



Access Bank Plc. Pillar III Disclosure FY'2020

OUR RISK APPETITE STATEMENT

At Access Bank, we embrace a moderate risk appetite, whilst delivering strategic objectives. We anticipate the risks in our activities and reward behaviour that aligns with our core values, controls and regulations. Challenges are discussed in an open environment of partnership and shared responsibility.

Table of Contents

<i>Access Bank Disclosure Glossary</i>	7
1. Executive Summary	10
1.1. Company Overview.....	10
1.2. Purpose of Disclosure.....	11
1.3. Legal Structure and Entities	12
1.4. Basel II Overview.....	13
1.5. Scope of Application.....	14
1.6. Risk and Capital Requirement.....	Error! Bookmark not defined.
2. Risk Management Governance and Strategy	17
2.1. Risks Governance.....	17
2.2. Risk Appetite.....	17
2.3. Access Bank Risk Strategy.....	18
2.4. Enterprise Risk Management.....	19
2.4.1. Risk Analytics and Reporting.....	20
2.4.2. Stress Testing framework.....	22
2.4.3. Stress and scenario tests	23
3. Internal Capital Adequacy Assessment Process	24
3.1. ICAAP Governance Structure.....	24
3.2. Regulatory Capital Composition.....	25
3.3. Capital Management.....	27
3.3.1. Capital management objectives.....	27
3.3.2. Capital Management Process	28
3.4. Summary of Capital Adequacy	28
3.5. Basel 3 Leverage Ratio.....	29
4. Internal Liquidity Adequacy Assessment Process	32
4.1. Purpose of ILAAP.....	32
4.2. ILAAP Structure.....	32
4.2.1. Qualitative assessment	32
4.2.2. Quantitative Assessment	33
4.3. ILAAP Metrics	34

4.3.1. Liquidity Coverage Ratio	34
4.3.2. Net Stable Funding Ratio (NSFR).....	34
4.3.3. Contractual maturity mismatch	35
5. <i>Recovery and Resolution Plan (RRP)</i>	35
5.1. Recovery Plan.....	36
5.2. Resolution Planning	37
6. <i>Credit Risk</i>	37
6.1. Introduction	37
6.2. General Disclosures.....	38
6.2.1. Credit Concentration by Geography.....	38
6.2.2. Credit Exposures by Counterparty	38
6.2.3. Credit Exposures by Sectors.....	39
6.2.4. Allowances for credit losses (Impairment)	40
6.3. Principal Credit Policies.....	42
6.4. Credit Risk Measurement Risk Rating.....	42
6.4.1. Risk Rating Process.....	43
6.5. Collateral Policies.....	46
7. <i>Market Risk</i>	48
7.1. Introduction	48
7.2. Access Bank FY 2020 Market Risk Capital Charge computation.	49
7.3. Non-trading portfolio	49
7.3.1. Trading portfolio	50
7.3.2. Limits.....	50
7.3.3. Mark-to-Market (MTM).....	50
7.4. Derivatives.....	50
7.4.1. Rationale for Derivative Activities.....	50
7.4.2. Over the Counter Derivative transactions.	51
7.5. Market Risk Models	52
7.5.1. Mark-to-Market (MTM).....	52
7.5.2. Value at risk (VaR).....	52
8. <i>Operational Risk</i>	54
8.1. Introduction	54
8.2. Measuring and Managing Operational Risk.....	54
8.3. Operational Risk Capital Charge.....	55
8.3.1. Access Bank 2019 Operational Risk Capital Charge computation.	55

9. Pillar 2 Risks	56
9.1. Interest Rate Risk (Banking Book)	56
9.1.1. Capitalization.....	56
9.1.2. Mitigation	57
9.2. Liquidity risk	57
9.2.1. Quantification of Liquidity Risk	58
9.2.2. Limit management and monitoring	58
9.2.3. Contingency funding plan	58
9.3. Credit Concentration Risk	58
9.4. Fraud risk.....	59
9.4.1. Sources and Manifestation of Risk.....	59
9.4.2. Mitigation	59
9.4.3. Capitalization.....	59
9.5. Money Laundering risk	60
9.5.1. Sources of Risk and Manifestation.....	60
9.5.2. Mitigation	60
9.5.3. Capitalization.....	60
9.6. Cyber/Digital Risk.....	60
9.6.1. Source of Risk	61
9.6.2. Mitigation	61
9.6.3. Capitalization.....	61
9.7. Business & Strategic risk	61
9.7.1. Sources and Manifestation	61
9.7.2. Mitigation	62
9.7.3. Capitalisation.....	62
9.8. Reputational risk.....	62
9.8.1. Sources and Manifestation of Risk.....	62
9.8.2. Mitigation	62
9.8.3. Capitalisation.....	63
9.9. Country / Group risk.....	63
9.9.1. Sources and Manifestation of Risk.....	63
9.9.2. Mitigation	63
9.9.3. Capitalisation.....	64
9.10. Model Risk	64
9.10.1. Sources and Manifestation of Risk.....	64

9.10.2. Mitigation	64
9.10.3. Capitalisation.....	64
9.11. Regulatory Risk.....	65
9.11.1. Sources and Manifestation of risk	65
9.11.2. Mitigation	65
9.11.3. Capitalisation.....	65
9.12. Downgrade Risk.....	65
9.12.1. Sources and Manifestation of Downgrade Risk	66
9.12.2. Mitigation	66
9.12.3. Capitalization.....	66
9.13. Legal Risk.....	66
9.13.1. Sources and Manifestation of Legal Risk.....	66
9.13.2. Mitigation	67
9.13.3. Capitalization.....	67
10. <i>Equity Exposures: Disclosures for Banking Book positions.</i>	68
10.1. Financial instruments in level 1.....	68
10.2. Financial instruments in level 2.....	69
10.3. Financial instruments in level 3.....	69

Access Bank Disclosure Glossary

ACRONYMS	MEANING
AGM	Annual General Meeting
ALCO	Asset and Liability Committee
ALM	Asset and Liability Management
AMCON	Asset Management Corporation of Nigeria
AML	Anti-Money Laundering
Basel II	Banking laws and regulations issued by the Basel Committee on Banking Supervision
BCBS	Basel Committee of Banking Supervision
CAC	Critical Asset Committee
CAR	Capital Adequacy Requirement
CBN	Central Bank of Nigeria
CFO	Chief Financial Officer
CPB	Capital Planning Buffer
CRM	Credit Risk Management
CRO	Chief Risk Officer
CRR	Cash Reserve Ratio
DNB	De Nederland Che Bank
EAR	Earnings at Risk
EBA	European Banking Authority
EIU	Economic Intelligence Unit
ERMC	Enterprise Risk Management Committee
EVE	Economic Value of Equity
EXCO	Executive Committee
FCY	Foreign Currency

ACRONYMS	MEANING
FGN	Federal Government of Nigeria
FPI	Foreign Portfolio Investment
FIRB	Foundation Internal Ratings Based Approach (Basel II Credit Risk Measurement Approach)
GCR	Global Credit Rating
HNI	High Net-worth Individual
ICA	Internal Capital Adequacy
ICAAP	Internal Capital Adequacy Assessment Process - the process followed to arrive at a Bank's self- assessment of capital requirements
IRR	Interest Rate Risk
KYC	"Know your Customer" (AML Requirements)
KYCB	"Know your Customer's Business" (AML Requirements)
LR	Leverage Ratio
MRIA	Material Risk Identification and Assessment
MRM	Market Risk Management
NFIU	Nigerian Financial Intelligence Unit
NII	Net Interest Income
NSE	Nigerian Stock Exchange
NSFR	Net Stable Funding Ratio
OECD	Organisation of Economic Co-operation and Development
ORMU	Operational Risk Management Unit
Pillar 1	Minimum capital requirements, addressing risk.
Pillar 2	Supervisory review process under the Basel Accord
POS	Point of Sale
RAROC	Risk Adjusted Return on Capital

ACRONYMS	MEANING
RCSA	Risk Control Self-Assessment
S&P	Standards & Poor's
SBU	Strategic Business Unit
SFT	Securities financing transactions
SME	Small and Medium Enterprises
SPE	Special Purpose Entity
TRS	Total Return Swap
VaR	Value at Risk

1. Executive Summary

1.1. Company Overview

Access Bank Plc. was incorporated as a private limited liability company on 8 February 1989 and commenced business on 11 May 1989. Access Bank was converted to a public limited liability company on 24 March 1998 and its shares were listed on the Nigerian Stock Exchange (NSE) on 18 November 1998. The Bank was issued a universal banking license by the CBN on 5 February 2001. Access Bank's key business segments are: Corporate and Investment Banking, Commercial Banking, Business Banking and Personal Banking. The key customer segments include but is not limited to: Telecommunications, Beverages, Manufacturing, Construction, Oil & Gas, Parastatals, High Net worth Individuals, Middle Income Professionals, and Financial Inclusion Customers.

At Access Bank, we are proud of our ability to add value to clients and to leverage our unique value proposition to provide innovative solutions across the economic value chain. In deploying products and services, the Bank adheres to responsible business practices and readily commits resources to social investments in fulfilment of its corporate social responsibility objectives. We are located in all major commercial centres and cities across Nigeria. We operate 9 subsidiaries within West Africa, East Africa and the United Kingdom. The Bank also has business offices in the Republic of China, Lebanon and India. The Access Bank (UK) Limited has a branch in United Arab Emirates.

Access Bank is on course to become Africa's Gateway to the World, with over 40 million customers, over 675 branches and an asset base of NGN8.6 trillion. We have an established and unique banking brand recognized for distinctive strengths which includes:

- Experienced and stable management team
- Strong corporate governance philosophy and practices - rigorous governance culture that guides and facilitates effective coordination and control of its business operations
- Strong execution engine with a proven track record
- Value chain model approach
- National branch footprint in key commercial locations
- Strong market share in large corporate customers' wallet across different industries/sectors; and
- Robust enterprise risk management framework.

1.2. Purpose of Disclosure

This report provides an overview of the risk profile and risk management practices of Access Bank Plc (“the Bank”) It also contains information on the Bank’s capital structure and capital adequacy in line with the requirements of the Central Bank of Nigeria. The objective of this disclosure is to encourage market discipline and allow stakeholders to assess accurate information on the Bank’s risk exposures and risk assessment processes.

Access Bank’s Pillar III Disclosure report complies with the requirement of the following Regulatory guidelines:

- *The Central Bank of Nigeria’s (CBN) framework on Regulatory Capital Measurement and Management for the Nigerian Banking System for the implementation of Basel II in Nigeria.*
- *The Basel Committee on Banking Supervision’s (BCBS) Revised Pillar 3 Disclosure Requirements.*
- *The Central Bank of Nigeria’s (CBN) Revised guidance on Pillar 3 Disclosure Requirement.*

This report has been internally verified by those charged with governance in line with the Pillar 3 Disclosure policy, which describes the responsibilities and duties of senior management and the Board in the preparation and review of the Pillar 3 disclosure. It aims to ensure that:

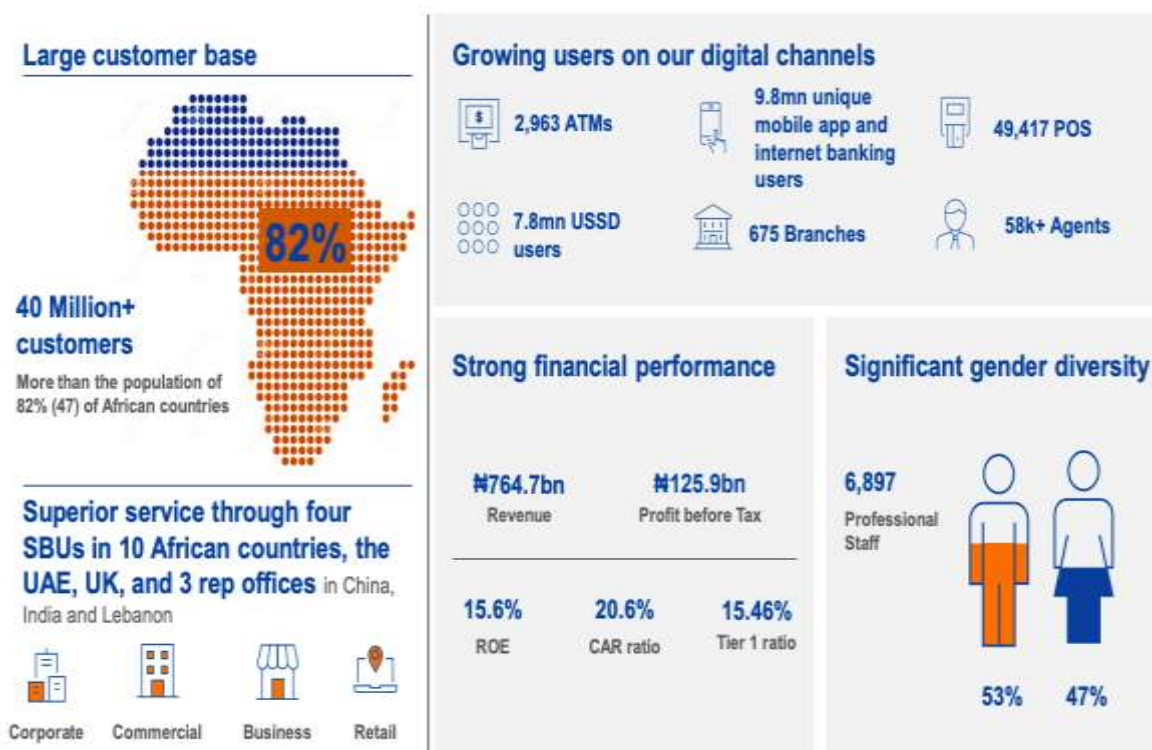
- Minimum disclosure requirements of the regulations, standards and directives are met;
- The disclosure provides a true reflection of the Bank’s financial condition and risk profile;
- Disclosed information is consistent with the manner in which the Board assesses the Bank’s risk portfolio; and
- The quantitative and qualitative disclosures are appropriately reviewed.

Access Bank proactively developed effective and timely strategies to ensure zero disruption in the delivery of service to all stakeholders despite the impact of COVID 19 in the preceding year. During the year under review, the Bank relied heavily on its robust technology (digital platforms) to deliver uninterrupted services to customers in addition we continued our African expansion project, though cautiously.

Access Bank remains well positioned to maximize opportunities, given its significant traction in Nigeria and more recently, Africa. This is in addition to the Bank’s existing commitment to sustainable business practices and demonstration of its ability to re-engineer the face of Africa by engaging in transactions, processes and partnerships that enable future generations to meet their needs. Our digital vision is - To be the clear-cut digital leader in Africa even as we move closer to becoming Africa’s Payment Gateway to the World

In the months ahead, we will continue to build on our achievements, alongside competences developed; through the continued investment in people, processes and most importantly, a renewed focus on our customers; ensuring we understand their unique needs, thereby catering and delivering an unrivalled unique value proposition.

Fig 1: FY 2020 Group Fundamental Statistics



1.3. Legal Structure and Entities

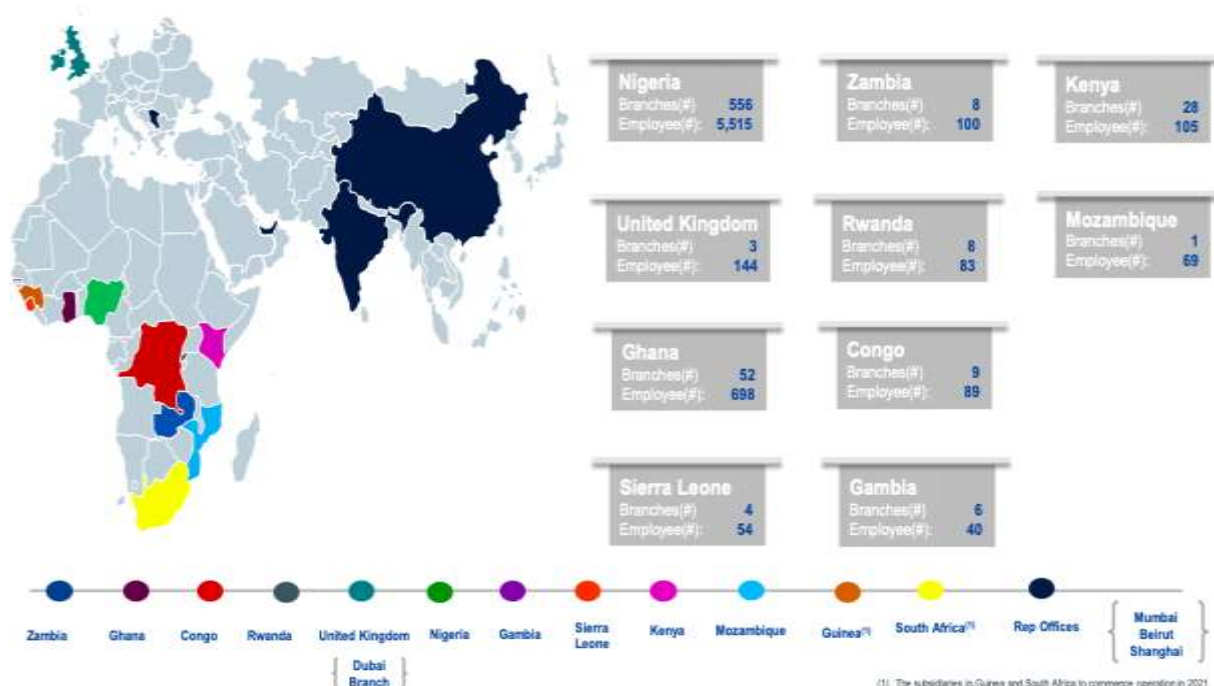
Access Bank has subsidiaries across Sub Saharan Africa and Europe, providing financial and banking services. The Bank’s subsidiaries include: Access Bank (Gambia) Limited, Access Bank (Sierra Leone) Limited, Access Bank (Zambia) Limited, Access Bank (UK) Limited, Access Bank (Ghana) Limited, Access Bank (D.R. Congo), Access Bank (Rwanda) Limited, Access Bank (Guinea) Limited, Access Bank (Kenya) Limited and Access Bank (Mozambique) Limited. The Bank also has representative offices in China, Lebanon, India and United Arab Emirate (UAE).

Access Bank’s subsidiaries have share capital consisting solely of ordinary shares, which are held directly by the Group and the proportion of ownership interests held equals to the voting rights held by the Group. The subsidiaries’ countries of incorporation are also the principal places of business.

Access Bank RSPP is a share rewards scheme designed solely for Access Bank staff irrespective of where they work within the Group. The shares are awarded to employees based on their performance, at no cost to them. The shares vest over a three-year period from the date of the award.

The table below provides a summary on the sizes of the Bank's various entities as at December 2020:

Fig 2: Access Bank's Plc. Global Positioning as at December 2020



Access Bank's subsidiaries consist of companies across the globe which contribute to Access Bank Group's profit. All subsidiaries operate in the financial services industry.

1.4. Basel II Overview

The Basel II Accord was introduced following financial losses attributable to poor risk management practices. Under the provisions of the accord, financial institutions are required to quantify their exposure to credit, market risk and operational risk using standardized measurement or approaches, as well as other inherent risk types arising from their respective business operations. The specific objectives of the new accord includes.

- Improving the ability of financial institutions to absorb shocks that arise from financial and economic stress.
- Improving risk management and governance.
- Strengthening Bank's transparency and disclosures

The Basel II framework is structured around a three-pillar approach that allows Banks and its supervisors to properly evaluate its various risk exposures. It specifies a minimum level of capital that Banks must maintain to ensure that they can absorb unexpected losses that arise from possible risk events and more importantly promote public confidence. It also specifies comprehensive disclosure requirements for Banks operating under the framework. A summary of the three pillars is provided below:

Fig 3: Basel II Pillars

PILLAR I	PILLAR II	PILLAR III
Introduced a minimum capital requirement for Bank's	Introduced the supervisory review of an institution's capital adequacy and internal assessment process.	This pillar is the Backbone of Market discipline
prescribes methods to quantify the amount of capital required to absorb unexpected losses that could occur in the three major risk areas that Banks are exposed to: credit risk, market risk and operational risk.	This Pillar covers the Supervisory Review Process (conducted by regulators) and The Internal Capital Adequacy Assessment Process (Self-assessment conducted by Bank's)	It requires the communication of risk types borne by the institution as well as the Capital position of the institution.

**The Bank has adopted the Standardized Approach for Credit and Market Risk quantification and the Basic Indicator Approach for Operational Risk quantification.*

In adherence to Basel recommendations and as required by the CBN under the Guidance Notes on Pillar 3 Disclosures, the Bank has articulated its risk profile, risk management practices and capital information to enable market participants have full understanding of its activities. Ultimately, the aim of this document is to ensure the appropriate disclosure of the Bank's position to all stakeholders in a bid to prevent information asymmetry.

1.5. *Scope of Application*

Access Bank Plc. consolidated, and separate financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB). Additional information required by national regulations is included where appropriate.

All information presented in this document are considered material in line with the Central Bank of Nigeria's Guidance Notes on Pillar III Disclosures.

Subsidiaries are all entities (including structured entities) over which the group exercise control. Control is achieved when the Group can demonstrate it has:

- I. Power over the investee.
- II. Exposure, or rights, to variable returns from its involvement with the investee
- III. The ability to use its power over the investee to affect the amount of the investor's returns.

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group. Control is the power to govern the financial and operating policies of an entity to obtain benefits from its activities. In assessing control, the Group takes into consideration potential voting rights.

However, for the purpose of this disclosure, the information in this document is reported at the individual parent entity level and not at a consolidated level. As a result, investments in the subsidiaries discussed above are deducted from regulatory capital for capital adequacy purposes as per the CBN guideline.

1.6. *Impact of New CBN Regulation*

In a bid to ensure Bank's play a major role in driving economic growth, the Central Bank of Nigeria mandated Deposit Mobilization Banks (DMBs) to increase lending to the real sector. A minimum threshold of 65% Loan to Deposit Ratio was established for all Banks. To ensure compliance with the directive, the Central Bank of Nigeria prescribed a penalty of additional Cash Reserve Ratio (CRR) to the tune of 50% of the lending shortfall of the LDR target on any Deposit Money Bank (DMB) which fails to meet this minimum requirement at any time. The Bank's loans and advances grew from N2.64tn (FY'2019) to close at N3.05tn (FY'2020) marking a 15% growth YoY. As is the case, the growth in loans and advances resulted in additional Capital implications required to absorb the increase in credit risk arising from the aggressive growth in loans.

1.7. *Summary of Capital Adequacy*

The Bank has continued to maintain robust capital position, maintaining a Capital Adequacy Ratio well above the minimum of 16% (15% + margin of 1%) required of Domestic Systemically Important Banks.

Table 1: Capital Adequacy Ratio

IN THOUSANDS OF NAIRA	TRANSITIONAL ARRANGEMENT		FULL IMPACT	
	FY'2020	FY'2019	FY'2020	FY'2019
ELIGIBLE TIER 1 CAPITAL	447,269,275	473,261,665	407,642,332	394,007,780.00
ELIGIBLE TIER 2 CAPITAL	94,339,247	65,456,885	81,130,266	65,456,884.00
TOTAL REGULATORY CAPITAL	541,608,523	538,718,550	488,772,599	459,464,664.00
TOTAL RISK WEIGHTED ASSETS	3,196,043,271	3,052,419,013	3,129,922,447	2,986,298,189.00
CAPITAL ADEQUACY RATIO	17%	17%	16%	15%

The Increase in Risk Weighted Assets was driven by business growth during the year with Credit Risk contributing 76% of the total Risk Weighted Assets in 2020. The growth in loans and advances was driven by the Central Bank of Nigeria's mandate the minimum Loan to Deposit Ratio of 65%. Furthermore, Operational risk increased as a result of the increase in the Bank's gross earnings while, market risk increased as a result of a significant portion of our trading portfolio of bonds and treasury bills having longer maturities as of December 2020 compared to December 2019.

2. Risk Management Governance and Strategy.

2.1. Risks Governance.

The Bank has a well-structured risk management framework and governance structure in identifying, assessing, monitoring, controlling and reporting the inherent risks in its business activities. The Bank's organisational structure and business strategy is well aligned with its risk management philosophy.

The Bank views and treats risks as an intrinsic part of business and maintains a disciplined approach to risk management. The Group's risk functions are quite dynamic and responsive to the needs of stakeholders while improving the focus on the inter-relationships between risk types. The Bank uses periodic review of risk exposure limits and risk control to position itself against adverse scenarios. Risk management functions are defined along three categories – lines of business, governance and control and corporate audit. The Bank believes it has processes in place to identify and mitigate exposure to high levels of risk which may cause distress to the business.

Access Bank's Risk Management Governance Structure is depicted below.

Fig 6:: Access Bank's Plc. Risk Management Governance Structure



2.2. Risk Appetite

Risk appetite is an articulation and allocation of the risk capacity or quantum of risk Access Bank is willing to accept in pursuit of its strategy, duly set and approved by the executive management and the Board, and integrated into our strategy, business, risk and capital plans. Risk appetite reflects the Bank's capacity to sustain potential losses arising from a range of potential outcomes under different stress scenarios. The Bank defines its risk appetite in terms of both volatility of earnings and the maintenance of minimum regulatory capital requirements under stress scenarios. Our risk appetite can be expressed in terms of how much variability of return the Bank is prepared to accept in order to achieve a desired level of result. It is determined by considering the relationship between risk and return. We measure and express risk

appetite qualitatively and in terms of quantitative risk metrics. The quantitative metrics include earnings at risk (or earnings volatility), Liquidity and economic capital adequacy. In addition, a large variety of risk limits, triggers, ratios, mandates, targets and guidelines are in place for all the financial risks (e.g. credit, market and asset and liability management risks). The Bank's risk profile is assessed through a 'bottom-up' analytical approach covering all of the Bank's major businesses and products. The risk appetite is approved by the Board and forms the basis for establishing the risk parameters within which the businesses must operate, including policies, concentration limits and business mix.

In 2020, the risk appetite metrics were tracked against approved triggers and exceptions were reported to management for prompt corrective actions. Key issues were also escalated to the Enterprise Risk Management committee (ERMC) and the Board Risk Management Committee (BRMC).

2.3. Access Bank Risk Strategy.

Access Bank's Risk Culture Statement:

“At Access Bank, we embrace a moderate risk appetite, whilst delivering strategic objectives. We anticipate the risks in our activities. We reward behaviour that aligns with our core values, controls and regulations. Challenges are discussed in an open environment of partnership and shared responsibility”.

Access Bank's Risk management philosophy and culture remain fundamental to the delivery of our strategic objectives. Risk management is at the core of the operating structure of the bank. We seek to limit adverse variations in earnings and capital by managing risk exposures within our moderate risk appetite. Our risk management approach includes minimizing undue concentrations of exposure, limiting potential losses from stress events and the prudent management of liquidity. The Bank's acclaimed risk management process has continued to achieve desired results as evidenced by improved risk ratios and independent risk ratings. In line with the Bank's core value of excellence, the Bank's risk management is continuously evolving and improving, given that there can be no assurance that all market developments, in particular those of extreme nature, can be fully anticipated at all times. Hence, executive management has remained closely involved with important risk management initiatives, which have focused particularly on preserving appropriate levels of liquidity and capital, as well as managing the risk portfolios.

Risk management is fundamental to the Bank's decision-making and management process. It is embedded in the role of all employees via the organizational culture, thus enhancing the quality of strategic, capital allocation and day-to-day business decisions. Access Bank considers risk management philosophy and culture as the set of shared beliefs, values, attitudes and practices that characterize how the Bank considers risk in everything it does, from strategy development and implementation to its day-to-day activities.

In this regard, the Bank's risk management philosophy is that a moderate and guarded risk attitude ensures sustainable growth in shareholder value and reputation.

Fig 7: Access Bank's Plc. Risk Management Process



2.4. Enterprise Risk Management.

The Bank believes that ERM provides the superior capabilities to identify and assess the full spectrum of risks and to enable staff at all levels to better understand and manage risks. This will ensure that:

- Risk acceptance is done in a responsible manner.
- The executive and the Board of the Bank have adequate risk management support.
- Uncertain outcomes are better anticipated.
- Accountability is strengthened.
- Stewardship is enhanced.

The Bank's overall risk tolerance is established in the context of our earning power, capital and diversified business model. The Bank's organisational structure and business strategy is aligned with its risk management philosophy. As the Bank navigates through new frontiers in a growth market in the ever-changing risk universe, proactive ERM Framework becomes even more critical in a bid to push the frontiers of our overall risk profile whilst remaining responsive to the ever-changing risk universe.

Access Bank views and treats risks as an intrinsic part of business and maintains a disciplined approach to its management of risk. Its Risk functions remain dynamic and responsive to the needs of stakeholders as it improves its focus on the inter-relationships between risk types. It uses periodic reviews of risk

exposure limits and risk control to position itself against adverse scenarios. This is an invaluable tool with which the Bank predicted and successfully managed the headwinds – local and global – which impacted the macro economy in 2020. The Bank’s risk management architecture, as designed, continued to balance corporate oversight with well-defined risk management functions which fall into one of three categories where risk must be managed: lines of business, governance and control, and corporate audit. The Board of Directors and management of the Bank are committed to constantly establishing, implementing and sustaining tested practices in risk management to match those of leading international banks. We are convinced that the long-term sustainability of the Bank depends critically on the proper governance and effective management of our business.

As such, risk management occupies a significant position of relevance and importance in the Bank. Risk strategies and policies are set by the Board of Directors of Access Bank. These policies, which define acceptable levels of risk for day-to-day operations as well as the willingness of Access Bank to assume risk, weighed against the expected rewards are detailed in the (ERM) Framework, which is a structured approach to identifying opportunities, assessing the risk inherent in these opportunities and actively managing these risks in a cost-effective manner. Specific policies are also in place for managing risks in the different core risk areas of credit, market and operational risks as well as for other key risks such as liquidity, strategic and reputational risks.

The role of the Group Chief Risk Officer in Access Bank remains pivotal as he has the primary responsibility for the overall risk management and effective ERM Framework of both the Bank and its subsidiaries. He provides robust challenge to the management teams based on quantitative and qualitative metrics. Though amendments to the Bank’s ERM Framework require Board approval, the risk management division is responsible for the enforcement of the Bank’s risk policy by constantly monitoring risk, with the aim of identifying and quantifying significant risk exposures and acting upon such exposures as necessary. Risk Management in Access Bank Plc has become a culture and everyone, from the most junior officer to the Executive Management has cultivated the risk culture. The Bank officers approach every banking transaction with care, taking into consideration the Bank’s acceptable risk appetite.

2.4.1. Risk Analytics and Reporting

The Bank’s Risk Analytics and Reporting Group continues to drive the development and entrenchment of integrated data architecture to enhance risk analytics and reporting within the ERM space in Access Bank. The Group has aligned its governance and risk functions to that of leading global financial institutions and also considered all contents as seen in most jurisdictions where risk management is best practised.

The Group gives Risk management space a critical depth and dimension in its risk management activities as it relates to data management and integration. The Group is responsible for enhancing all core risk analytical and reporting functions that previously resided in the respective risk areas within our Enterprise Risk Management (ERM), while the Bank’s pre-defined governance structures in respect of the above-mentioned functions is retained by the respective risk groups.

The Group remains the key driver in ensuring that Access Bank fully implements Basel II/III to the most advanced levels in alignment with the CBN prudential guidelines. The team is also responsible for the Internal Capital Adequacy Assessment Process (ICAAP), stress testing, Liquidity Risk measurement and other risk measurement activities. The Group aligns its reporting with the Bank's predefined governance structure such as BRMC, BCC and ERM.

The functional set up of the Risk Analytics and Reporting group is as follows:

- Data management and integration
- Risk modelling & Measurement
- Integrated Risk Reporting

2.4.1.1 Data Management and Integration

This unit is responsible for the development and maintenance of the enterprise risk data architecture with a roadmap geared towards ensuring data integrity, data quality and ensuring integration with risk analytics and reporting. The Group has a data governance structure which enforces risk data governance and discipline across the Bank as well as data quality measurement metrics to reduce the Bank's risk exposure due to data quality issues.

An efficient structure has been put in place to ensure auto-reconciliation of data across risk and finance silos to improve timeliness and consistency of risk reporting. The Group is in the process of developing a data structure model which will support the risk analytics and reporting activities, thus driving improvements.

2.4.1.2 Risk Modelling & Measurement

The Group guides the analytical input into the implementation of various risk software and their on-going implementation in Credit risk, Market risk, Operational risk and other risk areas. The unit also drives the development as well as implementation of the internal and regulatory risk measurement methodology and models for the core risk elements; examples of the model are Rating models, scoring models, Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD), etc.

The unit designs stress test models and implements the same on the Bank's portfolios and risk profile as well as comprehensive risk analyses to provide insight into all current Strategic Business Unit (SBU) risk profiles. The Group also drives the full implementation of Basel II/III and manages the ICAAP process.

The Group deepened the Risk Embedded Performance Management Framework as part of the process of maintaining and aligning behaviours with the Bank's moderate risk appetite. Business performance will subsequently be monitored with a focus on financial performance and risk exposures being aligned with the Bank's risk appetite. The Bank's yearly Budget is built with risk appetite as an integral part of the financial target determination. Varieties of triggers were employed, and an automated process was created to efficiently track compliance and apply a risk charge to the various SBUs where there are.

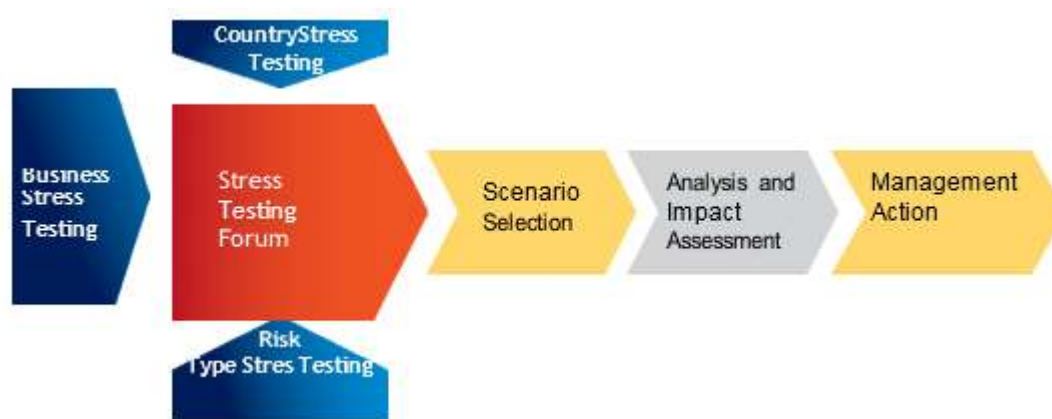
2.4.1.3 Integrated Risk Reporting

The Group strives to improve all in-house analytical reporting of risk management in the Bank and stimulate a culture of data-driven analytical insights for every decision impacting all risk touch points in the risk

management process. The quality of risk reporting has been greatly enhanced as a result of the implementation of an automated risk reporting system known as the Risk Management Report Portal and the subsequent inclusion of the Subsidiary Risk Management portal. This has led to easy and timely access to risk reports, provided early warning signals, better limit monitoring and better decision making for all units across risk management.

Fig 8: Access Bank's Plc. Stress Testing Framework

Stress testing framework



2.4.2. Stress Testing framework

The Bank has a **Board approved Scenario Planning document** which forms the basis of the assumptions used in the ICAAP stress test. The following processes were carried out:

- Proper assessment of current global and macroeconomic/social/political events which may give rise to shock and development of different scenarios for possible future shocks. Each SBU participated actively in this process.
- Establish industry outlook scenarios and demonstrate how these would impact our obligors, portfolio plan and concentration limits.
- Rate obligors based on the expected impact of these scenarios on their ability to meet their obligations as at when due. Relationship Managers (RM) were involved and confirmed obligors' ratings as they have first-hand knowledge of their business due to their one-on-one contact with the obligors. Also, RMs shared their knowledge based on their experience & expert judgement on customers behaviour over time especially during stress scenario
- Establish corrective management actions to protect the Bank from any negative impact but position it to take full advantage of opportunities arising therefrom.

Table 1: Idiosyncratic and Market wide scenario Framework

Idiosyncratic		(1) Business Downturn (2) Existing business growth but lower margins (3) Increased Cost
System wide	(5) Macroeconomic downturn (6) Exchange Rate Devaluation	(4) Deterioration in Asset Quality
	Rapid	Slow

2.4.3. Stress and scenario tests

These stress and scenario tests focus on the effect of various conditions on the Bank’s earnings and capital requirement. Note that all are described as stresses for convenience, although Stress 6 is a multiple event scenario

- Stress 1: Business Downturn
- Stress 2: Existing Business Growth but Lower Margins
- Stress 3: Existing Asset Growth but Higher Operational Cost
- Stress 4: Deterioration in Asset Quality
- Stress 5: Depreciation of the Naira
- Stress 6: Macroeconomic Downturn

These are based on the financial projections set out in the base case based on the five-year strategic plan with a focus on the first three years. In each case we have assumed that the stress takes place in 2021 - 2023, to give maximum impact on the Bank’s capital position, and continues into the two following years, either at the same, increased or a reduced level. For each stress and scenario, we have calculated the impact of the stress occurring in Year 1 with the effect on subsequent years being modelled. This approach has been chosen as it provides the greatest impact on the capital of the Bank, while ensuring that future growth is incorporated and considered. These scenarios have been aligned to the Bank’s financial forecast with a reduction in each percentage growth in earnings, increase in provisions and expenses.

Our stress testing framework is designed to:

- Contribute to the setting and monitoring of risk appetite
- Identify key risks to our strategy, financial position, and reputation
- Examine the nature and dynamics of the risk profile and assess the impact of stresses on our profitability and business plans

- Ensure effective governance, processes and systems are in place to co-ordinate and integrate stress testing
- Inform senior management
- Ensure adherence to regulatory requirements

3. Internal Capital Adequacy Assessment Process

The ICAAP process as stipulated in Pillar 2 of Basel 2 requires banks to identify and assess risks, maintain sufficient capital required to be held against identified material risks and apply appropriate risk-management techniques to maintain adequate capitalization. The Internal Capital Adequacy Assessment Process document is produced annually and sets out the results of Access Bank PLC own assessment of its internal capital requirements in accordance with Pillar II framework. A less detailed summary of risk assessments and capital requirements is produced on a quarterly basis. The purpose is to determine the adequate level of capital to support the Bank's business strategy and ensure adequate capital levels with regards to the associated risks. The report also includes background information concerning the Bank's organisation structure and the policies that underpin the Bank's risk assessment and risk management systems.

In preparing the document, the Bank leveraged on the following guidelines:

- *CBN Guidance note on Supervisory Review Process*
- *Statement of Policy: The Prudential Regulations Authority (PRA) methodologies for setting Pillar 2 capital (February 2020)*
- *European Banking Authority (EBA):*
 - I. *Regulatory Technical Standards (EBA/RTS/2014/11)*
 - II. *Guidelines (GL/2015/02)*

The Board formally approves the ICAAP document and subsequently reviews it annually or whenever it is considered necessary in the light of changes in market situations or specific circumstances.

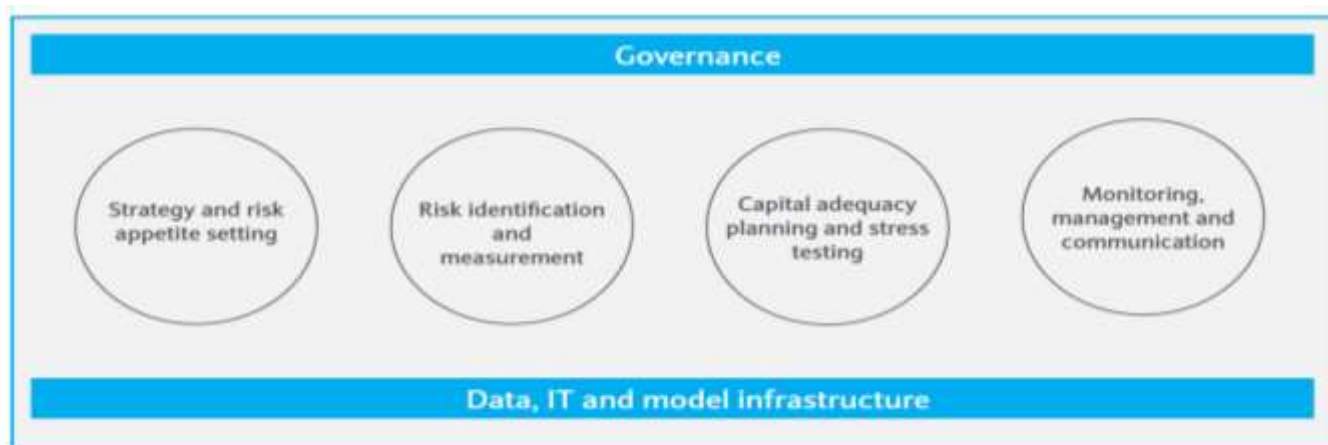
3.1. ICAAP Governance Structure

The efficient use of capital is fundamental to enhance shareholder value through careful deployment of capital resources. The ICAAP framework ensures that internal systems, controls and management information are in place to enable the Board and senior management to track changes in the economic environment, which may require adjustments to the business strategy in order to remain within the risk appetite. Furthermore, ICAAP reflects the level of capital required to be held against identified material risks the Group is, or may become exposed to, as a result of its strategy. From a Group consolidated perspective, capital adequacy is considered for each regulated entity as well as the Group. Capital management is an integral part of decision-making within the Group. Progress is measured against pre-determined targets in the balanced scorecard which incorporates capital metrics. Decisions on the

allocation of capital resources, which are an integral part of the ICAAP and capital management process, are based on several factors including return on regulatory capital. The Board of Directors and its committees, the ERM, and the Asset/Liability Committee (ALCO) form the core governance bodies related to ICAAP.

Fig 9: Access Bank's Plc. ICAAP Building Blocks

The building blocks of the Bank's ICAAP are as follows:



3.2. Regulatory Capital Composition

Access Bank's regulatory capital comprises of the two distinct elements which are classified as Tier 1 and Tier 2 capital; The CBN Guidance notes on Regulatory Capital provides the content for Tier 1 and Tier 2 capital. According to the CBN guidance note, the following qualify as Tier 1 capital.

- Paid-up share capital.
- Irredeemable preference shares.
- Share premium.
- General reserve (retained profit),
- SMEEIS reserves
- Statutory reserve.
- Other reserves as may be determined by the CBN.

While Tier 2 Capital comprises of.

- Hybrid Instruments
- Subordinated Debt
- Other Comprehensive Income.

The following are deductions made from capital;

- Intangible assets
- Investments in unconsolidated subsidiaries
- Deferred Tax Assets
- Treasury Shares

Table 2: Access Bank's Plc. Capital Position as at December 2020

ACCESS BANK'S REGULATORY CAPITAL AS AT DECEMBER 2020 (Transitional)

	December 2020 ('N000)	December 2019 ('N000)
Paid-Up share Capital	17,772,613	17,772,613
Irredeemable Preference Shares		
Share Premium	234,038,850	234,038,850
General Reserve (Retained Profit)	206,896,034	192,378,618
IFRS 9 Transitional Adjustment	39,626,942	79,253,885
Statutory reserve	95,067,598	83,061,699
Other reserves	39,669,665	12,972,081
Tier 1 Capital Before Regulatory Deduction	633,071,704	619,477,747
Regulatory Deductions		
Deferred Tax Assets		
Other intangible assets	67,496,078	71,003,729
Current year losses		
Under impairment	36,180,584	9,483,000
Treasury Shares		
Total Regulatory Deduction	103,676,662	80,486,729
Other Deductions		
50% Investment in the Capital of Financial Subsidiaries	82,125,766	65,729,354
Eligible Tier 1 Capital	447,269,275	473,261,664
Sub-ordinated debt	237,633,454	128,469,000
Other Comprehensive Income	60,450,900	2,717,238
Tier 2 Capital Before Deductions	176,465,013	131,186,238
Deductions		
50% Investment in the Capital of Financial Subsidiaries	82,125,766	65,729,354
Eligible Tier 2 Capital	94,339,247	65,456,884
TOTAL ELIGIBLE CAPITAL	541,608,523	538,718,546

ACCESS BANK'S REGULATORY CAPITAL AS AT DECEMBER 2020 (Full Impact)

	December 2020 ('N000)	December 2019 ('N000)
Paid-Up share Capital	17,772,613	17,772,613
Irredeemable Preference Shares		
Share Premium	234,038,850	234,038,850
General Reserve (Retained Profit)	206,896,034	192,378,618
IFRS 9 Transitional Adjustment		
Statutory reserve	95,067,598	83,061,699
Other reserves	39,669,665	12,972,081
Tier 1 Capital Before Regulatory Deduction	593,444,761	540,223,862
Regulatory Deductions		
Deferred Tax Assets		
Other intangible assets	67,496,078	71,003,729
Current year losses		
Under impairment	36,180,584	9,483,000
Treasury Shares		
Total Regulatory Deduction	103,676,662	80,486,729
Other Deductions		
Investment in the Capital of Financial Subsidiaries	82,125,766	65,729,354
Eligible Tier 1 Capital	407,642,332	394,007,779
Sub-ordinated debt	237,633,454	128,469,000
Other Comprehensive Income	60,450,900	2,717,238
Tier 2 Capital Before Deductions	163,256,032	131,186,238
Deductions		
Investment in the Capital of Financial Subsidiaries	82,125,766	65,729,354
Eligible Tier 2 Capital	81,130,266	65,456,884
TOTAL ELIGIBLE CAPITAL	488,772,599	459,464,661

3.3. Capital Management

Capital risk is the risk that the Bank's total capital base is not properly managed in a prudent manner. The Group's capital management strategy is focused on maximizing shareholder value by optimizing the level and mix of capital resources. Decisions on the allocation of capital resources are based on a number of factors including return on economic capital (EC) and on regulatory capital (RC), and are part of the internal capital adequacy assessment process (ICAAP).

3.3.1. Capital management objectives

The Bank has several capital management objectives:

- To meet the capital ratios required by its regulators and the Group's Board.
- To generate sufficient capital to support asset growth.

- To maintain an investment grade credit rating; and
- To achieve a return above the cost of equity

3.3.2. Capital Management Process

Capital is managed as a Board level priority in the Bank which reflects the importance of capital planning. The Board is responsible for assessing and approving the Group’s Capital Management Framework, capital target levels and capital strategy. The Capital Management Framework provides effective capital planning, capital issuance, Basel II alignment, Economic Capital (EC) utilisation and economic profit (EP) performance measurement criteria.

Fig 10: Access Bank's Plc. Capital Management Process



The above diagram illustrates the process the Bank follows to ensure end-to-end integration of the Bank’s strategy, risk management and financial processes into the capital management process. The purpose is to ensure that capital consumption in the business divisions has an impact on performance measurement, which in turn translates into management performance assessment and product pricing requirements and achievement of the overall strategy within risk appetite.

3.4. Summary of Capital Adequacy

The Capital Adequacy Ratio set standards for banks by looking at a bank’s ability to pay liabilities and respond to credit risks and operational risks. A bank that has a good CAR has enough capital to absorb potential losses. Thus, it has less risk of becoming insolvent and losing depositors’ money. After the financial crisis in 2008, the Bank of International Settlements (BIS) began setting stricter CAR requirements to protect depositors. The Bank’s Capital Adequacy Ratio at December 2020 stood at 17%, recognising the full impact of the IFRS 9 adjustment. The Table below highlights the Bank’s Capital Adequacy Ratio.

Table 3: Access Bank's Plc. Capital Adequacy Ratio as at December 2020

	TRANSITIONAL ARRANGEMENT	FULL IMPACT
Market Risk	143,009,817	143,009,817
Operational Risk	601,916,465	601,916,465
Credit Risk	2,451,116,988	2,384,996,164
Total Risk Weighted Asset	3,196,043,271	3,129,922,447
Total Qualifying Capital	541,608,523	488,772,599
Capital Adequacy Ratio	17%	16%

The table below sets out the summary of capital adequacy based on Access Bank's financial position as at December 2020 and projected periods of 2021, 2022 and 2023.

Table 4: Access Bank's Plc. Capital Position as at December 2020

Base Case (NGN 000s)	2020	2021	2022	2023
Pillar 1 requirements				
Credit Risk	367,667,548	386,786,261	406,009,538	417,499,608
Market Risk	11,440,785	12,241,640	13,220,972	14,146,440
Operational Risk	48,153,317	54,413,248	55,501,513	58,831,604
Pillar 2 Requirements	86,037,926	91,309,706	95,597,062	98,767,768
Total of Pillar 1, Pillar2	513,299,577	544,750,856	570,329,085	589,245,420
% of Pillar 2 to pillar 1	20%	20%	20%	20%
Total Capital Available	541,608,523	638,228,800	855,120,833	1,024,542,876
Surplus/Deficit	28,308,947	93,477,944	284,791,748	435,297,456

From the analysis above, the Bank has adequate capital to meet the Pillar 1 (Credit, Market and Operational Risks) and Pillar 2 material risks inherent in its business for the base and projected periods 2021 to 2023.

3.5. Basel 3 Leverage Ratio

As a response to the global financial crisis, the Basel Committee on Banking Supervision (BCBS) decided to undertake a major reform of the regulatory framework of the banking system. (BCBS press release of 12 January 2014 on BCBS (2014a), Basel III leverage ratio framework and disclosure requirements)

Basel III introduced a minimum "leverage ratio" - a non-risk-based leverage ratio. The Basel III standard on Leverage Ratio aims to strengthen the requirements from the **Basel II** standard on bank's minimum capital ratios which is a risk-based assessment of capital requirement i.e. The CAR under Pillar I & ICAAP under Pillar 2. Under the new Basel III banking regulations, a non-risk-based leverage ratio (LR) requirement will be introduced alongside the risk based capital framework (BASEL II) with the aim to "restrict the build-up of excessive leverage in the banking sector to avoid "destabilizing -deleveraging" processes that can damage the broader financial system and the economy" i.e. to enhance Bank's stability

The Basel III framework introduced a simple, transparent, non-risk-based leverage ratio to act as a credible supplementary measure to the risk-based capital requirements.

Calculated by dividing Tier 1 capital by the bank's average total consolidated assets (sum of the exposures of all assets and non-balance sheet items), banks are expected to maintain a leverage ratio in excess of 3% under Basel III.

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}} \geq 3\%$$

Access Bank Leverage Ratio = 7.21%

The Bank's Total leverage ratio exposure consists of the components Derivatives, securities financing transactions (SFTs), off balance-sheet exposure and other on-balance sheet exposure (excluding derivatives and SFTs).

Here, the Bank's total on- Balance sheet exposure is the actual balance sheet amount unlike in the Risk based approach (Basel II) where total exposure is risk weighted assets with the same nominal value but of different "riskiness" are treated equally and face the same capital requirement under the non-risk-based LR.

The leverage exposure for derivatives is calculated by using the regulatory mark-to-market method for derivatives comprising the current replacement cost plus a regulatory defined add-on for the potential future exposure. Variation-margin received in cash from counterparties is deducted from the current replacement cost portion of the leverage ratio exposure measure and variation margin paid to counterparties is deducted from the leverage ratio exposure measure related to receivables recognized as an asset on the balance sheet, provided certain conditions are met.

The SFT component includes the gross receivables for SFTs, which are netted with SFT payables if specific conditions are met. In addition to the gross exposure a regulatory add-on for the counterparty credit risk is included.

The Off-balance sheet exposure component follows the credit risk conversion factors (CCF) of the standardized approach for credit risk (0 %, 20 %, 50 %, or 100 %), which depend on the risk category subject to a floor of 10 %.

The other on-balance sheet exposure component (excluding derivatives and SFTs) reflects the accounting values of the assets (excluding derivatives and SFTs) as well as regulatory adjustments for asset amounts deducted in determining Tier 1 capital.

Moving from a solely risk-based approach - leverage ratio requirement- should only lead to limited additional risk-taking relative to the induced benefits of increasing loss-absorbing capacity, thus resulting in more stable banks

According to Basel, leverage ratio is intended to:

- Restrict the build-up of leverage in the banking sector to avoid destabilising deleveraging processes that can damage the broader financial system and the economy; and
- Reinforce the risk-based requirements with a simple, non-risk based "backstop" measure.

The tables below show Access Bank's Basel III Leverage Ratio Computation as at December 31, 2020

Fig 11: Access Bank's Plc. Leverage Ratio as at December, 2020

Leverage Ratio Common Disclosure Template		
DATE: FY'2020		
ON BALANCE SHEET EXPOSURES		
Line 1	On-balance sheet items (excluding derivatives and SFTs, but including collateral)	7,373,062,932.86
Line 2	(Relevant Asset amounts deducted in determining Basel III Tier 1 capital)	(1,661,663,762.34)
Line 3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	5,711,399,170.53
DERIVATIVE EXPOSURES		
Line 4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	251,922,605.27
Line 5	Add-on amounts for Potential Financial Exposure (PFE) associated with all derivatives transactions	3,866,314.39
Line 6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	
Line 7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	
Line 8	(Exempted CCP leg of client-cleared trade exposures)	
Line 9	Adjusted effective notional amount of written credit derivatives	
Line 10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	
Line 11	Total derivative exposures (Sum of lines 4 to 10)	255,788,919.66
SECURITIES FINANCING TRANSACTIONS EXPOSURES		
Line 12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	
Line 13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	
Line 14	Credit Conversion Factor (CCR) exposure for Security Financing Transaction (SFT) assets	
Line 15	Agent transaction exposures	
Line 16	Total securities financing transaction exposures (Sum of lines 12 to 15)	
OTHER OFF BALANCE SHEET EXPOSURES		
Line 17	Off-balance sheet exposure at gross notional amount	676,815,757.16
Line 18	(Adjustments for conversion to credit equivalent amounts)	(440,933,347.80)
Line 19	Off-balance sheet items (Sum of lines 17 and 18)	235,882,409.35
CAPITAL AND TOTAL EXPOSURES		
	Tier 1 capital	447,269,275.24
	Total exposures (Sum of lines 3, 11, 16 and 19)	6,203,070,499.55
LEVERAGE RATIO		
	Basel III leverage Ratio	7.21%

4. Internal Liquidity Adequacy Assessment Process

ILAAP is the process for identifying, measuring, managing and monitoring liquidity and funding risks by a Bank. It contains all qualitative and quantitative information necessary to underpin the Bank's liquidity risk appetite, including the description of the systems, processes and methodology for measuring and managing liquidity and funding risks.

The Board of Directors (hereafter "Board") is responsible for the ILAAP and has established the design and structure of the ILAAP in accordance with the liquidity risk profile of the Bank and its moderate liquidity risk appetite.

The ILAAP process is completed and reviewed annually or more frequently when there are significant changes to the business, strategy or external operating environment of the Bank.

4.1. Purpose of ILAAP

The objectives of ILAAP are as follows:

- To ensure that the Bank has adequate liquidity to support its operations
- To demonstrate to key stakeholders (i.e. regulators, investors, customers) the adequacy of the Bank's liquidity risk management (LRM) process, thereby gaining market confidence
- ILAAP provides a holistic view of LRM in the Bank.
- ILAAP can also be used as a strategic decision-making tool to ensure that growth strategy is in alignment with sound LRM practices

4.2. ILAAP Structure

The Bank's ILAAP is structured in line with the CBN guideline notes and De Nederlandsche Bank (DNB) supervision manual on the "Principles of the ILAAP". It essentially contains two elements i.e. qualitative and quantitative elements.

The qualitative elements describe among other things, the expectations on risk governance with a focus on liquidity risk. These elaborate on aspects relating to the Bank's liquidity risk strategies, procedures, measures and the liquidity cushions to be maintained by the Bank. The quantitative aspects of the ILAAP are directly linked to the qualitative elements and they include limits, maturity calendars, liquidity risk metrics and stress testing.

4.2.1. Qualitative assessment

The Board has put in place policies, processes and systems that enable it to identify, measure, manage and monitor liquidity risk and is responsible for approving these overall systems and controls. In setting the Bank's LRM framework, the Board adopted the "Three Lines of Defence Approach". This is outlined in the following documents:

- Market Risk Appetite Statement
- Contingency Funding Plan (which has been incorporated into the Bank's Resolution Plan)
- Market Risk Management Limits
- Framework for Managing Foreign Currency Lending and Funding

- Asset and Liability Management Policy
- Procedures for Liquidity Risk Gap Analysis
- Non-maturity and Maturity Account Analysis

4.2.2. **Quantitative Assessment**

The liquidity adequacy rule states that;

“a firm must at all times maintain liquidity resources which are adequate, both as to amount and quality, to ensure that there is no significant risk that its liabilities cannot be met as they fall due”

This rule has the following requirements:

- Hold sufficient liquidity resources which contain an adequate buffer of high quality, unencumbered assets that are marketable, or otherwise realisable.
- Be able to generate funds from those assets in a timely manner; and
- Maintain a prudent funding profile in which its assets are of appropriate maturities, given the maturity profile of the Bank’s liabilities

In order to ensure compliance to the liquidity adequacy rule, the Bank has assessed the overall character of the resources available to it, which enables it to meet its liabilities as they fall due.

The objective of the Bank’s quantitative liquidity adequacy assessment is to determine the minimum amount and type of liquidity resources that must be maintained by the Bank to withstand the impact of a range of stress scenarios and ensure compliance with its Risk Appetite limits under both normal and stressed conditions. The key elements in the Bank’s liquidity risk quantitative assessment are summed up in the following:

- Materiality assessment of liquidity risk drivers - Identification of material liquidity risks that the Bank is exposed to, including an assessment of the sources of liquidity risk:
 - ✓ This is based on an analysis of the Bank’s balance sheet, off balance sheet exposures and the structure of its funding profile.
 - ✓ Liquidity risks are identified and defined based on the ten internationally recognised liquidity risk drivers, together with any additional risks that are considered material to the Bank, with each on-balance sheet and off-balance sheet activity mapped to a relevant liquidity risk driver.
 - ✓ Where the liquidity risk drivers are considered immaterial to the Bank, the qualitative assessment supporting this view has been provided.
- Limits and liquidity risk tolerance (risk appetite)
- Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR)
- Stress testing and scenario analysis
- Early warning indicators
- Risk Based Fund Transfer Pricing

4.3. *ILAAP Metrics*

The assessment of the Bank’s liquidity and funding profile was carried out based on the 2018 year-end results, and 2019 projections using the following methodology;

- Materiality Assessment of Liquidity Risk Drivers
- Liquidity Coverage Ratio
- Net Stable Funding Ratio
- Liquidity Ratio
- Stress Test (Static and Dynamic)

Access Bank’s liquidity remained robust in 2020. The table below summarises the Bank’s Liquidity position as at year-end 2020

Liquidity Metrics	LCY	USD	Consolidated Currencies	Regulatory Requirement
LCR	239.14%	108.85%		100%
NSFR**			138.1%	100%

4.3.1. *Liquidity Coverage Ratio*

This ratio identifies the Bank’s available sufficient short-term liquidity (high quality liquid assets of HQLA) to cover short-term liquidity requirements. These requirements are defined as the net outflows over a 30 days’ time horizon under an acute liquidity stress scenario for the Bank and the market. As in similar metrics, the available liquidity must exceed the required liquidity, meaning LCR must be at least 100%.

$$LCR = \frac{\text{Stock of HQLA}}{\text{Total Net Cash Outflows}} \geq 100\%$$

Access Bank LCR (LCY) = 239.14%

The Stock of HQLA contains assets of the only highest credit and liquidity quality such as Federal government bonds and treasury bills, etc. For the denominator, the net cash outflows are considered with a factor of prudence applied to each individual item. This conservative definition ensures that the Bank never has to rely exclusively on expected inflows.

4.3.2. *Net Stable Funding Ratio (NSFR)*

The NSFR guides the Bank in adopting more stable sources of funding over a longer-time horizon. It defines the amount of available stable funding relative (ASF) to the required stable funding (RSF) over a 1-year time scale. The ASF is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The RSF calculation is a function of the liquidity characteristics and residual maturities of the various on-and off-balance sheet assets specific to the Bank.

The NSFR provides for different ASF and RSF weightings (or 'factors') depending on the type of counterparty and the residual maturity of the transaction. These are summarized below:

$$\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} \geq 100\%$$

Access Bank NSFR = 138.1%

4.3.3. Contractual maturity mismatch

The contractual maturity mismatch identifies the gaps between the contractual inflows and outflows of liquidity for defined time bands. These maturity gaps indicate how much liquidity the Bank would potentially need to raise in each of these time bands if all outflows occurred at the earliest possible date. This metric provides insight into the extent to which the bank relies on maturity transformation under its current contracts.

5. Recovery and Resolution Plan (RRP)

The 2008/2010 global financial crisis exposed Nigerian banks and the economy in general to unprecedented stress. Poor risk management in Nigerian banks led to the concentration of assets in certain risky areas. The concerns stemmed from the huge deterioration in the quality of banks' assets, liquidity concerns and low capital adequacy ratios. Consequently, the CBN had to intervene to prevent a total collapse of the industry and create stability in the Nigerian financial sector.

The Asset Management Corporation (AMCON) was set up in 2010 to relieve banking sector balance sheets of Non-Performing Loans thereby stimulating lending to the real sector. AMCON has over the period intervened by acquiring Eligible Bank Assets ("EBAs"), issuing financial accommodation securities and employing the bridging option to establish bridge banks as a form of resolution. The various regulatory interventions have been at the expense of taxpayers, as these funds could have been channelled towards infrastructural and human capital development.

Over the years, the failure of some of the hitherto biggest financial institutions sometimes without sufficient early warning signals had huge implications for the financial system and national economies. This became a learning point for regulators worldwide as they devised measures to reduce the impact of these bank failures on the financial system. Part of these measures included drawing up criteria to determine Systematically Important Financial Institutions (SIFIs).

The Financial Stability Board describes Systematically Important Financial Institutions (SIFIs) as "financial institutions whose distress or disorderly failure, because of their size, complexity and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity".

The CBN designated eight banks as Domestic Systemically Important Banks (D-SIBs) in November 2013 and issued requirements for Recovery and Resolution Plans to be submitted by 1st January of every year. Access Bank was designated as a D-SIB, accordingly we have updated the Bank's 2019 recovery plan ('Recovery Plan') and made submissions to the relevant regulators. The Recovery Plan is updated at least once a year to reflect changes in the business and the regulatory environment

The Recovery Plan equips the Bank to re-establish its financial strength and viability during an extreme stress situation. The Recovery Plan's raison d'être is to document how we can respond to a financial stress situation that would significantly impact our capital or liquidity position. The plan outlines a set of defined actions, aimed to protect us, our customers and the markets and prevent a potentially more costly resolution event.

5.1. Recovery Plan

The Access Bank Recovery Plan conforms to the following guidelines:

- CBN Minimum Contents for Recovery Plans and Requirements for Resolution Planning. November 2016
- European Banking Authority (EBA):
- Regulatory Technical Standards (EBA/RTS/2014/11)
- Guidelines (GL/2015/02)
- Prudential Regulations Authority (PRA) Policy and Supervisory Statements (PS1/15 and SS18/13)
- Financial Stability Board (FSB) Guidance on Recovery Triggers and Stress Scenarios dated 16 July 2013

Recovery Indicators are metrics that can be used by the Bank to define the points at which to take action under the recovery plan. Indicators are qualitative and quantitative in nature and draw on our existing risk management frameworks. The Bank currently has several risk related frameworks in place for both financial and non-financial risk, such as the ERM Framework, Contingency Funding Plan (CFP) and Business Continuity Plan (BCP). The Bank's qualitative and quantitative indicators are drawn from our existing risk management frameworks.

Quantitative indicators include Capital, Liquidity, Asset Quality and Earnings indicators. In addition to these, macroeconomic and market-based indicators are used by us to proactively signal negative trends which may harm the Bank. These triggers provide input and support for the continuous monitoring of possible adverse situations and may indicate potential changes in the four key indicators. The trigger levels and thresholds for the indicators were determined based on regulatory requirements (CBN), the Bank's Risk Appetite, as well as global best practices. These indicators have different monitoring frequencies, and a threshold breach will trigger a series of actions as specified in the plan.

In line with best practice, we have identified a wide range of recovery options that will mitigate different types of stress scenarios and steer the Bank back to a "BAU" condition. The Bank's ICAAP and ILAAP form the bedrock on which the Scenario Planning and Stress testing are shaped. These scenarios cover both idiosyncratic and market-wide events, which could lead to severe capital and liquidity impacts as well as impacts on our performance and balance sheet. For each recovery option, the impact on capital and

liquidity is quantified. The timing to realization of benefits, franchise impact as well as likely effectiveness are evaluated. The implementation plan and timeline are delineated, risks and regulatory considerations are also assessed.

The Board of Directors ("Board") owns and is responsible for the Recovery Plan. The CRO is charged with the responsibility of maintaining the RRP and making submission to the regulatory authorities.

The Recovery Management framework is built upon and closely integrated within existing risk, capital and liquidity management governance frameworks, and policies.

5.2. Resolution Planning

Globally, regulators of financial institutions are seeking to mitigate the risk of market-wide disruption from a bank failure as occurred in the previous financial crisis. To facilitate this, information is required from banks to facilitate the ease of resolution by the regulators with minimal distortions and impediments thereby ensuring that the impact of failure is minimised, access to deposits are maintained, payment services continue and the risk of a fire sale of assets, which may cause financial instability, is minimised. The CBN Minimum Contents for recovery Plans and Requirements for Resolution Planning outlines minimum information which should be included in a resolution pack which would assist the resolution authorities in carrying out their statutory responsibilities. This information has been provided in line with the regulatory guidance.

6. Credit Risk.

6.1. Introduction

Credit risk arises from the failure of an obligor of the Bank to repay principal or interest at the stipulated time or failure otherwise to perform as agreed. This risk is compounded if the assigned collateral only partly covers the claims made to the borrower, or if its valuation is exposed to frequent changes due to changing market conditions (i.e. market risk). The Bank's Risk Management philosophy is that moderate and guarded risk attitude will ensure sustainable growth in shareholder value and reputation. Extension of credit in Access Bank is guided by its Credit Risk and Portfolio Management Plan, which sets out specific rules for risk origination and management of the loan portfolio. The Plan also sets out the roles and responsibilities of different individuals and committees involved in the credit process. The Bank recognises the fact that its main asset is its loan portfolio. Therefore, the Bank actively safeguards and strives to continually improve the health of its loan portfolio.

An exposure where any amount due under the contract (interest, principal, fee or other amount) has not been paid in full at the date when it was due is deemed to be **past due**. An exposure should be considered past due even when the amount of the exposure or the past due amount, as applicable, is not considered material. The goal of the Bank is to apply sophisticated but realistic credit models and systems to monitor and manage credit risk. The pricing of each credit granted reflects the level of risks inherent in the credit. Subject to competitive forces, Access Bank implements a consistent pricing model for loans to its different

target markets. The client's interest is always guarded, and collateral quality is never the sole reason for a positive credit decision. Provisions for credit losses meet IFRS and prudential guidelines set forth by the Central Bank of Nigeria, both for loans for which specific provisions exist as well as for the portfolio of performing loans. Access Bank's credit process requires rigorous proactive and periodic review of the quality of the loan portfolio. This helps us to identify and remediate credit issues proactively.

The Criticized Assets Committee performs a quarterly review of loans with emerging signs of weakness; the Management Credit Committee and the Board Credit Committee also perform reviews of the quality of our loan portfolio on a quarterly basis. These are in addition to daily reviews performed by the various Head of Risk within the Credit Risk Management Groups.

6.2. General Disclosures

The table below shows the Bank's Risk Weighted assets for each Exposure Class.

6.2.1. Credit Concentration by Geography

Fig 12: Access Bank's Plc. Credit Concentration by Geography

LOCATION	(NGN)
Lagos	2,072,908,445,174.48
South South	410,584,887,353.26
United Kingdom	182,180,277,869.72
West	77,476,494,609.23
South East	36,398,518,250.93
North West	65,473,650,212.65
Abuja	29,040,619,713.71
North East	29,720,370,945.97
North Central	34,135,005,870.05

6.2.2. Credit Exposures by Counterparty

Fig 13: Access Bank's Plc. Credit Concentration by Counterparty

EXPOSURE CLASS	EXPOSURE AMOUNT	CREDIT RISK MITIGATION	NET EXPOSURE	TOTAL RISK WEIGHTED ASSETS
Central Government and Central Banks	2,885,418,942,129.00	-	2,885,418,942,129.00	-
State Government and Local Authorities	250,900,510,032.11	181,877,388,268.31	69,023,121,763.80	39,682,523,665.05
Multilateral Development Banks (MDB)	114,570,702,826.03	-	114,570,702,826.03	57,285,351,413.01
Supervised Institutions	370,755,758,158.74	105,166,095,467.93	281,246,916,867.34	115,871,618,498.14
Corporate and Other Persons	2,265,724,194,166.05	795,885,019,473.26	1,469,839,174,692.79	1,469,839,174,692.79
Regulatory Retail Portfolio	85,307,375,926.83	1,463,982,267.33	83,843,393,659.50	62,882,545,244.63
Exposures Secured by Mortgage on Residential Properties	77,616,276,284.83	3,842,315,672.41	73,773,960,612.42	55,330,470,459.31
Exposures Secured by Mortgage on Commercial Real Estates	115,782,140,612.21	546,183,143.31	115,235,957,468.90	115,235,957,468.90
Past Due Exposures	89,468,830,564.35	54,264,378.15	89,414,566,186.21	89,291,457,146.03
High Risk Exposures	15,171,296,000.00	-	15,171,296,000.00	22,756,944,000.00
Other Assets	877,952,197,000.00	152,336,846,564.10	785,017,073,099.19	329,293,968,099.19
Off Balance Sheet	190,330,193,967.10	136,334,856,320.81	125,363,410,110.86	125,363,410,110.86

6.2.3. Credit Exposures by Sectors

The table below shows the Bank's total Loan exposure to different sectors. The total loan exposure grew by 10% between FY 2019 and FY 2020.

Fig 14: Access Bank's Plc. Credit Concentration by Sector

SECTOR	DECEMBER, 2020 ('000)	DECEMBER, 2019 ('000)
AGRICULTURE	38,449,759.00	31,591,359.00
CONSTRUCTION	251,924,604.00	190,749,900.00
EDUCATION	6,646,081.00	1,672,612.00
FINANCE AND INSURANCE	51,938,634.00	35,603,293.00
GENERAL	182,981,897.00	141,416,749.00
GENERAL COMMERCE	250,551,200.00	301,611,261.00
GOVERNMENT	219,321,675.00	197,097,269.00
INFORMATION AND COMMUNICATION	159,818,167.00	146,599,122.00
OTHER MANUFACTURING (INDUSTRIES)	77,253,248.00	55,346,512.00
BASIC METAL PRODUCTS	46,576,673.00	44,740,231.00
CEMENT	42,615,921.00	33,722,220.00
CONGLOMERATE	112,880,586.00	79,971,726.00
FLOURMILLS AND BAKERIES	9,061.00	13,304,974.00
FOOD MANUFACTURING	103,153,650.00	61,926,991.00
STEEL ROLLING MILLD	86,001,404.00	116,073,823.00
OIL AND GAS - DOWNSTREAM	124,484,023.00	134,328,441.00
OIL AND GAS - SERVICES	559,533,809.00	438,926,954.00
OIL AND GAS - UPSTREAM	226,906,782.00	239,917,864.00
CRUDE OIL REFINING	15,351,429.00	45,851,377.00
REAL ESTATE ACTIVITIES	237,604,450.00	223,961,036.00
TRANSPORTATION AND STORAGE	95,128,955.00	79,289,024.00
POWER AND ENERGY	24,577,896.00	24,135,507.00
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	1,909,503.00	2,710,129.00
OTHERS	22,298,865.00	22,074,716.00
GRAND TOTAL	2,937,918,272.00	2,662,623,090.00

6.2.4. Allowances for credit losses (Impairment)

An exposure where any amount due under the contract (interest, principal, fee or other amount) has not been paid in full at the date when it was due. An exposure should be considered past due even when the amount of the exposure or the past due amount, as applicable, is not considered material.

A loan is impaired when, based on current information and events, it is probable that an institution will be unable to collect all amounts due, according to the original contractual terms of the loan agreement. Loans and advances to banks and customers are accounted for at amortised cost and are evaluated for impairment on a basis described in accounting policy 3.9 “The Bank reviews its loan portfolios to assess impairment at least on a half yearly basis. In determining whether an impairment loss should be recorded in the income statement, the Bank makes judgements as to whether there is any observable data indicating an impairment trigger followed by measurable decrease in the estimated future cash flows from a portfolio of loans before the decrease can be identified with that portfolio. This evidence may include observable data indicating that there has been an adverse change in the payment status of borrowers in a bank, or national or local economic conditions that correlate with defaults on assets in the Bank. The Bank makes use of estimates based on historical loss experience for assets with credit risk characteristics and objective evidence of impairment like those in the portfolio when scheduling future cash flows. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience. The specific component of the total allowances for impairment applies to financial assets evaluated individually for impairment and is based upon management’s best estimate of the present value of the cash flows that are expected to be received. In estimating these cash flows, management makes judgements about a debtor’s financial situation and the net realisable value of any underlying collateral. Each impaired asset is assessed on its merits, and the workout strategy and estimate of cash flows considered recoverable are independently reviewed by the Credit Risk Management Department (CRMD).

The Statement of prudential adjustments Provisions under prudential guidelines are determined using the time-based provisioning regime prescribed by the Revised CBN Prudential Guidelines. This is at variance with the incurred loss model required by IFRS 9 . As a result of the differences in the methodology/provision regime, there will be variances in the impairments allowances required under the two methodologies. Paragraph 12.4 of the revised Prudential Guidelines for Deposit Money Banks in Nigeria stipulates that Banks would be required to make provisions for loans as prescribed in the relevant IFRS Standards when IFRS is adopted. However, Banks would be required to comply with the following:

a) Provisions for loans recognised in the profit and loss account should be determined based on the requirements of IFRS. However, the IFRS provision should be compared with provisions determined under prudential guidelines and the expected impact/changes in general reserves should be treated as follows:

- Prudential Provisions is greater than IFRS provisions; the excess provision resulting should be transferred from the general reserve account to a “regulatory risk reserve”.

- Prudential Provisions is less than IFRS provisions; IFRS determined provision is charged to the statement of comprehensive income.

The cumulative balance in the regulatory risk reserve is thereafter reversed to the general reserve account.

IFRS 9 Financial Instruments: Classification and Measurement (effective 1 January 2018)

IFRS 9 is part of the IASB’s project to replace IAS 39. It addresses classification, measurement and impairment of financial assets as well as hedge accounting. IFRS 9 replaced the multiple classification and measurement models in IAS 39 with a single model that has only three classification categories: amortized cost, fair value through OCI and fair value through profit or loss. It includes the guidance on accounting for and presentation of financial liabilities and de-recognition of financial instruments which was previously in IAS 39. Furthermore, for non-derivative financial liabilities designated at fair value through profit or loss, it requires that the credit risk component of fair value gains and losses be separated and included in OCI rather than in the income statement. IFRS 9 also requires that credit losses expected at the balance sheet Date (rather than only losses incurred in the year) on loans, debt securities and loan commitments not held at fair value through profit or loss be reflected in impairment allowances. The IASB has amended IFRS 9 to align hedge accounting more closely with an entity’s risk management. The revised standard establishes a more principles-based approach to hedge accounting and addresses inconsistencies and weaknesses in the current model in IAS 39.

Collective allowance for groups of homogeneous loans is established using statistical modelling of historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management’s judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical modelling. Default rates, loss rates and the expected timing of future recoveries are regularly benchmarked against actual outcomes to ensure that they remain appropriate. “Collective allowance for group of assets that are individually significant but that were not found to be individually impaired cover credit losses inherent in portfolios of loans and advances and held to maturity investment securities with similar credit characteristics when there is objective evidence to suggest that they contain impaired loans and advances and held to maturity investment securities, but the individual impaired items cannot yet be identified. In assessing the need for collective loan loss allowances, management considers factors such as credit quality, portfolio size, concentrations, and economic factors. In order to estimate the required allowance, assumptions are made to define the way inherent losses are modelled and to determine the required input parameters, based on historical experience and current economic conditions. The accuracy of the allowances depends on estimates of future cash flows for specific counterparty allowances and the model assumptions and parameters used in determining collective allowances are estimated.

Fig 15: Access Bank’s Plc. Non-Performing Loan Position

Non-Performing Loans (NPL)	Volume	Percentage Change	NPL Ratio
	Total (N’ B)		

December, 2016	31.5	58%	1.80%
December, 2017	82.4	162%	4.28%
December, 2018	44.5	-46%	2.38%
December, 2019	172.5	288%	6.10%
December, 2020	115.8	-33%	3.65%

The table above shows the Bank's Non –Performing Loans (NPL) over a five-year period. The Bank's NPL at FY 2020 was N115.8Bn while the NPL ratio stood at 3.65%

6.3. *Principal Credit Policies*

The following are the principal credit policies of the Bank:

- **Credit Risk Management Policy:** The core objective is to enable maximization of returns on a risk adjusted basis from banking book credit risk exposures that are brought under the ambit of Credit Risk Management Policy by putting in place robust credit risk management systems consisting of risk identification, risk measurement, setting of exposure & risk limits, risk monitoring & control and reporting of credit risk in the banking book.
- **Credit Risk Mitigant Management Policy:** The objective is to aid in effective credit portfolio management through mitigation of credit risks by using credit risk mitigation techniques.
- **Credit Risk Rating Policy:** The objective of this policy is to ensure reliable and consistent Obligor Risk Ratings (ORRs) and Facility Risk Ratings (FRRs) throughout Access Bank and to provide guidelines for risk rating for retail and non-retail exposures in the banking book covering credit and investment books of the Bank.
- **Country and Cross Border Risk Management Policy:** The objective of this policy is to establish a consistent framework for the identification, measurement and management of country risk across Access Bank.
- **Credit Policy Guide:** The objective of this policy is to establish a consistent framework for creating and managing risk assets in order to prevent the loss of depositor's funds.

6.4. *Credit Risk Measurement Risk Rating*

The credit rating of the counterparty plays a fundamental role in final credit decisions as well as in the terms offered for successful loan applications. Access Bank employs a robust credit rating system based on international best practices (including Basel II recommendations) in the determination of the Obligor

and Facility risks and thus allows the Bank to maintain its asset quality at a desired level. In Access Bank, the objective of the Risk Rating Policy is to ensure reliable and consistent Obligor Risk Ratings ('ORRs') and Facility Risk Ratings ('FRRs') throughout the Bank and to provide guidelines for risk rating for retail and non – retail exposures in the bank. The Risk rating policy incorporates credit risk rating models which estimate risk of obligor default and facility risks (covering both recovery as well as exposure risk). These models are currently based on expert judgment for Retail and Non-Retail Exposures. Our goal is to adopt the Internal Rating Based ("IRB") approach. The data required to facilitate the IRB approach are being gathered. All Access Bank businesses that extend credit are subject to the Risk Rating Policy.

The following are the credit risk rating models deployed by Access Bank.

Retail Exposures

Obligor Risk Rating (ORR) Models have been developed for:

- 1 Personal Loans
- 2 Credit Cards
- 3 Auto Loans
- 4 Mortgage Loans

Facility Risk Rating (FRR) Models have been developed for:

- 1 Loss Given Default (LGD)
- 2 Exposure at Default (EAD)

Non – Retail Exposures

Obligor Risk Rating (ORR) Models have been developed for:

- 1 Sovereign (Approach to rating Sovereign Exposures using External ratings)
- 2 Bank and NBFIs
- 3 Corporate - Manufacturing Sector - Trading Sector - Services Sector - Real Estate Sector
- 4 Small and Medium Enterprises (SME) Without Financials

Facility Risk Rating (FRR) Models have been developed for

- 1 Loss Given Default (LGD)
- 2 Exposure at Default (EAD)

6.4.1. Risk Rating Process

In Access Bank, all businesses must have a documented and approved Risk Rating Process for deriving risk ratings for all obligors and facilities (including those covered under Credit Programs). The Risk Rating Process is the end-to-end process for deriving ORRs and FRRs and includes models, guidelines, support adjustments, collateral adjustments, process controls, as well as any other defined processes that a

business undertakes in order to arrive at ORRs and FRRs. Risk rating process of each business must be in compliance with the Bank's Risk rating Policy and deviations must be explicitly approved. Establishing the Risk Rating Process is the joint responsibility of the Business Manager and the Credit Risk Manager associated with each business. The process must be documented and must be approved by the Management Credit Committee. The Risk Rating Process for each business must be reviewed and approved annually, unless more frequent review is specified as a condition of the approvals. A more frequent review may be necessary when there is any new information that impacts on a borrower's rating e.g. release of interim audited financial statements or changes in business profile. Interim material changes to the Risk Rating Process, as determined by the Credit Risk Manager for the business, must be re-approved. Risk Rating Scale and external rating equivalent Access Bank operates a 12-grade numeric risk rating scale. The risk rating scale runs from 1 to 8. Rating 1 represents the best obligors and facilities and rating 8 represents the worst obligors and facilities. The risk rating scale incorporates sub-grades and full grades reflective of realistic credit migration patterns.

Table 5: Access Bank's Plc. Loans by Risk Rating Class
Access Bank Total Loans by Risk Rating Class

Credit Quality by Risk Rating Class			Loans and Advances to	Loans and Advances to	Loans and Advances to	Loans and Advances to		
In thousands of Naira			Individuals	corporates	Banks	Banks		
Neither Impaired	Past Due	nor Impaired						
External Rating Equivalent	Grade	Risk Rating	Dec-20	Dec-19	Dec-20	Dec-19	Dec-20	Dec-19
AAA	Investment	1			143,495,419	141,904,070	231,940,426	162,786,158
AA	Investment	2+			324,506,243	320,864,834		
A	Investment	2			286,799,165	164,083,286		821,994
BBB	Investment	2-			741,999,964	243,191,651	6,411	
BB+	Standard	3+	488,434	971,147	302,431,076	313,900,248		
BB	Standard	3	95,533,373	82,796,166	745,739,254	767,220,216		
BB-	Standard	3-	4,662,066	2,194,998	163,815,412	190,250,574		
B	Non-Investment	4	54,324	3,861,882	1,426,987	168,487,181		
B-	Non-Investment	5	9,821	667,271	1,273,477	91,850,394		
CCC	Non-Investment	6	4,929,527	3,364,354	17,011,057	33,482,271		2,062,143
C	Non-Investment	7	471,346	907,961	81,073,585	106,052,309		
D	Non-Investment	8	2,598,102	1,252,455	9,599,636	25,319,822	140,061	104,694
GROSS AMOUNT			108,746,993	96,016,233	2,829,171,276	2,566,606,857	232,086,898	165,774,989
Collective Impairment specific impairment			(2,831,594)	(4,776,941)	(116,210,946)	(176,222,477)	(298,622)	(1,361,987)
CARRYING AMOUNT			105,915,399	91,239,291	2,712,960,330	2,390,384,380	231,788,277	164,413,001

6.5. Collateral Policies

It is the Bank's policy that all credit exposures are adequately collateralised. Credit risk mitigation is an activity of reducing credit risk in an exposure or transferring it to counterparty, at facility level, by a safety net of tangible and realizable securities including approved third-party guarantees/ insurance. In Access Bank, strategies for risk reduction at the transaction level differ from that at the portfolio level. At transaction level, the most common technique used by the bank is the collateralization of the exposures, by first priority claims or obtaining a third-party guarantee. For all credit risk mitigants that meet the policy criteria, a clear set of procedures are applied to ensure that the value of the underlying collateral is appropriately recorded and updated regularly. Collateral types that are eligible for risk mitigation include: cash; residential, commercial and industrial property; fixed assets such as motor vehicles, aircraft, plant and machinery; marketable securities; commodities; bank guarantees; and letters of credit. Other techniques include buying a credit derivative to offset credit risk at transaction level. At portfolio level, asset securitisation, credit derivatives etc. are used to mitigate risks in the portfolio.

However, the primary consideration for approving credits is hinged largely on the obligor's financial strength and debt-servicing capacity. The guidelines relating to risk mitigant as incorporated in the guidance note of BCBS on "Principles for the Management of Credit Risk" (September 2000, Paragraph 34) are to be taken into consideration while using a credit risk mitigant to control credit risk. "Banks can utilize transaction structure, collateral and guarantees to help mitigate risks (both identified and inherent) in individual credits but transactions should be entered into primarily on the strength of the borrower's repayment capacity. Collateral cannot be a substitute for a comprehensive assessment of the borrower or the counterparty, nor can it compensate for the insufficient information. It should be recognized that any credit enforcement actions (e.g. foreclosure proceedings) can eliminate the profit margin on the transaction. In addition, Banks need to be mindful that the value of collateral may well be impaired by the same factors that have led to the diminished recoverability of the credit".

The range of collaterals acceptable to the Bank includes:

- Cash / Deposit (domestic and foreign currency) with bank including certificates of deposit or comparable instruments issued by the bank.
- Certificates of Deposit from other banks.
- Commodities.
- Debt securities issued by sovereigns and public-sector enterprises.
- Debt securities issued by banks and corporations.
- Equities - Stocks / Share Certificates of quoted blue-chip companies
- Mortgage on Landed Property
- Asset-backed securities.
- Charge on assets (Fixed and/or Floating) - premises/ inventory/ receivables/ merchandise/ plant/ machinery etc.
- Negative Pledges
- Lien on Asset being financed

- Stock Hypothecation
- Shipping Documents (for imports) • Bankers' Acceptance • Life Assurance Policies

7. Market Risk.

7.1. Introduction

Access Bank is faced with the risk of decline in its earnings and capital arising from adverse changes in market variables; such as interest rate and foreign exchange rate. Market Risk is the risk that the value of on/off-balance sheet positions will be adversely affected by movements in equity prices, interest rates, currency exchange rates and commodity prices. Access Bank is exposed to market risk through the positions created in its trading and banking books. Market risk policy, management and control

Over the years, the Nigerian financial market has witnessed a dramatic expansion in the array of financial services and products. This tremendous growth in scale and scope has also generated new risks with global consequences, especially market risk, necessitating an assessment of exposures to the volatility of the underlying risk drivers. These developments have prompted a comprehensive and dynamic Market Risk Policy, ALM Policy, Liquidity Policy, and Stress Testing Policy, etc. to ensure that risks faced across business activities and on an Access Bank Plc Consolidated financial statements.

The Board approves the risk appetite for trading and non-trading activities and risk limits are set within the context of the approved market risk appetite. Limits are set based on the approved risk appetite, underlying liquidity as well as legal limitations on individual positions imposed by the regulatory authorities in Nigeria. The specific limits are proposed by the Group Head, market risk management and the Bank's Chief Risk Officer and approved by the Bank's Executive Management, relevant management committees, and ultimately by the Board. The Bank runs a state-of-the-art integrated and straight through processing treasury system for enabling better measuring, monitoring and managing interest rate and foreign exchange risks in the bank. Liquidity, Exchange Rate, and Interest Rate risks are managed through various metrics viz. Liquidity Gap Analysis, Dynamic Cash Flow Analysis, Liquidity Ratios, Value at Risk (VaR), Earnings at Risk (EaR) and Sensitivity Analysis.

The primary aim of these processes is risk forecasting and impact mitigation through management action and portfolio rebalancing. The risk reporting mechanism in the Bank comprises disclosures and reporting to the various management committees viz. ERM Committee, Asset Liability Committee and the Board Risk Management Committee. The Risk Committees receive daily/weekly risk dashboard and monthly/quarterly reports which are presented at the committee meetings. Depending on the market conditions and risk outlook, recommendations are made to the risk management committees in respect of the market risk profile, risk appetite appraisal; as well as review of limits against actual position. The Bank regularly conducts stress testing to monitor its vulnerability to unfavourable shocks. It monitors and controls its risk, using various internal and regulatory risk limits for trading book and banking book which are set according to a number of criteria including economic scenario, business strategy, management experience, peer analysis and the Bank's risk appetite. In line with the CBN circular on new capital adequacy framework, Access Bank has adopted the standardised duration approach for market risk and has obtained the board approval for the policy on ICAAP. This policy defines and sets processes to review and improve the techniques used for identification, measurement and assessment of all material risks and

resultant capital requirements. Also, the bank has put in place a detailed plan for the full implementation for the Basel III frameworks and has also put in place a road map for the migration to more advanced capital computation method which factors in the actual loss experience of the bank.

The Bank manages exposure to market risk in both trading and non-trading portfolios

7.2. Access Bank FY 2020 Market Risk Capital Charge computation.

Fig 17: Access Bank's Plc. Market Risk Capital Charge as at December, 2020

Market Risk - Standardised Approach			
Summary information (capital required)	Trading	Banking	Total (NGN)
Interest rate risk	1,014,068,560		1,014,068,560
Specific risk	0		0
General market risk	1,014,068,560		1,014,068,560
Interest rate option	0		0
Equity Position risk	0		0
Specific risk	0		0
General risk	0		0
Equity option	0		0
Foreign Exchange Risk			10,426,716,876
FX and Gold			10,426,716,876
FX & Gold Option			0
Commodity risk			0
Simplified Approach			0
Maturity ladder approach			0
Commodity - option			0
Total Capital Requirement			11,440,785,436

7.3. Non-trading portfolio

The principal objective of market risk management of non-trading portfolios is to optimize net interest income (NII). Due to the size of the Bank's holdings in rate-sensitive assets and liabilities, a major area of market risk exposures in the bank is the interest rate on the banking book. This risk arises from the mismatch between the future yield on assets and their funding cost, as a result of interest rate changes.

The Bank uses a variety of tools to track and manage this risk. Some of the tools include:

- Repricing gap analysis;
- Liquidity gap analysis;
- Earnings-at-Risk (EAR) model using various interest rate forecasts; and
- Sensitivity Analysis.

The repricing gap analysis shows a positive or negative gap depending on the forecast of interest rate movement. The size of the gap is then adjusted to either hedge the NII against changing interest rates or to speculatively increase the NII.

7.3.1. Trading portfolio

The measurement/control techniques used to measure and control traded market risk (interest rate and foreign exchange risk) include daily valuation of positions, limit monitoring, gap analysis, sensitivity analysis, Value at Risk, tail risk, stress testing, etc.

7.3.2. Limits

Specific limits and triggers (regulatory and in-house) have been set across the various market risk areas to prevent undue exposure and the market risk management group ensure that these limits and triggers are adhered to by the bank. The following limits currently exist; Fixed income and FX Open Position Limits (OPL): The Bank, in keeping with the prudence concept, sets its policy limit for Open Position at a level lower than the maximum OPL approved by the regulatory authority. In setting the internal OPL, the following considerations are imperative:

7.3.3. Mark-to-Market (MTM)

The marking-to-market technique establishes historical profit/loss by revaluing money market exposures to prevailing market prices. When no market prices are available for a specific contract period, mark-to-Ms

7.4. Derivatives

The Bank plays a pivotal role in the development of the derivatives market in Nigeria. The FMDQ OTC Markets dealing member (banks') turnover ranking shows that Access Bank was number 2 by market share in the OTC market affirming itself as a leading in the Derivatives market.

Our framework for managing derivatives guides all derivatives activities. The policy has been approved by the Board of Directors and ownership of the document rests with the Chief Risk Officer. He is responsible for ensuring the implementation of the policy across the Bank, as well as guiding and assisting business and support functions to identify, monitor, access and manage risks related to derivatives activities.

The Board has overall responsibility for managing derivatives hedging risks in the Bank.

7.4.1. Rationale for Derivative Activities

The Bank may engage in derivative transactions based on one or more of the following objectives:

1. Hedging

The Bank might enter a derivative transaction to hedge a risk. In hedging, the derivative position is employed to offset or reduce the risk associated with an existing balance sheet position or future planned transaction. To hedge, the conditions below must exist:

- Prior to the transaction, the Bank does have a risk exposure;

- After the transaction, the Bank reduces its risk exposure;
- At the time of entering into hedging transactions, the hedger knows the benefit- reduced risk; and
- Cost, revenue and risk implication are fully stated vis a vis the objectives of transaction within set limits

2. Trading

The Bank may enter into derivative transactions in the course of trading and to meet customers' needs.

3. Liquidity

The Bank may engage in derivative transaction for liquidity purposes. For instance, If the Bank intends to diversify its funding mix on the FCY balance sheet, it could execute a total return swap to receive FCY at the spot date and transfer Nigerian Treasury Bills (NTBs) of face value equivalent to 100% plus a haircut of the USD notional amount to the counterparty and upon maturity in a future date the NTBs will be transferred back to the Bank while the Bank transfers back the FCY received on the spot date.

In summary, the Bank may use derivatives to:

- Limit downside earnings exposure;
- Preserve upside earnings potential; and increase return

Fig 17: Access Bank's Plc. Derivatives Valuation as at December 2020

Grade		Risk Rating		Derivative Financial Instruments			
				Gross Nominal		Fair Value	
				December 2020	December 2019	December 2020	December 2019
Investment	1	1,177,123,466	986,475,815	233,473,011	123,561,874		
Investment	2+	5,902,833	58,724,417	(570,464)	(349,160)		
Investment	2	98,012,907	113,011,795	(7,469,082)	(548,924)		
Investment	2-	30,001,963	31,367,334	(2,048,266)	(1,987,313)		
Standard	3+	1,137,335	-	(17,117)	-		
Standard	3	4,240,894	-	737,100	-		
Standard	3-	583,204	-	(56,922)	-		
		1,317,902,602	1,209,579,362	224,048,301	120,676,476		
		1,317,902,602	1,209,579,362	224,048,301	120,676,476		

7.4.2. Over the Counter Derivative transactions.

Over the counter Derivatives are contracts that are privately negotiated or traded between two parties without going through an exchange or intermediary. The CBN guideline on Credit Risk states that a Bank is only exposed to the potential cost of replacing the cash flow (On contracts showing a positive value) if the counterparty defaults. The Bank includes all the OTC derivatives in its Banking and trading book when

calculating its credit exposures arising from interest rate and foreign exchange rates related OTC derivative transactions for capital adequacy purposes.

Access Bank computes its credit exposure for OTC derivative transactions using the **Current Exposure Method**. The exposure is computed by adding.

- the replacement cost (obtained by marking-to-market) of the OTC derivative transaction or in the case of a transaction with negative replacement cost, a value of zero; and
- the amount for potential future exposure obtained by applying the appropriate add-on factor set out in the table below to the notional amount of the OTC derivative transaction;

$$E = \text{Max}(RC \text{ Or } 0) + NA * \text{Add on Factor}$$

Where E = exposure,

RC = replacement cost and

NA = notional amount

7.5. Market Risk Models

The Bank employs the use of some techniques in managing its exposure to market risk. Some of these techniques are discussed below

7.5.1. Mark-to-Market (MTM)

The marking-to-market technique establishes historical profit/loss by revaluing money market exposures to prevailing market prices. When no market prices are available for a specific contract period, mark-to-model is used to derive the relevant market prices; it is the Bank's policy to revalue all exposures categorized under the securities trading portfolio on a daily basis. As a general guide, marking to market is performed independently of the trading unit i.e. prices/rates are obtained from external sources.

7.5.2. Value at risk (VaR)

The Group applies a 'Value at Risk' (VaR) methodology to its trading portfolios at a group level to estimate the market risk of positions held and the maximum losses expected, based upon a number of assumptions for various changes in market conditions. The Board sets limits on the value of risk that may be accepted for the Group, which are monitored on a daily basis by Market Risk Unit. Interest rate risk in the non-trading book is measured through the use of interest rate repricing gap analysis. VaR is a statistically based estimate of the potential loss on the current portfolio from adverse market movements. It expresses the 'maximum' amount the Group might lose, but only to a certain level of confidence (99%). There is therefore a specified statistical probability (1%) that actual loss could be greater than the VaR estimate. Value-at-risk estimates the potential maximum decline in the value of a position or portfolio, under normal market conditions, over a one-day holding period. It also assumes that market moves occurring over this holding period will follow a similar pattern. The Group applies these historical changes in rates, prices, etc.

directly to its current positions - a method known as historical simulation. Actual outcomes are monitored regularly to test the validity of the assumptions and parameters/ factors used in the VaR calculation. The Access Bank value-at-risk method incorporates the factor sensitivities of the trading portfolio, the volatilities and correlations of the market risk factors. The group uses the variance covariance method which derives likely future changes in market value from historical market volatility. Value at risks is estimated on the basis of exposures outstanding at the close of business and therefore might not factor in the intra-day exposures. However, the bank does not only base its risk estimates on Value at Risk, it uses Stress tests to provide an indication of the potential size of losses that could arise in extreme conditions by applying a what-if analysis to further complement it. The results of the stress tests are reviewed by senior management in each business unit and by the Board of Directors.

8. Operational Risk.

8.1. Introduction

Operational Risk is the risk of loss resulting from inadequate or failed internal processes, people, or systems, or from external events. Our definition of operational risk excludes regulatory risks, strategic risks and potential losses related solely to judgments with regard to taking credit, market, interest rate, liquidity, or insurance risks. It also includes the reputation and franchise risk associated with business practices or market conduct in which the Bank is involved.

Operational risk is inherent in Access Bank's global business activities and, as with other risk types, is managed through an overall framework designed to balance strong corporate oversight with well-defined independent risk management.

This framework includes:

- Recognized ownership of the risk by the businesses;
- Oversight by independent risk management; and
- Independent review by Corporate Audit.

8.2. Measuring and Managing Operational Risk

The Bank recognizes the significance of operational risk and is committed to enhancing the measurement and management thereof. Within the Bank's operational risk framework, qualitative and quantitative methodologies and tools are applied (Bank-wide) to identify and assess operational risks and to provide management information for determining appropriate mitigating measures. Risk Event Data Collection and Reporting a standard process is used Bank-wide for the recognition, capture, assessment, analysis and reporting of risk events. This process is used to help identify where process and control requirements are needed to reduce the recurrence of risk events. Risk events are loaded onto a central database and reported monthly to the ERMC. The Bank also uses a database of external public risk events and is part of a consortium of international banks that share loss data information anonymously to assist in risk identification, assessment, modelling and benchmarking. Risk and Control Self-Assessments (RCSA) In order to pro-actively identify and actively mitigate risks, the Operational Risk Management Framework utilizes RCSAs. RCSA is used at a granular level to identify relevant material risks and key controls mitigating these risks. The risks and controls are assessed on a quarterly basis and relevant action plans are put in place to treat, tolerate, terminate or transfer the risks, taking into account the relevant business risk appetites. The RCSA program is extensive and covers the entire Group. The Internal Audit further tests the effectiveness of the RCSAs within the normal course of auditing and relevant metrics are monitored and actioned where

8.3. Operational Risk Capital Charge

In computing the 2018 Operational Risk capital charge for Access Bank, the basic indicator approach was used. The Basic Indicator Approach allocates operational risk capital using a single indicator, gross income, as a proxy for the institution's overall operational risk exposure. Banks using this approach must hold capital for operational risk equal to the average of a fixed percentage of annual gross income over the previous three years (this percentage has been set at 15% by the Basel Committee). Gross income is defined as NII plus net non-interest income.

There are no qualifying criteria for the Basic Indicator approach, as it is meant to be applicable by any Bank, regardless of its sophistication or complexity.

The charge may be expressed as follows:

$$(KBIA) = \frac{\sum(GI_{1-n} \times a)}{n}$$

Where:

KBIA	The capital charge under the Basic Indicator Approach
GI	Annual Gross Income, where positive, over the previous three years
N	Number of the previous three years for which gross income is positive
a	15%, which is set by the Basel Committee, relating the industry wide level of required capital to the industry wide level of the indicator

8.3.1. Access Bank 2019 Operational Risk Capital Charge computation.

Fig 18: Access Bank's Plc. Operational Risk Capital Charge as at December 2020

BASIC INDICATOR APPROACH					Aggregate Gross Income (years 1 to 3)	Capital Charges
Nature of item	Capital Charge Factor	First Year	Second Year	Third Year		
		SUM	SUM	SUM		
Gross Income	15%	241,724,573,100	312,641,528,000	408,700,243,000	963,066,344,100	144,459,951,615
Number of years with positive annual gross income						3
Mean Average of Aggregate Capital Charge						48,153,317,205
Calibrated Risk-weighted Amount						601,916,465,063

**Gross income should be gross of any provisions (e.g. for unpaid interest), gross of operating expenses, including fees paid to outsourcing service providers, excludes realised or unrealised profits/losses from sale of securities in banking book and excludes extraordinary or irregular items as well as income derived from insurance.*

9. Pillar 2 Risks

9.1. Interest Rate Risk (Banking Book).

In computing the Interest rate Risk in the Banking Book (IRRBB) capital charge for Pillar 2, the Economic value of equity (EVE model) was used. The EVE represents the present value of the expected cash flows on assets minus the present value of liabilities of the expected cash flows on the liabilities, plus or minus the present value of the expected cash flows on off balance sheet instruments. This captures repricing risk, Basis Risk, Yield curve risk and option risk as opposed to the Gap measurement method which captures only repricing risk.

EVE is used to measure IRRBB by comparing the base case EVE value with different EVE measures under different interest rate shocks (including shocks relating to increase and reduction in interest rate shocks). The maximum of the worst aggregated reductions to EVE is taken as the minimum capital requirement for IRRBB. It reflects the worst aggregated reductions in EVE across Basel prescribed interest rate shocks.

The principal tool used to measure and control market risk exposure within the Bank's trading portfolios is the open position limits using the Earnings at Risk approach. Specified limits have been set for open positions limits, which are the expected maximum exposure the Bank is to be exposed to. Risk management activities are aimed at optimizing net interest income, given market interest rate levels consistent with the Bank's business strategies.

Interest-rate risk is monitored regularly with a Gap report. A limits framework is in place to ensure that retained risk remains within approved appetite.

The Bank presently has a modelled Earning at Risk Model (EaR). Earnings-at-Risk (EAR) is computed in order to evaluate the impact of interest rate changes on earnings. The approach used is a VaR based approach that takes into account non-parallel shifts in the term structure and its impact on the earnings portfolio of the bank. However, the model is currently being validated and will be used in the computation of Interest Rate in the Banking Book going forward.

9.1.1. Capitalization

In the computation of IRRBB, the Bank recently adopted the Economic value of Equity Model as recommended by CBN in its ICAAP 2015 and 2016 response as well as the recently released Exposure draft document. Here, the EVE represents the present value of the expected cash flows on assets minus the present value of liabilities of the expected cash flows on the liabilities, plus or minus the present value of the expected cash flows on off balance sheet instruments.

This captures repricing risk, Basis Risk, Yield curve risk and option risk as opposed to the Gap measurement method which captures only repricing risk. EVE is used to measure IRRBB by comparing the base case EVE value with different EVE measures under different interest rate shocks (including shocks relating to increase and reduction in interest rate shocks). The maximum of the worst aggregated reductions to EVE is taken as the minimum capital requirement for interest rate risk in the banking book.

Basel has some prescribed interest rate scenarios that banks should apply to capture parallel and non-parallel gap risks for EVE. The scenarios are as follows:

- Parallel Shock Up
- Parallel Shock Down
- Steepened Shock (short rates down and long rates up)
- Flattener shock (short rates up and long rates down)
- Short rates shock up
- Short rates shock down

9.1.2. *Mitigation*

The Treasury function, Market Risk and the Asset Liability Committee (ALCO) are responsible for the identification, measuring, monitoring, control and reporting of IRR in the Bank. The ALM policy sets out further details on the Bank's IRR management practices including the interest rate re-pricing gap schedule to measure IRR. The re-pricing gap schedule measures the effect of movement in interest rates on net interest income (NII). The Economic Intelligence unit is also responsible for forecasting the direction of interest rate movements and reporting their results to all other functions as required. The Bank also has re-pricing gap limits in place.

9.2. *Liquidity risk.*

Liquidity risk arises when the Bank is unable to meet expected or unexpected current or future cash flows and collateral needs without affecting its daily operations or its financial condition. The Bank is managed to preserve a high degree of liquidity so that it can meet the requirements of its customers at all times including periods of financial stress.

The Bank has developed a liquidity management framework based on a statistical model underpinned by conservative assumptions with regard to cash inflows and the liquidity of liabilities. In addition, liquidity stress tests assuming extreme withdrawal scenarios are performed. These stress tests specify additional liquidity requirements to be met by holdings of liquid assets.

The Bank's liquidity has consistently been materially above the minimum liquidity ratio and the requirements of its stress tests. Global funding and liquidity risk management activities are centralized within Corporate Treasury. We believe that a centralized approach to funding and liquidity risk management enhances our ability to monitor liquidity requirements, maximize access to funding sources, minimizes borrowing costs and facilitate timely responses to liquidity events. The Bank analyse and monitor our liquidity risk, maintain excess liquidity and access diverse funding sources including our stable deposit base.

The Board approves the Bank's liquidity policy and contingency funding plan, including establishing liquidity risk tolerance levels. The Group ALCO, in conjunction with the Board and its committees, monitors our liquidity position and reviews the impact of strategic decisions on our liquidity. Liquidity positions are

measured by calculating the Bank's net liquidity gap and by comparing selected ratios with targets as specified in the liquidity risk management manual.

9.2.1. Quantification of Liquidity Risk

Access Bank has adopted both qualitative and quantitative approaches to measuring liquidity risk. Specifically, the Bank adopted the following approaches;

- a) Funding and Liquidity plan;
- b) Gap Analysis;
- c) Ratio Analysis.

The Funding and Liquidity plan defines the Bank's sources and channels of utilization of funds. The funding liquidity risk limit is quantified by calculating liquidity ratios and measuring/monitoring the cumulative gap between our assets and liabilities. The Liquidity Gap Analysis quantifies the daily and cumulative gap in a business as usual environment. The gap for any given tenor bucket represents the borrowings from, or placements to, the market required to replace maturing liabilities or assets. The Bank monitors the cumulative gap as a + or – 20% of the total risk assets and the gap as a + or – 20% of total deposit liabilities.

9.2.2. Limit management and monitoring

Active management of liquidity through the framework of limits and control presented above is possible only with proper monitoring capabilities. The monitoring process focuses on funding portfolios, the forward balance sheet and general indicators; where relevant information and data are compared against limits that have been established. The Bank's Treasury is responsible for maintaining sufficient liquidity by maintaining sufficient high ratio of liquid assets and available funding for near-term liabilities. The secured liquidity measure is calculated and monitored by risk management. Increased withdrawals of short-term funds are monitored through measurements of the deposit base in the Bank. Liquidity risk is reported to the Board of Directors on a quarterly basis.

9.2.3. Contingency funding plan

Access Bank has a contingency funding plan which incorporates early warning indicators to monitor market conditions. The Bank monitors its liquidity position and funding strategies on an ongoing basis, but recognizes that unexpected events, economic or market conditions, earnings problems or situations beyond its control could cause either a short or long-term liquidity crisis. It reviews its contingency funding plan in the light of evolving market conditions and stress test results.

9.3. Credit Concentration Risk

The Herfindahl-Hirschman Index (HHI) was employed to measure the credit concentration risk in sectorial distribution as well as geographical distribution of the Bank's loan portfolio. The HHI is defined as the sum of the squares of the relative portfolio shares of all borrowers (these portfolio shares are calculated using

risk-weighted assets (RWAs)). Well-diversified portfolios have an HHI close to 0, whilst the most concentrated portfolios have a number close to 1. The Bank of England Prudential Regulation Authority's mapping model was used to translate the Bank's HHI into a capital charge from a prescribed capital add-on range on ranges to HHI as seen below:

Fig 19: PRA guidelines on HHI computation of Concentration Risk

Single name concentration risk (granularity):									
HHI _{RWA}	0%	0.29%	0.29%	0.59%	0.59%	1.15%	1.15%	1.85%	> 1.85%
Capital Add-on (% portfolio RWA)	0%	0.5%	0.5%	1%	1%	2%	2%	3%	4%
Sector concentration risk:									
HHI _{RWA}	11.1%	20.3%	20.3%	25.8%	25.8%	41.7%	41.7%	67.4%	> 67.4%
Capital Add-on (% portfolio RWA)	0%	0.25%	0.25%	0.5%	0.5%	1%	1%	1.5%	2.8% ^(*)
Geographic (international) concentration risk:									
HHI _{RWA}	11.1%	24.9%	24.9%	34.5%	34.5%	47.8%	47.8%	77.9%	> 77.9%
Capital Add-on (% portfolio RWA)	0%	0.2%	0.2%	0.5%	0.5%	0.8%	0.8%	1.25%	1.4%

9.4. Fraud risk

Fraud risk is the risk to earnings or capital arising from an intentional act committed to secure an unfair or unlawful gain. Fraud comprises internal fraud and external fraud.

9.4.1. Sources and Manifestation of Risk

The Bank is exposed to both internal and external fraud that can materialize as a result of fraudulent financial reporting, misappropriation of assets (e.g. embezzlement, payroll fraud, etc.), revenue or assets gained by fraudulent or illegal acts (e.g. over-billing customers), expenses or liabilities avoided by fraudulent or illegal acts (e.g. tax fraud, falsifying compliance data provided to regulators) and expenses or liabilities incurred for fraudulent/illegal acts (e.g. public bribery, kickbacks).

9.4.2. Mitigation

The Bank has policies in place to ensure employee training on code of conduct and ethics, anti-fraud policy, and carries out employee background screening for new hires. The Bank continues to strengthen its internal control system, elements of which include management oversight and control culture, segregation of duties, as well as authorization and approval. In addition, the Operational Risk Department investigates and reports all incidences of fraud within the organization.

9.4.3. Capitalization

Access bank calculates its capital charge for fraud risk by using the following assessment metrics;

- Number of successful fraud attempts over 3 years
- Number of fraud attempts under investigation
- Number & amount of un-reconciled GL accounts

The inherent risk as well as residual risk is determined by using the Impact and probability scale.

9.5. Money Laundering risk

This is the risk that the Bank can be used as a conduit through which corrupt politicians or criminal organizations launder the proceeds of crime or transfer money to fund terrorist or illegal activities. Access Bank could suffer loss of earnings or capital arising from non-compliance with the anti-money laundering and anti-terrorism financing regulations and policy.

9.5.1. Sources of Risk and Manifestation

The Bank is exposed to money laundering risk primarily in its deposit taking and transaction processing activities. The Bank maintains a large number of politically exposed person (PEP) accounts, which increases the likelihood of money laundering risk. The Bank's account opening and transaction related activities are subjected to scrutiny by various regulatory agencies in respect to money laundering as well as suspicious and fraudulent activities. The manifestation of this risk could occur as a result of failure to adhere to anti- money laundering rules and regulation including customer due diligence at account opening, monitoring of PEP accounts, and reporting of suspicious activities to the relevant AML authorities.

9.5.2. Mitigation

The business unit risk owners whose activities and transactions are affected by AML regulatory requirements are responsible for mitigating and reporting suspected money laundering activities that occur in their respective areas. The Bank conducts AML training for all staff annually and has implemented "Know Your Customer" procedures during the account opening process to verify the identity of customers and determine the legitimacy of their funds. The Bank reviews funds in excess of \$30,000 or N5million credited to PEP accounts and renders ad-hoc suspicious activity reports to Nigerian Financial Intelligent Unit.

9.5.3. Capitalization

Access bank calculates its capital charge for Money Laundering risk by using the following assessment metrics;

- Number of customers account opened without complete documentation in FY 2020
- Number of Politically Exposed Persons (PEP) accounts opened in FY 2020
- Number of suspicious transactions reported in FY 2020
- Number of unusual lodgments waived by management but unreported in FY 2020

The inherent risk as well as residual risk is determined by using the Impact and probability scale.

9.6. Cyber/Digital Risk

Digital risk is a term encompassing all digital enablement that improve risk effectiveness and efficiency—especially process automation, decision automation, and digitized monitoring and early warning. The

approach uses work-flow automation, optical-character recognition, advanced analytics (including machine learning and artificial intelligence), and new data sources, as well as the application of robotics to processes and interfaces. Essentially, digital risk implies a concerted adjustment of processes, data, analytics and IT, and the overall organizational setup, including talent and culture.

9.6.1. *Source of Risk*

Digitization has become deeply embedded in banking strategy, as nearly all businesses and activities have been slated for digital transformations. The significant advantages of digitization, with respect to customer experience, revenue, and cost, have become increasingly compelling. The momentum to adopt the new technologies and operating models needed to capture these benefits continues to build. Risk of loss from failure of information technology systems (service downtime) and cyber resilience, susceptibility to fraud, vendor host change control, breach of transaction limit in absence of required monitoring process and lack of compliance to regulatory requirements.

9.6.2. *Mitigation*

The Mitigation of Digital/cyber Risk is the primary responsibility of the digital/cyber risk unit under the Risk management division. This includes regular monitoring as well as regular customer awareness, anti -fraud and anti-phishing services, Proactive system monitoring (application, database, uptime utilisation, using threshold and alert) back up providers, implementation of anti-fraud and anti-phishing threshold monitoring, Interoperability rules and practices Adoption of Application Standard (e.g. ISO8583)POC, Properly scoped capacity planning strong authentication and due diligence before contracting vendors relating to all digital products of the Bank.

9.6.3. *Capitalization*

A current loss rate was determined using previous year data. This was applied to the total exposure of the Bank's digital products to obtain a capital charge.

9.7. *Business & Strategic risk*

Business risk is the risk that the Bank will fail to meet its performance target or produce sufficient cash flow to maintain its operations resulting in a negative impact on the Bank's operating results and financial conditions. The Bank's methodology for assessing this risk is based on a best practice approach that considers the Maximum negative deviation from profit projections observed over a period of three years.

9.7.1. *Sources and Manifestation*

The Bank is exposed to business risk in all of its operations. The risk could manifest as a result of, competition, adverse macro-economic conditions (not limited to systemic crashes), adverse regulatory directives, wars, and natural disasters that could affect the Bank's ability to meet its financial target.

9.7.2. Mitigation

The mitigation of business risk is the primary responsibility of executive and senior management. The Financial Control Unit measures the impact of business risk on the Bank's earnings through the use of budgetary control as well as the proactive review and monitoring of target vs. actual performance. The Economic Intelligence Unit (EIU) is responsible for conducting environmental scans to identify macroeconomic issues and trends, and report them to appropriate parties, so the Bank can take timely decisions to mitigate its exposure. The Bank utilises its management information system to track progress towards achieving performance target and to take timely decisions if actual performance falls behind target. Others include:

- Close monitoring of all reputational risk event drivers
- Adherence to the principle of zero tolerance for regulatory breaches by the Compliance Unit
- Active engagement with all stakeholders – customers, investors, regulators, staff, etc.

All significant strategic actions developed by the Strategy team are approved by the Board.

9.7.3. Capitalisation

Access Bank holds additional capital for business risk. The capital charge is based on the assumed loss of 2.5% of estimated gross earnings for FY 2019 to cover business risk exposure in line with the Bank's tolerance level.

9.8. Reputational risk

Reputational or franchise risk is the risk of an adverse reaction from the Bank's stakeholders to its action or inactions thereby affecting its reputation or brand and making it more difficult for the Bank to achieve its objectives.

9.8.1. Sources and Manifestation of Risk

Reputational risks to the Bank could materialise as a result of operating in a highly regulated environment with significant vulnerability to regulatory actions that may adversely impact the Bank's reputation. Reputational risk also materialises as a result of adverse opinions of stakeholders as a result of operating losses, litigation, sanctions or fines imposed by regulators, failure of directors, management and staff to adhere to ethical code of conduct, failure to deliver quality service to customers, failure to address issues of public concern, labour unrest and failure to adhere to good employment practices. Should these risks materialise, the Bank could suffer loss due to decline in customer base and loss of market share as well as erosion of brand value.

9.8.2. Mitigation

The Bank has formal policies and procedures for managing reputation events, including pre-planning how certain situations may be handled. The policies and procedures cover roles and responsibilities, process for managing pre- and post-reputational risk events, review of reputational risk process by internal audit. Other procedures are timely report and escalation of any reputation events to senior management with a

view to formulating an action plan to deal with the situation as well as notification to stakeholders that may be affected by the event. The Head of operational risk management unit liaises with the Head of corporate communication to obtain an analysis of the frequency of positive or negative publicity in the news media and to manage the Bank's corporate image effectively. The Bank also monitors online, all published information whether true or untrue on blogs, opinion forums or article and to react in a proactive manner its reputation, brand and revenue stream.

In addition, the Compliance and Internal Control unit carries out compliance testing to ensure strict adherence to the Bank's code of conduct and documented practices and post event review to derive the lessons learnt which will be used to enhance the reputational risk management.

9.8.3. Capitalisation.

The Reputational Risk capital Charge is based on an assumption that should the Bank have a reputational risk incidence, there may be a run off of the top 100 depositors with non-contractual deposits in the 0-3months bucket and 15% of the total retail deposits. Customer's short term loans were netted off deposits as would happen in the case of a "run". The run will lead to an increased cost in funding which will be used in calculating the capital charge.

9.9. Country / Group risk

Country risk encompasses all the uncertainties arising from the economic, social and political conditions of a country that may cause borrowers in that country to be unable or unwilling to fulfill their external obligations. Group risk is the risk that the activities or the operating performance of a foreign subsidiary company may impact negatively on the capital of Access Bank.

9.9.1. Sources and Manifestation of Risk

Access Bank has operations outside of Nigeria comprising six African countries and the UK. Consequently, it is exposed to losses in the event of adverse performance of the foreign subsidiary entities. The subsidiary entities in Ghana, Sierra Leone, the Gambia, United Kingdom, and Congo performed profitably except for Rwanda and Zambia. The Board of Directors and Management have established minimum performance targets for all subsidiaries to ensure that each subsidiary is profitable. Access Bank is also exposed to country risk in its cross border and international lending activities. Specifically, the sources of this risk are changes in regulatory or political environment of its subsidiary banks and counterparties in those countries, deteriorating economic conditions, political and social upheavals, expropriation of assets, and government repudiation of external indebtedness, foreign exchange controls and currency devaluation.

9.9.2. Mitigation

The Bank's risk management policies outline the controls for managing group risk. These controls include the centralizing at the Head Office all credit approval requests from subsidiary banks, conducting detailed country risk analysis and selection before entering any country to open foreign offices, performing country risk rating reviews, and establishing and monitoring country exposure/concentration limits. The Bank's Compliance and Internal control unit is responsible for monitoring and reporting issues related to country/

group risk. The Financial Control unit and Compliance and Internal Control are responsible for monitoring the country exposure limits and reporting on the financial performance of the various subsidiaries and making allowances for provisions as necessary. The Economic Intelligence unit carries out an environmental scan and produces the economic intelligence reports on a monthly basis.

9.9.3. Capitalisation

Two methodologies are employed in the computation of group/country risk;

Evaluation of country risk rating which determines the inherent risk of the entity. Here, the risk grade of the subsidiaries as seen above determines the inherent risk in line with the ERM framework of the Bank. Secondly, Minimum performance targets for all subsidiaries to ensure that each subsidiary is profitable as established by the Board based on the investment exposure- This could improve or drop the rating down further depending on the profit or loss making status we consider the profitability of the subsidiaries which determines the movement by a notch increase or decrease depending on the profit levels in comparison to past 3 years.

9.10. Model Risk

Model Risk is the risk of errors in estimates caused by inadequacies in the model or its implementation. It arises from the use of a plethora of mathematical formulas to categorise and classify risks. It could also arise as any valuation which has to be benchmarked, extrapolated or calculated from market input. It is the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.

9.10.1. Sources and Manifestation of Risk.

The major sources of Model Risk can arise from Data error, Lack of Critical Variables, Insufficient historical depth, incorrectly entered variables, insufficient samples. Computational difficulties, Valuation errors of Derivative instruments and errors in the estimation of certain variables such as collective and specific impairments. It could be noted that some assumptions could however be subjective.

9.10.2. Mitigation

The Bank's designated personnel (FINCON, Treasury, Market Risk and Credit Portfolio Management) are all responsible for developing and implementing Models. The risk management, Internal and External Audit validates the models. A 20% haircut will be set aside to guide against the possibility of losses arising from a change in the model. This would be driven by the key estimator (exchange rates) volatility period. Also including other estimation errors. (Valuation adjustment in line with Basel BCBS 699).

9.10.3. Capitalisation

The outputs have a material impact on business decisions, including decisions related to risk management and capital and liquidity planning and the model failure could have a particularly harmful impact on the bank's financial condition.

9.11. **Regulatory Risk**

Regulatory risk is the risk of regulatory sanctions, material financial loss, or loss to reputation the Bank may suffer as a result of its failure to comply with the letter and spirit of laws, regulations, rules, and codes of conduct applying to its business activities.

9.11.1. **Sources and Manifestation of risk**

A large number of the Bank's activities are governed by various regulatory agencies, and as Access Bank is heavily exposed to regulatory risk in its Banking operations. The manifestation of this risk could occur as a result of failure to obtain certain regulatory approvals as at when due, inaccurate rendition of regulatory returns, failure to meet regulatory deadlines, failure to observe proper standards of market conduct resulting in legal or regulatory sanctions, reputational loss and the associated financial and business impacts.

9.11.2. **Mitigation**

Proactive engagement strategy with CBN and other regulators, driven by a well -developed Regulatory Risk framework and lead by the Chief Risk Officer and Chief Compliance Officer

New regulations and compliance plans are discussed in management and board committee meetings. The Bank has implemented an automated Entity Regulatory Rules Book. The Bank has established procedures to ensure regulatory compliance. These include the automation of returns to regulatory agencies, periodic testing of internal controls over financial reporting, monitoring of compliance with policies and procedures, segregation of duties (maker/checker), adhering to internal deadlines, tracking of deliverables, sanction grids, tracking of request from regulators and timely response to request/regulatory enquiries, strong corporate governance and compliance culture.

9.11.3. **Capitalisation**

Access Bank calculates the capital charge for regulatory compliance risk by using the assessment metrics which include:

- i. Number of regulatory investigations and inquiries in the current year
- ii. Number of noted errors in regulatory reporting in the current year
- iii. Amount of fines paid over the last 3 years
- iv. Amount of fines under investigations with regulatory bodies in the current year

9.12. **Downgrade Risk**

Downgrade risk is the risk of financial loss triggered by a downgrade to the Bank's credit rating or its debt securities' ratings, thereby resulting in increased cost of funding.

On balance, the near-term impact from the oil price shock, rapidly depleting foreign reserves and COVID-19 on funding and liquidity is likely to be tolerable. The primary risk is that lower oil revenues (and Nigeria's falling FX reserves) could limit banks' access to foreign currency (FCY) liquidity. Furthermore, adverse global conditions could impede some banks in raising external financing. Local-currency liquidity remains strong with banks funded mainly by low-cost customer deposits.

The bank may suffer from a simultaneous and persistent decline in access to non-core sources of deposits and to wholesale funding

9.12.1. Sources and Manifestation of Downgrade Risk

The primary source of downgrade risk is a fall in the bank's credit ratings or its debt securities' ratings, thereby resulting in increased cost of funding necessitated by a decline in the ratings of Nigeria.

9.12.2. Mitigation

Efficient Deposit Rate Guide, Rate reasonability check on tenured deposit, Interest rate control limits, regular testing of sensitivity of net interest income, duration gap analysis to test the impact of interest rate movement on the Bank's earnings and net worth

9.12.3. Capitalization

We have modelled the impact of increased cost of funds on the Bank's FCY source of deposit within the 90 days maturity bucket. A possible rollover of these funds may result in the demand of a higher premium upon crystallization of this risk. We examined the impact of downgrade risk culminating in resulting in a **10%** increase in cost of funds on the FCY borrowings.

9.13. Legal Risk

Basel II classified legal risk as a subset of operational risk in 2003. This conception is based on a business perspective, recognizing that there are threats entailed in the business operating environment. The idea is that businesses do not operate in a vacuum and that, in the exploitation of opportunities and their engagement with other businesses, their activities tend to become subjects of legal liabilities and obligations. Legal risk is the risk of financial or reputational loss that can result from lack of awareness or misunderstanding of, ambiguity in, or reckless indifference to, the way law and regulation apply to your business, its relationships, processes, products and services.

9.13.1. Sources and Manifestation of Legal Risk

Legal risk is the risk of loss to an institution which is primarily caused by:

- (a) A defective transaction; or
- (b) A claim (including a defense to a claim or a counterclaim) being made or some other event occurring which results in a liability for the institution or other loss (for example, as a result of the termination of a contract) or;

(c) Failing to take appropriate measures to protect assets (for example, intellectual property) owned by the institution; or

(d) Change in law.

9.13.2. Mitigation

The Bank maintains a legal Unit responsible with the responsibility to reduce the risk of disputes and litigation by ensuring compliance and maintaining accurate records.

9.13.3. Capitalization

The Bank is a party to numerous legal actions arising out of its normal business operations. The outcomes that result from such proceedings may have a material adverse effect on the financial position of the Bank, either individually or in the aggregate. The Legal risk capital charge is based on a percentage of the total litigation exposure.

10. Equity Exposures: Disclosures for Banking Book positions.

The Bank uses widely recognised valuation models for determining the fair value of its financial assets. Valuation techniques include net present value and discounted cash flow models, comparison with similar instruments for which market observable prices exist and other valuation models. Assumptions and inputs used in valuation techniques include risk-free and benchmark interest rates, credit spreads and other premia used in estimating discount rates, bond and equity prices, foreign currency exchange rates, equity and equity index prices and expected price volatilities and correlations.

The objective of valuation techniques is to arrive at a fair value measurement that reflects the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date. For more complex instruments, the Group uses proprietary valuation models, which are usually developed from recognised valuation models. Some or all of the significant inputs into these models may not be observable in the market and are derived from market prices or rates or are estimated based on assumptions. Examples of instruments involving significant unobservable inputs include certain Investment securities for which there is no active market.

Valuation models that employ significant unobservable inputs require a higher degree of management judgement and estimation in the determination of fair value. Management judgement and estimation are usually required for selection of the appropriate valuation model to be used, determination of expected future cash flows on the financial instrument being valued, determination of the probability of counterparty default and prepayments and selection of appropriate discount rates. Fair value estimates obtained from models are adjusted for any other factors, such as liquidity risk or model uncertainties, to the extent that the Group believes that a third-party market participant would take them into account in pricing a transaction. Fair values reflect the credit risk of the instrument and include adjustments to take account of the credit risk of the Group entity and the counterparty where appropriate.

For level 2 assets, fair value was obtained using a recent market transaction during the year under review. Fair values of unquoted debt securities were derived by interpolating prices of quoted debt securities with similar maturity profile and characteristics. There was no transfer between levels 1 and 2 during the year

10.1. Financial instruments in level 1

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the group is the current bid price. These instruments are included in Level 1. Instruments included in Level 1 comprise primarily government bonds, corporate bonds, treasury bills and equity investments classified as trading securities or available for sale investments

10.2. Financial instruments in level 2

The fair value of financial instruments that are not traded in an active market are determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2. If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3. Specific valuation techniques used to value financial instruments include: (i) Quoted market prices or dealer quotes for similar instruments; (ii) The fair value of forward foreign exchange contracts is determined using forward exchange rates at the balance sheet date, with the resulting value discounted back to present value; (iii) Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

10.3. Financial instruments in level 3

Valuation techniques used to derive Level 3 fair values Level 3 fair values of investments have been generally derived using the adjusted fair value comparison approach. Quoted price per earning or price per book value, enterprise value to EBITDA ratios of comparable entities in a similar industry were obtained and adjusted for key factors to reflect estimated ratios of the investment being valued. Adjusting factors used are the Illiquidity discount which assumes a reduced earning on a private entity in comparison to a publicly quoted entity and the haircut adjustment which assumes a reduced earning for an entity located in Nigeria contributed by lower transaction levels in comparison to an entity in a developed or emerging market.

UNREALISED GAINS (LOSSES) ON OTHER COMPREHENSIVE INCOME		
Unrealised Revaluation Gain (Losses) in reporting period recognised in Other Comprehensive Income		
FVOCI Instruments (N'000)	Dec 2020	Dec 2019
Fair Value changes of FVOCI instruments during the year	58,444,389	7,373,186
Net Changes in allowance for FVOCI Financial Instrument	294,278	63,712
Total Realised Gain (Losses) from Financial Instrument	58,738,667	7,436,898

**Forms part of Other Comprehensive Income included in Tier 2 Capital*

Assets Held for Sale		
	Dec 2020	Dec 2019
Opening Balance	24,957,518	12,241,822
Acquired from business combination	-	-
Additions	5,180,949	14,660,695
Disposals	(2,010,000)	(1,945,000)
Balance, Year End	28,128,467	24,957,517

VALUATION TECHNIQUE FOR UNQUOTED EQUITY

The investment valuation policy (IVP) of the Group provides the framework for accounting for the Group's investment in unquoted equity securities and assets held for sale while also providing a broad valuation guideline to be adopted in valuing them. Furthermore, the IVP details how the group decides its valuation policies and procedures and analysis of changes in fair value measurements from year to year.

In accordance with IFRS 13 fair value measurement, which outlines three approaches for valuing unquoted equity instruments; market approach, the income approach and the cost approach. The Group estimated the fair value of its investment in each of the unquoted equity securities at the end of the financial year using the market approach.

The adjusted fair value comparison approach of EV/EBITDA, P/E ratios and P/B ratios was adopted in valuing each of these equity investments taken into cognizance the suitability of the model to each equity investment and the availability of financial information while minimizing the use of unobservable data.

Description of valuation methodology and inputs:

The fair value of the other unquoted equity securities was derived using the Adjusted fair value comparison technique. Adjusted fair value comparison approach of EV/EBITDA, P/E ratios and P/B ratios are used as input data.

The steps involved in estimating the fair value of the Group's investment in each of the investees (i.e. unquoted equity securities) are as follows:

Step 1: Identify quoted companies with a similar line of business, structure and size

Step 2: Obtain the EV/EBITDA or the P/B or P/E ratios of these quoted companies identified from Bloomberg, Reuters or Nigeria Stock Exchange

Step 3: Derive the average or median of EV/EBITDA or the P/B or P/E ratios of these identified quoted companies

Step 4: Apply the lower of average (mean) or median of the identified quoted companies' ratios on the EV/EBITDA or Book Value or Earnings of the investment company to get the value of the investment company

Step 5: Discount the derived value of the investment company by applying an Illiquidity discount and EPS Haircut Adjustment to obtain the Adjusted Equity Value

Step 6: Multiply the adjusted equity value by the present exchange rate for foreign currency investment

Step 7: Compare the Adjusted Equity value with the carrying value of the investment company to arrive at a net gain or loss

a. Enterprise Value (EV):

Enterprise value measures the value of the ongoing operations of a company. It is calculated as the market capitalization plus debt, minority interest and preferred shares, minus total cash and cash equivalents of the company.

b. Earnings Before Interest, Tax Depreciation and Tax (EBITDA):

EBITDA is earnings before interest, taxes, depreciation and amortization. EBITDA is one of the indicators of a company's financial performance and is used as a proxy for the earning potential of a business.

EBITDA = Operating Profit + Depreciation Expense + Amortization Expense

c. Price to Book (P/B Ratio):

The price-to-book ratio (P/B Ratio) is used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest company book value per share or by dividing the company's market capitalization by the company's total book value from its balance sheet.

d. Price to Earning (P/E Ratio):

The price-earnings ratio (P/E Ratio) values a company using the current share price relative to its per-share earnings. The sources of the observable inputs used for comparable technique were gotten from Reuters, Bloomberg and the Nigeria Stock Exchange

METHOD OF VALUATION

The comparative method of valuation is used in the valuation of the asset. This method involves the analysis of recent transaction in such asset within the same asset type and the size of the subject asset after due allowance have been made for peculiar attributes of the various asset concerned.

The key elements of the control framework for the valuation of financial instruments include model validation and independent price verification. These functions are carried out by an appropriately skilled Finance team, independent of the business area responsible for the products. The results of the valuation are reviewed quarterly by senior management.

Assessment of impairment of goodwill on acquired subsidiaries

Goodwill on acquired subsidiaries was tested for impairment using discounted cash flow valuation method. Projected cash flows were discounted to present value using a discount rate of 23.3% (Dec. 2018: 17.90%) and a cash flow growth rate of 7.095% (Dec. 2018: 9.6%) over a period of ten years. The Group determined the appropriate discount rate at the end of the year using the adjusted weighted average cost of capital method.

Defined benefit plan

The present value of the long-term incentive plan depends on a number of factors that are determined in an actuarial basis using a number of assumptions. Any changes in these assumptions will impact the carrying amount of obligations. The assumptions used in determining the net cost (income) for pensions include the discount rate. The Group determines the appropriate discount rate at the end of the year. In determining the appropriate discount rate, reference is made to the yield on Nigerian Government Bonds that have maturity dates approximating the terms of the related pension liability. Other key assumptions for pension obligations are based in part on current market conditions.