficient is represented in equation (2) as follows:

$$r' = 1 - \frac{6\left(\sum d_i^2\right)}{n(n^2 - 1)} \quad (2)$$

where d stands for the difference between the ranks of the corresponding x_s and y's.

In the statistics literature, the interpretation of r has posed a number of problems. Freund and Williams (1983) have noted that the coefficient of correlation is one of the most widely used and also one of the mostly widely abused of statistical measures. It is abused in the sense that one sometimes overlooks the fact that r measures nothing but the strength of linear relationships and that it does not necessarily imply a cause-effect relationship. However, Loveday (1979) has noted that with n = 20, we need a minimum value of r = 0.45 for correlation to be likely.

In order to accept our null hypothesis (Ho) at the 5 percent level of significance, the computed r' should lie between –1.96 and + $\frac{1.96}{\sqrt{n-1}}$ $\sqrt{n-1}$

or between - 0.42 and + 0.42. We reject the null hypothesis if r' < -1.96 or > 1.96 $\sqrt{n-1}$ $\sqrt{n-1}$

EMPIRICAL RESULTS

From Table 3, we can observe from Panel Data III, that 56.6 per cent of the banks had an equity-to-total assets ratio that was below 12.0 per cent in the 1997-99 period. Other measures of capital adequacy revealed 73.9 per cent of the banks with

equity-to-loans and advances below an average of 39.2 per cent, followed by 52.2 per cent of the banks having a permanent assets-to-equity ratio that was above a average of 55.4 per cent. However, these undercapitalised banks had the ratio of classified loans and advances below an average 73.0 per cent, showing improved asset quality. From Panel Data III, we equally note that those banks whose capital adequacy ratios were above average had asset quality ratios that exceeded the group average of 73.0 per cent, implying poor asset quality.

From Panel Data IV covering the 2000-2 period, majority of the banks, on the basis of two capital adequacy ratios out of the three listed, manifested undercapitalisation compared with averages of 14.1 per cent for equity-to-total assets ratio, and 41.8 per cent for equity-to-loans and advances. Accordingly their classified loans-to-equity stock rates also performed below the industry average of 70.5 per cent. It is only in one case that eleven banks, representing 47.8 per cent of the banks in the group, had an asset quality ratio that was below 70.5 per cent. However, majority of the well capitalised banks had asset quality ratios in excess of 70.5 per cent, showing poor asset quality.

An inter-temporal analysis of the overall averages of the capital adequacy and asset quality ratios between 1997-999, and 2000-2 periods, reveal two important facts. First, using equity-to-total assets and equity-to-loans and advances the banks on average revealed marginal improvements in their capital adequacy. In terms of the permanent-assets-to-equity ratio, there was a significant decline from 55.4 per cent in the 1997-99 period to 39.8 per cent in the 2000-2 period. Second, as capital adequacy ratios improved marginally, the ratio of classified loans-to-equity stock also declined marginally from 73.0 per cent to 70.5 per cent over the two periods. Assuming the assets are risk-weighted, a capital adequacy ratio of 14.1 per cent is in strict compliance with the Basle Capital Accord

I (1988) which prescribes a minimum risk-weighted capital ratio of 8 per cent.

The data in Table 4 show the correlation coefficients and significance tests of our null hypothesis. From the 1997-1999 data, the normal correlation coefficient (r) is -0.001 which reveal a very weak, and infinitesimal negative linear relationship between the capital adequacy measure (equity to total assets) and bank asset quality measured using the proportion of classified loans. The 2000-2002 data reveal an r of -0.95, showing a very strong negative linear relationship between capital adequacy and bank asset quality. This means that in 95 percent of the cases, banks with high capital adequacy measure exhibited poor asset quality, while banks with below-average capital adequacy measure manifest high asset quality in their loans portfolio.

The rank correlation coefficients (r') are 0.073 for the 1997-99 period, and 0.141 for the 2000-2 period. These results confirm that correlation is not most likely between capital adequacy and bank asset quality. Since our computed r' values of 0.073 and 0.141 lie within the region of -0.42 and $+0.42$, at the 5 percent level, we accept our null hypothesis of no significant association between capital adequacy and bank asset quality.

CONCLUSION

The results on the nature of the relationship between capital adequacy and asset quality are mixed. At the individual bank level, we find that undercapitalised banks showed superior asset quality characteristics, while well capitalised banks manifested poor asset quality. The correlation coefficients show negative linear relationship between capital adequacy and bank asset quality. The rank correlation measures fall within the acceptance region of our null hypothesis. These findings are contrary to the belief by the regulatory authorities that increased capitalisation requirement would limit risk concentration in the Nigerian banking industry.

The evidence shows that a classified loans-to-equity stock ratio of 70.5 per cent for the twenty-three (23) banks in the 2000-2 period means a very high level of risk concentration in the industry.   On the aggregate, marginal improvements in capital adequacy resulting in a 2.5 per cent improvement in asset quality is not conclusive. The significant reduction in the ratio of permanent assets-to-equity proves this mixed feeling.

What is rather needed is a collective action to facilitate loan repayment behaviour, avoid poor lending practices, and a general improvement in the national economy through effective macroeconomic policies. With these results, the reluctance of banks to expand credit to the economy, even when the cash reserve requirement is lowered, can be clearly understood. Both supervisors and banks should enforce strictly the Basel Committee's Know Your Customer (KYC) standards from a prudential perspective in the effective management of banking risks. There is also a need to review the present deposit insurance system, and the lender-of-last-resort function of the CBN if we intend to minimise future moral hazards with their attendant concentration risks and financial costs to the banking industry.

Table 1: Selected Nigerian Macroeconomic Indicators (1996-2000)

Indicator	1996	1997	1998	1999	2000	Average (1996-2000)
Real GDP Growth Rate (%)	3.4	3.2	2.4	2.8	3.8	3.1
Gross National Savings (% of GDP)	12.4	13.9	9.2	10.5	9.4	11.1
Gross Fixed Capital Formation (% of GDP)	5.1	5.4	5.3	5.4	7.9	5.8
Net domestic credit to economy(%)	-23.4	-2.8	46.8	30.1	-23.1	5.9
Net Credit to government (%)	-55.6	-53.5	144.9	32.0	+62.3	-18.9
Credit to private sector (%)	23.9	23.9	27.4	29.2	30.9	27.1
Narrow Money (M1)	14.5	18.2	20.5	18.0	62.2	23.1
Broad Money (M2)	16.8	16.9	23.3	31.0	48.1	27.1
GDP Per Capita (N)	1,051.8	1,056.1	1,051.0	1,0759	1,066.4	1,060.2
Commercial Banks: Average liquidity ratio (%)	40.1	37.8	42.6	50.9	56.2	45.5
Average loan/deposit ratio	69.0	71.4	70.4	54.1	43.7	61.7
Merchant Banks: Average liquidity ratio (%)	38.4	39.1	39.3	55.3	54.1	45.2
Average loan/deposit ratio (%)	99.5	109.6	95.4	91.2	81.4	95.4

Sources: CBN 2000 Annual Report and author's calculations.

Table 2: *Aset Quality Characteristics of Selected Nigerian Banks (Average Values)*

Data Sources	Percentage of Classified loans (%)	Loan loss reserves to classified loans (%)
Panel Data I (1997-99)		
Overall average	17.6	95.5
Banks above average	11(47.8%)	7(30.4%)
Banks below average	12(52.2%)	16(69.6%)
Panel Data II (2000-2002)		
Overall average	21.1	81.2
Banks above average	9(39.1%)	11(50.0%)
Banks below average	14(60.9%)	11(50.0%)

Sources: See Appendices I and II.

Table 3: *Capital Adequacy And Asset Quality Ratios Of Selected Nigerian Banks (Average Values)*

Data Sources	Equity / Total Assets	Equity / Loans & advances	Permanent Assets / Equity	Classified Loans / Equity stock
Panel Data III (1997-99)				
Overall average (%)	12.0	39.2	55.4	73.0
Banks above average	10(43.5%)	6(26.1%)	11(47.8%)	10(43.5%)
Banks below average	13(56.5%)	17(73.9%)	12(52.2%)	13(56.5%)
Panel data IV (2000-2)				
Overall average (%)	14.1	41.8	39.8	70.5
Banks above average	9(39.1%)	9(39.1%)	12(52.2%)	11(47.8%)
Banks below average	14(60.9%)	14(60.9%)	11(47.8%)	12(52.2%)

Sources: Appendices III and IV.

Table 4: *Correlation Coefficients and Significance Tests*

Period of Study	Correlation Coefficient (r)	Rank Correlation Coefficient (r ')	Acceptance Region of Ho
1997 - 99 Data	- 0.001	0.073	0.42
2000 - 2 Data	- 0.95	0.141	0.42

Source: Author's calculations based on Appendices 1 - IV.

Appendix I: *Asset Quality Ratios of Selected Nigerian Banks (1997-99)*

Bank	Proportion of Classified loans(%)	Loan loss Reserves/classified loans(%)
1. Habib Bank	11.0	71.0
2. NAL Merchant Bank	20.3	77.0
3. FBN (Merchant Banks)	2.7	131.1
4. Chartered Bank	7.8	83.5
5. Trans International Bank	32.9	38.6
6. Diamond Bank	7.2	66.3
7. Omegabank	33.0	100.1
8. Standard Trust Bank	39.5	85.0
9. African International Bank	22.9	52.9
10. Hallmark Bank	37.3	67.3
11. Zennith International Bank	1.7	157.9
12. Universal Trust Bank	18.7	60.0
13. Continental Trust Bank	6.3	115.4
14. Liberty Merchant Bank	11.3	78.8
15. Wema Bank	8.1	90.9
16. Inland Bank	16.0	60.7
17. Manny Bank	22.4	83.9
18. Citibank	3.0	220.3
19. First Bank	21.6	96.7
20. Afribank	17.0	89.6
21. Guaranty Trust Bank	3.6	104.5
22. Union Bank	34.3	170.0
23. United Bank for Africa	21.6	95.0
Overall average	17.6	95.5

Source: Author's calculations from several issues of Financial Standard.

Appendix II: Asset Quality Ratios Of Selected Nigerian Banks (2000-2)

Bank	Proportion of Classified loans (%)	Loan loss reserves/ classified loan
1. Habib Bank	18.3	73.6
2. Lion Bank	25.1	70.9
3. Universal Trust Bank	17.9	79.5
4. FBN (Merchant Bankers)	16.7	73.7
5. INMB Bank	8.0	n.a.
6. Magnum Bank	9.9	91.9
7. Afribank	27.3	94.8
8. Prudent Bank	8.7	83.6
9. Equity Bank	32.1	79.6
10. City Express Bank	25.4	63.7
11. Gulf Bank	16.9	97.1
12. Fortune International Bank	28.8	54.9
13. Global Bank	32.6	59.2
14. Fidelity Bank	19.1	83.0
15. Standard Trust Bank	8.8	96.8
16. First Atlantic Bank	16.7	99.9
17. Hallmark Bank	29.4	55.9
18. Marina International Bank	3.2	124.65
19. Wema Bank	16.7	84.7
20. Broad Bank	33.5	100.9
21. Trade Bank	55.9	57.6
22. Lead Bank	16.5	67.4
23. United Bank for Africa	17.7	92.2
Overall average	21.1	81.2

Source: Author's calculations from several issues of *Financial Standard.*

Appendix IV: *Capital Adequacy and Asset Quality Ratios of Selected Banks in Nigeria (Three – Year Average)*
2000 – 2002

Bank	Equity/ Total Assets	Equity/ Loans & advances	Permanent assets Equity	Classified loans/ Equity stock
1. Habib Bank	8.2	26.3	58.3	73.9
2. Lion Bank	18.1	70.5	40.4	51.9
3. Universal Trust Bank	9.6	28.5	27.1	72.6
4. FBN (Merchant Bankers)	15.5	46.7	18.3	44.0
5. INMB Bank	29.7	83.4	8.0	10.1
6. Magnum Bank	10.8	49.9	60.1	25.4
7. Afribank	7.2	27.5	75.9	134.4
8. Prudent Bank	13.8	35.3	40.1	27.0
9. Equity Bank	11.5	37.6	59.0	114.8
10. City Express	12.2	36.4	58.8	80.8
11. Gulf Bank	19.8	47.8	17.1	48.2
12. Fortune International Bank	27.9	46.6	22.9	99.7
13. Global Bank	11.8	30.9	43.4	130.5
14. Fidelity Bank	10.5	40.5	49.7	59.0
15. Standard Trust Bank	8.9	31.8	43.2	31.5
16. First Atlantic Bank	16.8	45.6	34.8	15.0
17. Hallmark Bank	11.4	31.5	32.6	113.7
18. Marina International Bank	20.8	48.8	23.1	6.8
19. Wema Bank	9.0	27.2	63.0	77.8
20. Broad Bank	16.5	61.5	39.3	86.5
21. Trade Bank	11.8	37.7	21.8	205.2
22. Lead Bank	17.2	38.1	17.0	43.2
23. United Bank for Africa	6.1	31.3	60.8	68.9
Overall average	14.1	41.8	39.8	70.5

Source: Author's calculations.

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