

# **CENTRAL BANK OF NIGERIA**



## **Guidance Notes on the Calculation of Regulatory Capital**



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## REGULATORY CAPITAL

### 1.0 INTRODUCTION

This document lays down the new supervisory regulations for assessing the capital adequacy levels of banks and banking groups. The regulations have been revised following the changes that were introduced in international regulations<sup>1</sup> to take account of developments in risk management methodologies adopted by banks and the new policies and criteria underpinning supervisory activities.

The rules governing regulatory capital<sup>2</sup>, the total capital requirement, internal capital assessment process and risk concentration shall be applied on solo and consolidated bases.

The following regulation is applicable to all banks licensed by the CBN.

### 2.0 COMPOSITION OF REGULATORY CAPITAL

This guideline establishes the procedures for calculating regulatory capital which shall be the sum of

Capital elements:

- Tier 1 Capital<sup>3</sup>
  - (a) Paid-up share capital/common stock
  - (b) Disclosed reserves<sup>4</sup>
  
- Tier 2 Capital<sup>5</sup>
  - (a) Revaluation reserves

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<sup>1</sup> More specifically, these are contained in International Convergence of Capital Measurement and Capital Standards, A Revised Framework. Comprehensive Version, published by the Basel Committee on Banking Supervision June 2006 (the "New Basel Capital Accord", or "Basel II")

<sup>2</sup> Regulatory capital shall not be less than the initial capital required for authorization to engage in banking.

<sup>3</sup> Subject to Tier 1 capital prudential filters, if any, as computed by the CBN

<sup>4</sup> These include share premiums, retained profit, general reserves, SMEEIS reserves, regulatory risk reserves and statutory/legal reserves

<sup>5</sup> Subject to Tier 2 capital prudential filters, if any, as specified by the CBN



- (b) General provisions/general loan-loss reserves
- (c) Hybrid (debt/equity) capital instruments
- (d) Subordinated debt

**Less any**

**a) From Tier 1:**

- (i) Goodwill and increase in equity capital resulting from a securitization;
- (ii) Investment in own shares (treasury stock)
- (iii) Losses carried forward and losses for the current financial year
- (iv) Intangible assets

**b) The following items shall be deducted 50% from Tier 1 and 50% from Tier 2 capital:**

- (i) Investments in unconsolidated banking and financial subsidiary companies.
- (ii) Investments in the capital of other banks and financial institutions.
- (iii) Significant minority investments in other financial entities.



### **3.0 QUALIFYING CRITERIA FOR THE ASSESSMENT OF CAPITAL COMPONENTS**

#### **3.1 TIER 1 CAPITAL**

This includes only permanent shareholders' equity (issued and fully paid ordinary shares/common stock and perpetual non-cumulative preference shares) and disclosed reserves (created or increased by appropriations of retained earnings or other surpluses).

In the case of consolidated accounts, this also includes minority interests in the equity of subsidiaries which are not wholly owned. This basic definition of capital excludes revaluation reserves and cumulative preference shares.

**There is no limit on the inclusion of Tier 1 capital for the purpose of calculating regulatory capital.** For this purpose, the equity shares with the following characteristics are included in Tier 1 capital:

- Issued directly by the bank;
- Clearly and separately identified in the balance sheet;
- Have no maturity (are perpetual);
- Fully paid;
- Cannot be refunded beyond the possibility of the liquidation of bank or reduction of share capital;
- Do not give to the holder rights to a minimum remuneration nor are there any clauses that require the compulsory payment of dividends;
- The dividends are paid solely out of distributable profits or retained earnings distributable;
- Classified as equity instruments in accordance with IFRS.



## 3.2 TIER 2 CAPITAL<sup>6</sup>

### (b) Revaluation Reserve

- i) **Fixed Asset Revaluation Reserve:** This relates to revaluation of fixed assets in line with market values reflected on the face of the balance sheet.

Prior approval of the CBN must be obtained by any bank before the recognition of the revaluation surplus on fixed assets in its books, which can only be done taking into consideration the following:

- The valuation must be made by qualified professionals and the basis of the revaluation as well as the identities of the valuers must be stated;
- The difference between the market and historic values of the eligible fixed assets being revalued shall be discounted by **55%**;
- The revaluation of fixed assets is applicable to own premises only; and
- The revaluation of fixed assets (own premises only) is permissible within a minimum period of seven years after the date of the purchase of the asset or the last revaluation.

- ii) **Other revaluation reserves:** The inclusion of other revaluation reserves created by the adoption of the International Financial Reporting Standards (IFRS) as part of the Tier 2 capital shall be subject to the limitations that will be specified by the CBN from time to time.

### (c) General provisions/General loan-loss reserves

For the purpose of the standardized credit risk measurement approach, provisions or loan-loss reserves held against future (presently unidentified), losses are freely available to meet losses which subsequently materialize and therefore qualify for inclusion in Tier 2 capital. Provisions ascribed to specific or identified deterioration of particular assets or known liabilities, whether

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<sup>6</sup> The total of Tier 2 capital will be limited to a maximum of 33.3% of the total of Tier 1, while Tier 3 capital, innovative instrument and undisclosed reserve are not allowed for inclusion in regulatory capital.



individual or grouped (collective), are excluded. Furthermore, general provisions/general loan-loss reserves eligible for inclusion in Tier 2 will be limited to a maximum of **1.25 percentage points of credit risk weighted assets** and subject to the approval of the CBN.

**(d) Hybrid (debt/equity) capital instruments**

These include financial instruments which combine characteristics of equity and debt capital. Essentially, they should meet the following requirements:

- they are unsecured, subordinated and fully paid-up;
- they are not redeemable at the initiative of the holder or without the prior consent of the CBN;
- they are available to participate in losses without the bank being obliged to cease trading (unlike conventional subordinated debt);
- although the capital instrument may carry an obligation to pay interest that cannot permanently be reduced or waived (unlike dividends on ordinary shareholders' equity), it should allow service obligations to be deferred (as with cumulative preference shares) where the profitability of the bank would not support payment.
- Hybrid capital instruments that are redeemable must have a maturity of **at least 10 years**. The contract must clearly specify that repayment is subject to authorization by the Central Bank of Nigeria

Cumulative preference shares, having these characteristics, would be eligible for inclusion in this category.



#### **(e) Subordinated term debts**

Subordinated debts issued by banks shall form part of the Tier 2 capital provided that the contracts governing their issue expressly envisage that:

- In the case of the liquidation of the issuer, the debt shall be repaid only after all other creditors not equally subordinated have been satisfied;
- The debt has an original maturity of at least five years; where there is no set maturity, repayment shall be subject to at least five years' prior notice;
- Early repayment of the liabilities may take place only at the initiative of the issuer and shall be subject to approval of the CBN.
- The contracts shall not contain clauses whereby, in cases other than those referred to in points a) and c), the debt may become redeemable prior to maturity.
- During the last five years to maturity, a cumulative discount (or amortization) factor of 20% per year will be applied to reflect the diminishing value of these instruments as a continuing source of strength.

Unlike instruments included in hybrid capital above, these instruments are not normally available to participate in the losses of a bank which continues trading. For this reason, these instruments will be limited to a maximum of 50% of Tier 1 Capital.

#### **4.0 PRUDENTIAL FILTERS**

Due to the adoption of International Financial Reporting Standards (IFRS) by banks and for the purpose of calculating regulatory capital, the CBN may from time to time apply prudential filters.





## **5.0 FREQUENCY OF REPORTING AND PROCEDURES FOR CALCULATING INDIVIDUAL REGULATORY CAPITAL**

Banks shall continue to report on regulatory capital in accordance with the CBN's extant rules.



**ANNEX A: EXAMPLE OF CAPITAL ADEQUACY RATIO COMPUTATION**

The table below represents the balance sheet of Bank A with an average gross income of N120 in the last three years and the Basic Indicator approach is adopted for operational risk capital charge. In addition, the bank adopted Standardized approach for Market risk with a capital charge of N25. Assume that the all loans and advances were rated B and no credit risk mitigation technique is used, calculate the capital adequacy ratio of Bank A.

<b>Statement of Financial Position</b>			
	<b>N</b>		<b>N</b>
Cash	1,400	Deposits	21,000
FGN Bonds	5,100	Other Liabilities	1,700
Bende State Bonds	1,000	Qualifying debt Capital	3,000
Loans Secured by Residential Mortgage	1,400	Total Shareholder Equity	2,250
Other loans and advances	18,000		
Property, Plant & Equipment	300		
Total Assets	27,200	Total Liabilities + Shareholder Equity	27,200
Off-Balance Sheet Items			
Performance Bonds	750		
Revolving committed but undrawn credit facilities with maturity of less than 1 year.	1,500		

**Solution**

1. Convert the off-balance sheet exposures to their credit equivalents using appropriate credit conversion factors;

<b>S/N</b>	<b>Exposures</b>	<b>Amount (N)</b>	<b>CCF (%)</b>	<b>Credit Equivalent</b>
1	Performance Bonds	750	50	375
2	Revolving committed but undrawn credit facilities with maturity of less than 1 year.	1500	20	300



2. Calculate the credit risk weighted assets:

Exposures	Gross Exposure Before CRM	CRM	Net Exposure/ after CRM	Risk Weight Category	RWA
Cash	1,400	0	1,400	0%	0
FGN Bonds	5,100	0	5,100	0%	0
Bende State Bonds <sup>7</sup>	1,000	0	1,000	20%	200
Loans Secured by Residential Mortgage	1,400	0	1,400	100%	1400
Retail Portfolio					0
Other loans and advances	18,000	0	18,000	100%	18000
Building and Equip	300	0	300	100%	300
Off Balance Sheet Exposures					0
Performance Bonds	375		375	100%	375
Revolving committed but undrawn credit facilities with maturity of less than 1 year.	300		300	100%	300
<b>Total Credit Risk Weighted Assets</b>					<b>20,575</b>

3. Calculate operational risk capital charge:

$$= \text{Relevant Indicator (gross profit)} \times \alpha \text{ (15\%)}$$

$$120 \times 15\% = \text{N18}$$

4. Calculate the total qualifying capital (i.e. Tier 1 + Tier 2)

$$= \text{Equity} + \text{Qualifying Debt}$$

$$\text{N (2,250+750)} = \text{N3,000 (Note; Tier 2 is limited to 33.3\% of Tier 1 Capital)}$$

<sup>7</sup> The 20% risk weight applies to state government bonds that meet the CBN eligibility criteria for classification as liquid assets.



Calculate the capital adequacy ratio (CAR)

**CAR =**

$$\frac{\textit{Tier 1 Capital + Tier 2 Capital}}{\textit{Credit Risk Weighted Asset + 12.5 (Market risk capital charge + Operational risk capital charge)}} \times 100$$

$$CAR = \frac{3000}{20,575 + 12.5 (25 + 18)} \times 100$$

$$CAR = 14.13\%$$