Contemporary Banking Policies and the Fragility of the Nigerian Banking Sector

Amenawo I. Offiong (PhD)
Department of Banking and Finance
University of Calabar
Cross Rivers state
Nigeria
ameofiong@yahoo.com

Hodo B. Riman (PhD)
Department of Banking and Finance
University of Calabar
Cross Rivers state
Nigeria
horim105@yahoo.com

James G. Bassey (PhD Candidate)
Department of Banking and Finance
University of Calabar
Cross Rivers state
Nigeria
jommyhill@yahoo.com

Abstract
Banking policies in the Nigerian banking industry are constantly being reformed in the bid not just to strengthen the industry but also to reposition the banking sector for global competitiveness. This paper sought to investigate if the recent bailout policy amongst other policies may have had an effect on bank's fragility. The paper utilized the multinomial logistic model previously specified by Degrys, Elahi and Ponas (2013) to investigate the phenomenon in question. The hypothesis of the study was adopted from Brandao-Marques, Correa and Sapriza (2010) who had proposed that Government support to banks through the provision of explicit or implicit guarantees affects the willingness of banks to take on risks by reducing market discipline or by increasing charter value. The findings in this study established that banking soundness, economic climate and unresponsive bank management exacerbates bank fragility in Nigeria. The study recommended that corporate governance structure of banks should not only be seriously monitored but also be made to accommodate the risk-taking behavior of bank in line with Basel III accord.

Keywords: Nigeria, Contemporary bank policies, Bank fragility, Bailout, Multinomial logistic model.

1.0   Introduction

Amongst the various institutions in the financial system, banks are considered to be more fragile than non-bank institutions. This is mainly due to the peculiar features of a typical financial structure of a bank. Firstly, banks and non-bank financial institutions have a tendency to be highly leveraged in terms of the low capital to assets ratio when compared with institutions that are non-financial in structure. Their cushion against insolvency is relatively

low compared to non-financial firms. Banks also tend to have a mismatch between their assets and liabilities more than non-financial firms. As a result of this divergence banks are delicate to withdrawals of huge funds which may sometimes involve sell of certain of their assets (Kroszner & Strahan, 1996). These have made banks to be under constant monitoring and regulation in a bid to strengthen the sector.

Undoubtedly, cautiously regulating the banking system is a key concern for financial regulators because of the huge cost that may be as a result of instability in the banking system. Banks also tend to easily have large number of non-performing loans which makes them incur cost. Hoggarth, Reis and Saporta (2002) estimated incurred fiscal costs that has been witnessed in the last two decades in resolving banking crisis and found out that the losses incurred during the periods of crisis averages between 15-20 per cent of a country's annual gross domestic product. As such, an in-depth insight of the underlying foundations of systemic banking crisis is a notable task for a prudent financial regulator. In cushioning against perceived insolvency, a higher capital base would suffice. Freixas, Parigi and Rochet (2000) Allen and Gale (2000) and Eyo and Offiong (2015) argued that banking system that is well-capitalized would aid the reduction in possible contagion effects from failures arising from individual bank in the same economy or market.

Over the years, the Nigerian banking industry has been undergoing a lot of policy changes. In the Nigerian banking sector, contemporary policies are evolved regularly by the various monitoring authority (Central Bank of Nigeria, Nigerian Deposit Insurance Corporation etc.) to help strengthen the sector. Nevertheless, it has been observed that not all these policies may have impacted positively for some banks in the industry thus the fragility of one bank may undermine the functionality of several banks in the economy. Banking reforms involves systematic review of rules and regulations governing banking practice with a view to achieving systemic stability and sustainability while conscientiously creating meaningful wealth for shareholders (Adam, 2005). It facilitates introduction of policies that would attract the right incentives for financial institutions to take the lead in empowering productive private sector outfits for accelerated economic growth. Over the years, these policies may have sparked system-wide volatility not only in less-developed and developing countries but also in the emerging and advanced economies of the world (Agundu & Agbahiwe, 2014). The Nigerian banking sector has witnessed deregulation, monitored deregulation, several recapitalization and corporate governance reforms.

All these reforms have aimed at strengthening the banking system. Though bank distress has not been experienced lately, it is however of concern that certain banks in the Nigerian financial system had to be given bailout in 2009 and restructured to stabilize them. It even becomes more disturbing with the present dwindling of oil prices which is the main stay of the Nigerian economy. Couple with government introduction of single treasury account for all Ministries departments and agencies and various foreign exchange restrictions, one begins to wonder how fragile or strong the Nigerian banking sector is to handle these policies.

Recapitalization of the Nigerian banking industry was to help strengthen the industry because bigger banks are supposed to be more stable. Those who hypothesized the views of concentration-fragility did not agree with the notion that few banks that are considered as being large were easily monitored and controlled than the many banks that are considered small. Therefore, if bank sizes were to have a direct link with complexity, then monitoring and controlling small banks would be less difficult as compared with monitoring and controlling larger ones. There are however some authors that maintain that banks considered to be larger

ones are implicitly protected by the policy of "too big to fail" that small banks are not opportune to benefit from. This protective policy strengthens the risk-taking incentives far beyond any known benefits that larger banks enjoyed as a result of diversification (Mishkin, 1999; Boyd & Runkle, 1993; O'Hara & Shaw, 1990). If going by this arguments Nigerian banks may have nothing to worry about. It would therefore be the major aim of this paper to look at some of these contemporary policies which may have affected the industry. In other to achieve this, this study would focus on the soundness of banks, economic climate and management/concentration of banks in Nigeria.

2.0   Literature Review

The economy of Nigeria was hit by the global crisis second round effect as the stock market witnessed a downward trend of about 70.0 per cent between 2008 and 2009 and this caused plenty of banks in Nigeria to sustained massive losses, especially as it concerns their exposure to the oil and gas downstream sectors and the capital market (Sanusi, 2010). According to him, about eight factors that inter-relate were found to be responsible for wave of the banking crisis in Nigeria in 2008 when a holistic approach was employed on what went wrong. They were inadequate customer and investors' sophistication, unstructured management approach by the central bank of Nigeria (CBN), loose gaps in regulatory structures, macroeconomic instability, poor transparency and corporate governance disclosure by banks, uneven enforcement and supervision and poor operating environment for businesses. These were the fundamental issues that almost brought about the collapse of the entire financial system in Nigeria.

As a result of this, about eight (8) banks were deemed to have been rescued from severe liquidity problems through the injection of fresh liquidity and capital, prosecuting those involved in breaking the rules of standard ethics and practices, and demoting and stepping down of most top executives. This approach was adopted with the sole aim of restoring sanity and boosting of confidence in the banking system. According to Sanusi (2010), as a result of the 2008 banking crisis, the CBN made available a working document termed as "the project alpha initiative" with the sole aim of revolutionizing the banking sector especially and financial system in general in Nigeria. The revolution exercise had a target to deal with the associated fragmentations and weaknesses inherent in the financial system and unleashing of the vast opportunities inherent in the Nigerian economy (Alade, 2012).

With respect to Malaysia, Aziz and Duenwald (2002) stated that banking reforms were introduced in reaction to the 1990s' financial crises in Asia. This brought about enormous research interest in the public due to the resilience of the financial system and the entire economy. These policy measures were introduced which helped to manage banks' exposure to real estate and capital market-related risks. Between the 1998 and 1999, the financial regulatory authorities following a series of critical interferences, strictly defended the national currency (exchange rate). The high points were the deployment of blanket guarantee for all bank deposits, establishment of bank recapitalization/restructuring body and setting up an assessment agency, as well as introduction of monetary/capital controls. Prudential regulations alongside the establishment of dedicated firms charged with the responsibility of consolidating, recapitalizing and rationalizing banking and allied financial institutions. Accordingly, between 1999 and 2001, 54 banking institutions were reported to have been successfully consolidated into ten banking groups. The economy also better withstood the impact of financial crisis by maintaining strong strategic macroeconomic policies (Agundu & Agbahiwe, 2014).

Some literatures have fixated on the effect of the bank on the economy at a macro stance, with deep concern on the part they played in money supply determination. The banking

industries involvement in the process of money supply is apparently an important consideration in the policy of regulating banks. However, if the policy on banking regulation is based on macroeconomic goals, then, the core services of the banks would not see the light of the day. Oftentimes, most regulatory policies on the basis of macroeconomic goals have gone as far as to portray that the existence of banks is insignificant since banks can be replaced by other non-banking financial institutions such as mutual funds and so on. There is a great danger in this position because banks still have pertinent functions in the growth of any economy (Diamond & Dybvig 1983).

The instruments of micro-prudential and capital base are supposed to guarantee with much certainty, individual bank's solvency with the assurances that stable banks would engender a stable and reliable financial system. Monetary policy on the other hand should disregard expressly certain financial issues and focus on attaining price stability over various time horizons. Certain experiences have changed this acumen, thus, firstly, the conventional statutory requirements for the solvency of individual bank (adequate capital and asset quality) do no longer upheld as fitting for stability in the financial system as regulators are constantly pressured to employ a macro-prudential approach and various Basel accords have enhanced these. On the other hand, monetary policy should be centered on systemic risks control in the financial system as a result of the crisis, the systemic risks proved its negative effect on price stability and output, and further revealing the extent to which monetary policy can define the degree of riskiness of the financial sector.

Monetary policies rest primarily on linkage between interest rates in an economy. Monetary policy uses a various regulatory approaches in stabilizing and stimulating the growth of the economy, an acceptable exchange and inflation rates and reduced unemployment level. On the premise of monopolistic currency issuance, the monetary authority is empowered to intervene on the subject matter of interest rates and money supply in order to achieve its policy goals. However, if monetary policy is regarded as being incredible, policy makers would not attain its expectations.

Developed economies like the core European economies and the United States (U.S) have revealed the significant essence of the effectiveness of innovations in monetary policy on real economic parameters (Rafiq & Mallick, 2008; Bernake, Jean & Piotr, 2005; Mishkin, 2002; and Christiano, Martin & Charles, 1999) as citied by Chuku (2009). On the side of developing countries like Nigeria, the policies are weak and full of puzzles which has been the order of the day. According to Balolgun (2007), who test monetary policy ineffectiveness in Nigeria using the simultaneous equation revealed that, instead of engendering economic growth, erstwhile domestic monetary policy was the main root cause of persistent inflation and economic stagnation. The case was the same for countries like Ghana, Sierra Leone, Guinea and Gambia using the same models (Chuku, 2009).

The outstanding puzzles commonly identified are categorized into aspects; the price puzzle, the liquidity puzzle and the exchange rate puzzle. Considering the liquidity puzzle, it is revealed that rather than a decrease in interest rate, monetary aggregates increases should aligned increased in interest rates. With regards to the price puzzle, the positive innovations in interest rate which resulted in monetary policy contractions seem to facilitate increase in prices. Lastly, the exchange rate puzzle has been considered in any open economy as mostly common, held that a decrease in interest rate is associated with an appreciation of the local currency. However, following the work of Lucas (1972) most authors have sets out effective approaches in order to deal with the identified puzzles through the incorporation of rational expectations

from monetary policy effects. This was widely supported by authors such as Zhang (2009); Brument and Dincer (2008); Khan, Shmuel & Oded et al. (2002) and Cochran (1998) as cited in (Chuku, 2009).

It is no longer news that interest rate in Nigeria is high and that the foreign exchange rate has risen to an all-time high particularly in the parallel market. The CBN has been struggling to bring it down with certain restrictions like limitation on the amount spent on foreign currency on Nigerian card, the stop of sell of foreign exchange to bureau de change and restrictions on school fees payments to student schooling abroad. But given the high rate of interest rate as well the drop in foreign reserves due to the drop in crude oil prices one wonders if these measures would not destabilize the banking sector. Inflationary counter policy considers exchange rate as a key conditioning constant. This emanates from the preposition that price changes causes nominal wages to adjust and the fundamental pricing make-up model. Under this condition, information about exchange rate is conveyed regarding economic fundamentals and inflationary expectations would affect a fast-depreciation domestic currency. The possibility of instability being witnessed within macroeconomic fundamentals as a result of a fast depreciating local currency is the sole reason why the CBN set forth in motion different stabilizing measures on the domestic currency. Over the years, so many measures have been adopted by the CBN has been on the area of managing foreign exchange rate with the aim of attaining a feasible and appropriate exchange rate that will facilitate the growth of the economy and achieve a reasonable stable value between the naira and the dollar (Owoeye & Ogunmakin 2013). Despite all these, the economy is presently experiencing distortions.

Adebiyi (2006) as cited in Owoeye & Ogunmakin (2013) maintained that it is important to realize that achieving a lasting solution on exchange rate problems will only be possible if the reasons behind the almost vertical supply curve and the upward sloping demand curve of exchange rate are known and a framework developed to ensure that foreign exchange is only sort after for productive purposes and not to fund a lifestyle or taste.

Things have also been further compounded in the banking sector with the introduction of the treasury single account (TSA) recently which may have affected the asset quality. As it is common place with countries that are emerging, Nigeria has a fragmented system for handling of the receipts and payments of government such that the Treasury lacks a unified control of public sector cash resources (Mboto, Offiong & Ibor, 2017. The new policy may affect the total assets and invariably the asset quality. In response to this public financial innovation, Mr. Odilim Enwegbara, a development economist according to Eme & Chukwurah, (2015) commended the efforts of the policy. Given all this contemporary policies and the drop in government's revenue, it is important to investigate if the Nigerian banking sector is strong enough to withstand the challenges of stabilizing the economy.

3.0   Methodology

In 2005-2007 Nigerian banks under went radical transformation in order to keep them in business and avoid systemic crisis. All commercial banks operating within the country were requested to recapitalize to the tune of N25billion or merge with other banks to recapitalize their capital base. After this exercise, all the banks in Nigeria were assumed to be sound and stable until the recent event where nine banks were given bailout funds by the CBN to avert an imminent collapse. In this section we employ annual data from 2007-2014 (period so chosen because this was period where all banks in Nigeria were recapitalized) to obtain result and insight on predicting bank fragility in Nigeria.

In this research, twenty (21) recapitalized banks were analyzed. Our sample size of banks includes banks that went through mergers and acquisition and those that received bailout

funds from the Central Bank of Nigeria. The hypothesis to be tested in this study is related to that previously tested by Brandao-Marques, Correa and Sapriza (2010), "bank risk taking is related to government support to banks. (i.e banks can afford to venture into risky venture since they know that the government through its Central Bank will always offer bailouts in cases of impending crisis). The dependent variable in this model is a binary measure equal to one if there is a systematic banking bailout for bank$_i$ in year$_t$, and equal to zero otherwise. The study adopts the multinomial logistic model specified by Degryse, Elahi and Penas (2013) to examine if the various characteristics of the banking system are simultaneously influenced following shocks that get to the system. The multinomial logistic model is represented as

$$P_i = 1/1 + e^{-(\beta_1 + \beta_2 X)}$$

Note that P_i is unobservable but its impact can be observed in the binary outcome. Since Y_i is a Bernoulli random variable: its equation can be rewritten as

$\quad$ Pr $(Y_i = 1) = P_i$
$\quad$ Pr $(Y_i = 0) = (1 - P_i)$

In the case of having a random variable of n observations and letting $f_i(Y_i)$ to denote the probability that $Y_i = 1$ or 0, the joint probability of observing n Y_i values, i.e $f_i(Y_1, Y_2 \ldots Y_n)$ is given as

$$f_i(Y_1, Y_2 \ldots Y_n) = \prod f_i(Y_1) = \prod P^v (1 - P_i)^{1 - Y_i}$$

where $\prod$ is the product operator. The equation above can be transformed into a linearized natural logarithm called log likelihood function (LLF) given multiple explanatory variables as thus

$$f_i(Y_1, Y_2 \ldots Y_n) = \sum Y_i (\beta_1 + \beta_2 X) - \sum Ln[1/1 + e^{-(\beta_1 + \beta_2 X)}]$$

the log likelihood function is a function of the parameter β_1 and β_2 since Xs are known. Xs in our model are categorized into banking soundness index (capital adequacy, asset quality), economic climate (interest rate changes, real exchange rate) and bank management/concentration (value of banking product/total asset, log of non-performing loan/total asset).

where
Capital adequacy $\qquad = \qquad$ ratio of capital/deposit
Asset quality $\qquad = \qquad$ net revenue/total asset
Interest rate changes $\qquad = \qquad$ real interest rate
Exchange rate variability $\qquad = \qquad$ real exchange rate volatility
Diversification $\qquad = \qquad$ value of banking products/total assets
Concentration $\qquad = \qquad$ log of non-performing loans/total assets

4.0   Discussion
Banking Soundness Index and Bank Fragility in Nigeria

$\qquad$ Unlike the conventional linear model, the binary logistic model does not consider the magnitude of the coefficient but their respective signs as the influence on the dependent variable. Considering the coefficient of banking soundness index of fully bailout banks on bank fragility in Nigeria, only capital adequacy was found to be highly significant while the asset quality of banks was statistically insignificant. However, both variables have affected the probability of bank fragility in Nigeria positively, as expected. They are also jointly highly significant (LR stat =73.14, P<0.001). Being a logistic regression model, away from variables coefficient and its corresponding p-values, the estimated logistic model, that is, the log of the

odds ratio ($Y = \ln(\frac{p}{1-p}) = b_0 + b_1x_1 + b_2x_2$), estimated probability ($p = \frac{e^{b0+b1x1+b2x2}}{e^{b0+b1x1+b2x2}+1}$) and the odds ratio which measures the probability of success to the probability of failure ($OR = (\frac{p}{1-p})$).

The banking soundness index of fully bailout bank had had a positive (2.7705) influence on bank fragility in Nigeria. Given an assumed estimated probability threshold of greater than equals to 0.5 as success and less than equals to 0.4 as failure, the estimated probability of banking soundness index has a very high probability (0.96) in predicting bank fragility in Nigeria. However, the odds ratio (OR) of 25.31 revealed that, banking soundness has a 25.31:1 chance of facilitating bank fragility in Nigeria. This implies that, the asset quality and the capital adequacy ratio of these banks hung below the threshold of soundness. In spite of the move by the banking authority to return these banks to a healthy and sound state, the possibility of fragility is very high in these banks, hence, the danger for possible insolvency.

The effect of banking soundness index of partially bailout banks on bank fragility in Nigeria, both capital adequacy and bank asset quality were found to be highly significant. However, only bank asset quality variable had a positive effect while capital adequacy had a negative on the probability of bank fragility in Nigeria. They are also jointly highly significant (LR stat =125.55, P<0.001). The banking soundness index of partially bailout bank had a positive (2.2952) influence on bank fragility in Nigeria. Given an assumed estimated probability threshold of greater than equals to 0.5 as success and less than equals to 0.4 as failure, the estimated probability of banking soundness index has a very low probability (0.08) in predicting bank fragility in Nigeria. However, the odds ratio (OR) of 0.09 revealed that, banking soundness has a 0.09:1 chance of facilitating bank fragility in Nigeria. Unexpectedly, the soundness of these banks proved to be solid and adequate. The state of their asset quality and capital adequacy showed the ability of these banks to scaled over the possibility of being fragile. As a result of the odd ratio, partially bailout banks appear to very sound and stable.

Economic Climate and Bank Fragility in Nigeria
The coefficient of economic climate of fully bailout banks on bank fragility in Nigeria, both real exchange rate and real interest rate were found to be highly significant. However, real exchange rate had negative effect while real interest rate has a positive effect on the probability of bank fragility in Nigeria. They are also jointly highly significant (LR stat =44.21, P<0.001). The economic climate of fully bailout bank had had a positive (2.7362) influence on bank fragility in Nigeria. Given an assumed estimated probability threshold of greater than equals to 0.5 as success and less than equals to 0.4 as failure, the estimated probability of economic climate has a very high probability (0.95) in predicting bank fragility in Nigeria. However, the odds ratio (OR) of 13.28 revealed that, economic climate has a 13.28:1 chance of facilitating bank fragility in Nigeria.

Further the effect of economic climate of partially bailout banks on bank fragility in Nigeria, both real interest rate and real exchange rate were found to be highly significant. In like manner, both variables had a positive effect on the probability of bank fragility in Nigeria, as expected. They are also jointly highly significant (LR stat =76.98, P<0.001). The economic climate of partially bailout bank had had a positive (50.5904) influence on bank fragility in Nigeria. Given an assumed estimated probability threshold of greater than equals to 0.5 as success and less than equals to 0.4 as failure, the estimated probability of economic climate has a very high probability (0.98) in predicting bank fragility in Nigeria. However, the odds ratio (OR) of 49 revealed that, economic climate has a 49:1 chance of facilitating bank fragility in Nigeria. For both the fully and partially bailout banks, the implication of the odd ratio revealed

that, the real exchange rate and real interest rate puts these banks in a zone of fragility. These banks are seen as being handicapped in the control and adjustment of the government controlled macroeconomic climate. The odd ratio revealed a possibility of market interferences from the government (not clear) against the expected free hands of the forces of demand and supply, hence, the high possibility for bank fragility in the system.

Bank Management/Concentration and Bank Fragility in Nigeria

The coefficient of bank management/concentration of fully bailout banks on bank fragility in Nigeria, both banking diversification and banking concentration were found to be highly significant. However, banking diversification had negative effect while banking concentration has a positive effect on the probability of bank fragility in Nigeria. They are also jointly highly significant (LR stat = 138.94, P<0.001). Bank management/concentration of fully bailout bank had had a positive (20.4235) influence on bank fragility in Nigeria. Given an assumed estimated probability threshold of greater than equals to 0.5 as success and less than equals to 0.4 as failure, the estimated probability of bank management/concentration has a very high probability (0.92) in predicting bank fragility in Nigeria. However, the odds ratio (OR) of 11.5 revealed that, bank management/concentration has an 11.5:1 chance of facilitating bank fragility in Nigeria.

On the other hand, the coefficient of bank management/concentration of partially bailout banks on bank fragility in Nigeria, both banking diversification and banking concentration were found to be highly significant. However, banking diversification had a negative effect while banking concentration had a positive effect on the probability of bank fragility in Nigeria. They are also jointly highly significant (LR stat = 523.09, P<0.001). Bank management/concentration of partially bailout bank had had a positive (66.0274) influence on bank fragility in Nigeria. Given an assumed estimated probability threshold of greater than equals to 0.5 as success and less than equals to 0.4 as failure, the estimated probability of bank management/concentration has a very high probability (0.87) in predicting bank fragility in Nigeria. However, the odds ratio (OR) of 6.69 revealed that, bank management/concentration has a 6.69:1 chance of facilitating bank fragility in Nigeria. The implication of the odd ratio revealed that, the degree of bank diversification and non-performing loans puts these banks in a ring of fragility. The over dependence of these banks on government funds (Prior TSA implementation) saw the banks neglecting its primary functions and duties of deposit mobilization and real investment. In addition, the huge volume of unsecured and non-performing loans by insiders was the major reasons while bank management/concentration of fully and partially bailout banks could not shield these banks from possible fragility as shown by the odd ratio.

5.0 Conclusion and Recommendation
Conclusion

The Nigerian banking system is constantly being fine-tuned with policies in a bid to stabilize the system. It was the aim of this paper to find out if these policies could affect the bank's fragility and invariably lead to bank distress. This paper used bank soundness (capital adequacy and asset quality), economic climate (foreign exchange rates and interest rates) and bank management/concentration (non-performing loans and bank value). It was concluded that these parameters have had an effect on bank fragility. Bank soundness showed a positive sign to bank fragility for fully bailout banks. This is in line with the discovery of Sanusi (2010) who discovered that the recapitalization did not stabilize the capital base of these banks hence, the need for Government intervention through injecting bailout funds to stabilize the financial system.

The study observed that banks which received partial bailout banks had less market and operational risk status, indicating that these banks capital base were reliably stable, hence had less exposure to becoming fragile. Bank management and concentration was positive for both fully and partially bailout banks. Most of these banks at this point were found to have large number of non-performing loans as well as poor management which lead the CBN to launch an investigation into the benefactors of the loans and a lot of insider abuse was dictated which lead to the removal of certain CEO and directors of bank in Nigeria. In addition, the failure of these banks to focus on their core banking mandates rather than relied sole on government idle funds exposed this fragility states as a result of the full-implementation of TSA in Nigeria. In conclusion, bank soundness, economic climate and bank management/concentration are parameters that have a positive influence on bank fragility, hence, if not controlled, may lead to bank distress in the Nigerian economy.

Recommendations

1. The asset quality and capital adequacy of banks should be of critical concern to regulatory authorities. Given the recent event vis-à-vis the Skye bank in Nigeria, regulatory authorities should emphasize on a sound capital base position for banks.
2. AMCOM, CBN, NDIC should strengthen existing bank credit monitoring tools in order to ensure that only eligible creditors get loans.
3. The bank verification number is a welcome development in the bank system but the CBN could go further by using the identity to black list erring creditors.
4. The corporate governance structures of banks further should be examined, especially, since their decision to leverage the firms have direct affinity with banks risk-taking behavior.
5. Banks should be monitored to ensure that their risk management behaviour is in line with the Basel III accord especially, as banks march towards the 2019 compliance deadline.

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ML-BINARY LOGIT FOR FULLY BAILOUT BANKS IN NIGERIA

BANKING SOUNDNESS INDEX

Variable	Coefficient	z-statistics	Probability
ASSQT	28.4	1.74	0.08
CAAQ	12.25	6.77	0.00
C	-2.23	-2.69	0.00

ECONOMIC CLIMATE

REXCHR	-0.40	-5.91	0.00
RINT	2.63	4.12	0.00
C	3.83	6.80	0.00

BANK MANAGEMENT/CONCENTRATION

DIVST	-379.99	-4.43	0.00
CONTN	2419.16	4.97	0.00
C	-16.74	-5.12	0.00

ML-BINARY LOGIT FOR PARTIALLY BAILOUT BANKS IN NIGERIA

BANKING SOUNDNESS INDEX

Variable	Coefficient	z-statistics	Probability
ASSQT	11.81	4.22	0.00
CAAQ	-115.40	-7.47	0.00
C	15.88	6.52	0.00

ECONOMIC CLIMATE

REXCHR	0.78	-6.18	0.00
RINT	6.60	-5.78	0.00
C	11.63	-8.63	0.00

BANK MANAGEMENT/CONCENTRATION

DIVST	-11.86	-4.09	0.00
CONTN	3009.16	-5.87	0.00
C	6.20	-9.86	0.00

ESTIMATED LOGISTIC MODEL, PROBABILITY AND ODDS RATIO

	FULLY	PARTIALLY
BANKING SOUNDNESS INDEX		
Log of odds ratio	2.7705	2.2952
Estimated probability	0.962	0.089
Odds Ratio	25.31579	0.097695
ECONOMIC CLIMATE		
Log of odds ratio	2.7362	50.5904
Estimated probability	0.93	0.98
Odds Ratio	13.28571	49
BANKING MANAGEMENT/CONCENTRATION		
Log of odds ratio	20.2435	66.0274
Estimated probability	0.92	0.87
Odds Ratio	11.5	6.69