

NOTE ON RISKS

RISK MANAGEMENT

Risk categories

Credit risk

Credit risk, inherent in banking activity, is the risk of customers not repaying their financial obligations toward the Bank in full or within the allotted time, resulting in potential losses for the Bank. It is the broadest risk category and may be correlated with other risk categories.

Market risk

Market risk is the risk of loss in value of financial instruments resulting from changes in market parameters, volatility and correlations between them. Concerned parameters include exchange rates, interest rates and the prices of securities (stocks, bonds) and commodities, derivatives and all other assets.

Global liquidity and interest rate risk

Interest rate risk is the vulnerability of the financial situation of an institution to adverse changes in interest rates.

Liquidity risk is defined as the risk for the development of not being able to meet its cash flow or collateral requirements when they fall due and at a reasonable cost.

Operational risk

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, personnel error and systems failure or from external events. This definition includes legal risk, but excludes strategic and reputational risks.

Country risk

Country risk comprises political risk as well as transfer risk. Political risk generally arises from action taken by the government of a country such as nationalisation or expropriation or an independent event such as war or revolution, which may affect a customer's ability to honour its obligations.

Transfer risk can be defined as the risk of a resident customer being unable to acquire foreign currency in its country so as to honour its overseas commitments.

Risk management organization

Risk control bodies

Group Risk Division

One of the missions assigned to the Group Risk management is to strengthen the monitoring and control of credit, market, country and operational risks. It is also responsible for:

- Defining BANK OF AFRICA Group's risk policy;
- Definition and management taking and monitoring of commitments:
- Implementing of a credit risks control system, market transactions and operational risks;

The Group Risk management is composed of four entities:

- Group Risk management
- Monitoring commitments
- Commitments analysis
- Counterparty risks
- Africa & transversal projects.

Governance bodies

Group Risk Committee

The Group Risk committee BANK OF AFRICA is an instance from the board of Directors of BANK OF AFRICA, whose prerogatives are extended to direct and indirect subsidiaries included in the scope of consolidation of the Group.

This committee assists the board on strategy and risk management, including ensuring that the global risk strategy is adapted to the risk profile of the bank and the Group, to the degree of risk aversion, its systemic importance, its size and its financial basis.

Group Audit and Internal Control committee

BANK OF AFRICA Group's audit and Internal control committee is an instance from the board of Directors of BANK OF AFRICA, whose prerogatives are extended to subsidiaries and other entities included in the scope of consolidation.

Group audit and Internal control committee assists the board of Directors on internal control, by ensuring the existence and maintenance of an internal control system adapted to the Group's organization, the reliability of financial information intended for the board of Directors and third parties, the examination of the corporate and consolidated accounts before their submission to the Board of Directors.

General Management Committee

The Group Management Committee is responsible for the Declination in equity and operational measures of the Group's strategy and monitoring.

This Committee, whose periodicity is weekly, has main tasks the management of the business of the bank, the conduct of internal control and risk management, monitoring the HR component, commercial communication policy, institutional and financial

• The Steering Committee and Group Risk Management

After the BANK OF AFRICA Group's General management committee, the Steering committee and Risk management assists in the management and monitoring of effective and operational of piloting device Group risks (BANK OF AFRICA S.A and its direct and indirect subsidiaries) and the consistency of Group activities with the policies fixed of risks and limitations.



This committee ensures the efficiency of the piloting device of the risks (credit, market, country and operational) and its adequacy with the level of risk appetite defined within the framework of the risk management policy.

Credit Committees

Senior Credit Committee

The Senior Credit Committee reviews and approves, on a weekly basis, credit applications from customers of the bank and of the Group within its delegated powers. Operating rules and powers differ depending on the degree of risk incurred as well as the nature of the bank's credit portfolio segment in question - business, corporate or Personal & Professional banking customers.

The Credit Committee's scope also covers Group entities. It assesses and issues, via the Senior credit committee - Group entities, decisions regarding risk-taking with regard to certain counterparties or groups of counterparties within the banking and trading portfolio in respect of domestic operations as well as for individual counterparties in respect of overseas operations based on predefined thresholds by subsidiary.

This committee is chaired by the Bank's Chairman and Chief Executive Officer with the Group Executive Managing Director. It is sub-divided by market segment into two committees, one specialising in corporate banking, the other in Personal and Professional banking. These committees meet twice-weekly and include senior managers of the Bank.

• Regional Credit Committee

The Regional Credit Committee (CCR) enjoys delegated powers enabling it to rule on counterparties at a regional level in accordance with the existing scheme of delegation. The committee meets on a weekly basis. Each region's Regional Director decides on when the CCR will meet and informs all members accordingly. Regional Directors decide on meeting dates and inform committee members.

Supervisory Committee for Sensitive Accounts

As part of its portfolio monitoring remit, the Loan Commitments Monitoring Committee (CSE) (at head office or on a select basis) meets on a monthly basis to followup on the various initiatives implemented for the purpose of resolving, recovering and cleaning up accounts showing anomalies. The committee also reviews customer dossiers that are eligible for downgrade and decides on what action to take.

Bodies responsible for following up and monitoring, operating at four levels, three of which are at head office, oversee the process of monitoring the loan commitments situation.

CREDIT RISK

The Bank's credit activity is part of the general credit policy approved by the Bank's senior management. Among the guiding principles include the Group's requirement related to ethics, attribution of responsibilities, the existence and adherence to procedures and rigour in risk analysis.

This policy is available in specific policies and procedures appropriate to the nature of activities and counterparties.

Credit decision cycle

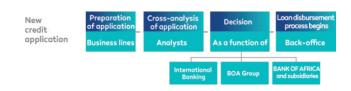
General principles

The approval process at BANK OF AFRICA Group level respects the "Troïka" principle and is based on the following principles:

- All credit requests adhere to the same approval process which ensures that the Troïka principle is respected (minimum requirement). Therefore, at least 3 people, one of which is from the Risk Division, should approve all credit requests except for some predefined specific
- The Decision, jointly taken by the Risk and Commercial Divisions – which includes at least one preliminary counterfactual analysis – applies to the applications assigned to the local Decision committees as well as to the central Decision committees. This involves a multilevel pyramid structure, where the higher level acts as an arbitrator in the event that consensus is not reached:
- The Risk Division can use the escalation procedure (n+1) if there is a disagreement with the Commercial Division.
- Appeal to the highest authority having ruled on any other case of a related case with the highest level of high delegation (in case of a group).

Credit approval process

The following diagram provides an overview of the credit approval process :



- The Commercial Division in charge of customer relations is responsible for preparing the credit application;
- Counterfactual analysis of the credit application is performed by credit analysts from the entity's Risk Division;
- The Decision is jointly taken by the Risk and Commercial Divisions, based on their respective levels of delegation;
- The loan is actually implemented by the back-office, which is a unit independent from the Risk and Commercial Divisions.

Decision making and choice of circuits

In order to facilitate the reporting exercise, the principle of a single Decision for each credit proposal should be respected.

Credit Decisions are made either by circulation file, or by holding a Credit Committee, via a manual or electronic process.

Delegation

The credit Decision process is based on a delegation system whereby an entity's Board of Directors delegates powers to its employees or a group of employees by setting limits, as it sees fit.

The delegation may in turn involve a sub-delegation depending on the organisation, volume, products and risks.

The delegation of authority to employees is assigned intuitu personae on the basis of their Decision-making ability, experience, personal skills, professional skills and training.

Approval rules

The credit approval Decision is sent for consideration to the Troïka or to Credit Committees depending on the approval levels required.

The present delegation system defines the following decision levels:

- At local branch level;
- At "hub" level (BOA Group and Overseas Operations)
- At central BANK OF AFRICA level.

The local branch level may involve a sub-delegation depending on the entity's organisation, volume, products and risks.

Credit application contents

All requests for obtaining credit should meet the product's eligibility criteria as defined in the product factsheets. All credit Decisions are taken on the basis of a standard credit application whose format is defined in consultation with the Commercial Division and Risk concerned and in coordination with the Group Risk Division.

A credit application is prepared for each counterparty or transaction to which the entity wishes to make a commitment or for which the entity has already made a commitment in the case of an annual review or renewal. This is done on the basis of the documents mentioned in the product checklist and provided by the client.

The document checklist to be sent by the client and the analysis form should be identical to the one at Group level and these will be modified based on the type of credit. The contents of the credit application should provide the Decision-makers with the necessary information as well as the quantitative and qualitative analysis required for taking the credit Decision.

The Commercial Division is responsible for preparing the credit application and its contents.

The credit application shall remain the single point of reference for any credit Decision; it should contain all the signatures or stamps that guarantee the accuracy of the information provided therein.

RATING MODEL

BANK OF AFRICA has an internal rating tool covering several customer segments.

Key rating rules

Rating's uniqueness

The rating is established for each client, provided as a third code group. The rating process is thus carried out for each third code group so that a third party has one and only one ratings. Thus, BANK OF AFRICA ensures the uniqueness of the rating attributed to each assessed counterparty.

Rating's integrity

As per the regulatory principles, the attribution of the rating and its periodic review should be carried out or approved by a party that does not benefit directly from the credit approval. It is for this reason that the rating is validated in the back office by the Group Risk Management Division following initial attribution by front-office commercial operations. The rating's integrity is a key component in the credit risk management process and should reinforce and encourage independence in the rating process.

Rating's singularity

A counterparty code is assigned to each of the Bank's counterparties. The rating of each third party is carried out using the counterparty reference code in such a manner that, for all third parties (the counterparty type is single and unique), the assessment will be carried out by using a single rating model but with data specific to each counterparty. BANK OF AFRICA thus ensures the rating's singularity for each counterparty.

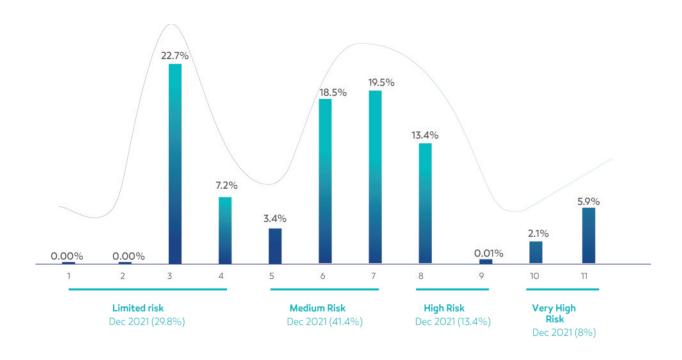
Rating scale

BANK OF AFRICA Group has adopted an 11-level rating scale to attribute a final counterparty rating:



	CATEGORY	CLASS	DEFINITION
Investment grade	Limited Risk	1	Extremely stable short- and medium-term; very stable long-term; solvent despite serious disruptions;
		2	Very stable short- and medium- term; stable long-term; sufficiently solvent despite persistently negative events;
		3	Solvent short- and medium-term despite significant difficulties; moderately negative developments can be withstood long-term;
		4	Very stable short-term; no expected change to threaten the loan in the coming year; sufficiently solid medium-term to be able to survive; long-term outlook still uncertain;
	Medium Risk	5	Stable short-term; no expected change to threaten the loan in the coming year; can only II negative developments medium-term;
		6	Ability limited to withstand unexpected negative developments;
		7	Ability very limited to withstand unexpected negative developments;
Sub-investment grade	High Risk	8	Ability limited to repay interest and principal on time; any change in internal and external commercial conditions will make it difficult to fulfil obligations;
	g	9	Incapable of repaying interest and principal on time; fulfilling obligations dependent on favourable internal and external commercial and economic conditions;
	Very High risk	10	Very high risk of default; incapable of repaying interest and principal on time; partial default in repayment of interest and capital;
	, ,	11	Total default in repayment of interest and capital.

As of 31 December 2021, the breakdown of the portfolio by asset class was as follows :



Retail customer scoring system

Scoring for the Retail Customer segment consists of modeling statistics of default and risk behaviour.

Two types of score have been introduced, a behavioural score and a credit approval score.

The behavioural score, for open accounts, is a dynamic risk assessment based on a customer's behaviour.

Only customers that are known to the Bank may be assigned a behavioural score.

Each of the Bank's customers is assigned a rating from A to K which is updated on a monthly basis and on a daily basis in the event of any incident.

Classe	Description	
Α		
A-	Very low risk	
В	Lauratati	
B-	Low risk	
С	Aussananiak	
C-	Average risk	
D	Average- high	
D-	risk	
E		
E-	High risk	
F	111911131	
F-	Very high risk	
G	Major risk	
G-	Mujor risk	
Н	Proven risk	
H-	Proventisk	
1	Sub-standard	
J	Doubtful	
K	Impaired	

Four separate behavioural scoring models have been introduced for specific market segments: personal banking customers, professional banking customers, Moroccans living abroad and small businesses.



The credit approval score is a one-off rating that is assigned on opening a line of credit. New and existing customers are assigned a credit approval score.

A Decision support system has been introduced for approving consumer loans.

Guarantees

The Group receives various types of guarantee as loan collateral. As a general rule, collateral requirements are governed by two factors: the type of credit requested and the counterparty quality.

The Group systematically mortgages all property which it has financed (housing loans and loans for real estate development) and also requests that customers take out insurance cover.

Similarly, funding for public procurement, merchandise, capital equipment and business premises are systematically guaranteed by pledges on the items funded and insurance cover is also required.

In addition to these guarantees, the Group generally bolsters its position by requesting personal guarantees from counterparties whenever deemed necessary, depending on the quality of the latter.

CREDIT RISK CONTROL AND MONITORING PROCEDURE

Credit risk control and monitoring ensures the secondlevel checking, separate from daily monitoring by the Commercial Division.

This procedure may be adapted depending on how each subsidiary is organised in consultation with the Group Risk Division.

Commercial Division is responsible for risk monitoring. Indeed, the credit manager in the Commercial Division is responsible to the daily monitoring of transaction risks. To fulfill this mission, the Commercial Division is helped by the risks which play an alert role.

The risk Division's main objective is to ensure the efficiency running of a forward-looking alert system that allows the Commercial Division to optimize risk management as well as anticipating potential risks so that the bank's portfolio may be properly managed. The risk Division also ensures that the Commercial Division is monitoring properly and provides alerts for accounts in default.

- Performs pre-checks;
- Performs post-checks;
- Identifies and monitors the portfolio of commitments based on several factors: products, maturities, beneficiaries, business sectors, branches, geographical regions etc.;
- Fixes and monitors concentration limits;
- Detects and monitors accounts showing anomalies and high-risk accounts;



- Categorised the portfolio based on regulatory criteria and proposes provisioning;
- Performs stress tests;
- Produces regulatory reports and internal steering reports.

Pre-checks

Pre-checks include all compliance checks carried out prior to a credit mine's initial authorisation and use. These checks are performed in addition to automatic checks and checks carried out by the Commercial Division, Backoffice and Legal Department etc.

These checks are imple mented by the Risk Division. They mainly relate to:

- Credit proposal data:
- Compliance with the appropriate delegation level;
- Legal documentation compliance;
- Conditions and reservations expressed before initial use of funds or the facility;
- Data entered in the information systems.

Post-checks

Like pre-checks, post-checks are also performed by the Risk Division.

These checks are aimed at ensuring measurement, control and monitoring of credit risks in terms of the entire portfolio and not just the counterparty. Special attention is therefore paid to credit quality, anticipating and preventing irregularities and risks as well as controlling and monitoring risks by the Commercial Division.

Portfolio monitoring

Group's portfolio Monitoring commitments and its entities is performed through several indicators, both on the risks to the granting and during the life of the credit records.

The first post-check consists of identifying and monitoring the entity's total commitments based on several factors including products, maturities, customers, business groups, customer segments, counterparty ratings, loan categories (healthy loans and non-performing loans), industries, branches, geographical regions, type of collateral etc. The multi-criteria analysis is a credit risk management tool.

The production of multi-criteria analysis commitments portfolio is the responsibility of the Credit Risk die which also ensures the reporting of credit risks, both internally and vis-à-vis the Risk Committees and management, that external, vis-à-vis the regulators.

System for detecting risks and anomalies

High-risk accounts and those showing anomalies represent a risk that is likely to subsequently increase and therefore generate a cost for the Bank. These consist of customer loan commitments that are still healthy, but which reveal:

 Either a visible deterioration in risk quality as measured against quantitative criteria (doubtful – in arrears, substandard, frozen – lack of any ledger entry and overdrawn, persistent overruns, etc.)

The main examples of this type include:

- Debit balances on demand accounts for which no actual credit entry has been recorded, covering at least the overdraft fees charged to these accounts as well as a significant part of the said debit balances
- Outstanding amortised loans that have not been settled within 30 days of their maturity date
- Outstanding loans that are repayable in a single repayment and that have not been honoured within 30 days of their maturity date
- Trade receivables discounted by the Bank and returned unpaid
- Persistent overruns, beyond one month, by comparison with the authorisations granted. So as to avoid incurring any operational risks, however, the entities will monitor, on a weekly basis, the authorised overruns of a certain level (at each local entity's discretion).
- Or a potential deterioration in risk quality as measured against qualitative criteria, which is likely to further deteriorate and therefore generate an expense for the Bank. These indicators may include incidents of a legal nature (garnishee orders, attachments, etc.) or account-related incidents (loss of income, overdrawn balances, authorisations or maturing guarantees, etc.) or negative information specific to a counterparty (non-performing loans at a competitor bank, deterioration in either its financial position, its credit quality or collateral), or incidents and disputes relating to the main shareholders (death, receivership or liquidation, etc.) or difficulties encountered in a counterparty's business sector etc.

Furthermore, other risk criteria relating to credit dossiers are rigorously monitored by the Bank's various entities including:

- Loan arrears committees
- Unsecured collateral (beyond expiry of the notary public's commitment period)
- · Credit lines that remain unused for more than 6 months
- Funded projects revealing irregularities or difficulties that may impact the ability or likelihood of repayment
- Etc

These criteria represent the minimal requirements imposed on the Bank as far as detection and monitoring is concerned under BAM Circular 19/G. In fact, the Risk and Commercial functions detect, monitor and submit for analysis and review by the Loan Commitments Monitoring Committee each dossier that they consider sufficiently sensitive for it to be discussed.

As such, the Group Risk Management Department, via Permanent Monitoring of Commitments (PSPE), is the designated reference data source relating to risk criteria detection and has prerogatives relating to analysing and qualifying these data.

Concentration limits

Credit Risk Management has adopted a policy of analysing business line strategies from a risk perspective, especially in respect of new activities or product launches, by setting formal limits on these risks. Credit concentration risk incurred by BANK OF AFRICA Group can arise from exposure to:

- Individual counterparties;
- Interest groups;
- Counterparties belonging to the same industry or country.

Individual counterparties

The Group proceeds monthly monitoring of individual concentrations, on social and consolidated basis, and ensures close monitoring of the commitments of its 10, 20 and first 100 customers with the greatest commitments.

The following table shows commitments to the bank's main debtors at the end of December 2021:

	December 2021			
	Amount	% of the total		
Commitments to 10 largest customers	18 871	15.4%		
Commitments to 20 largest customers	24 777	20.2%		
Commitments to 100 largest customers	44 233	36.1%		

Interest groups

Diversification of the portfolio by counterparty is monitored on a regular basis, notably under the Group's individual risk concentration policies. Credit risks that result from concentration on a single counterparty or group of counterparties with a relative high level of outstandings (more than 5% of shareholders' equity) are specifically monitored from an individual as well as consolidated perspective.

In addition, monitoring of major risks also ensures that the aggregate exposure to each beneficiary does not exceed 20 % of the Group's net consolidated shareholders' equity capital as recommended by the Moroccan banking regulations. BANK OF AFRICA remains well below the concentration limits defined by the Bank Al Maghrib directive.

Counterparties belonging to the same company

The Group has a methodology for setting sector limits based on a statistical model based on the historical default rate and the number of counterparties by business sector and risk class (rating).

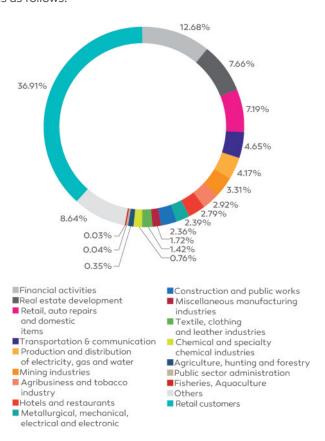
The objective is to model default risk using appropriate econometric techniques, using a random variable dependent, whose value is the result of the enumeration of realization of fault events.

The approach is based on assumptions of the independence of the counterparties and the non-correlation of defaults. Thus, the key notion of this methodological approach is the probability of default of a counterparty given. This probability is measured through the use of the rate failure of the rating pair / business

The model also allows you to calibrate the envelopes to be allocated to each business sector, particularly in view of the development plan of the Bank and the sector's loss experience. This approach adopted by the Group Risk Division is completed by the implementation of back Testing of the model every six months.

The review of the sectoral limits is carried out every six months in consultation with the commercial sector and the Intelligence Centre The Bank's economics, which provide their business vision and costing of the macroeconomic and sectoral perspectives. The opinions of these entities thus make it possible to challenge and further strengthen the relevance of the model in relation to the economic context.

The breakdown of activities at the end of December 2021 is as follows:





Conducting stress-tests

Every six months, BANK OF AFRICA Group conducts crisis simulations (stress tests) to assess the vulnerability of its credit portfolio in the event of an adverse event or deterioration of the quality of its counterparties.

The stress tests are conducted in order to assess the Bank's resilience in the face of unexpected, extreme events. Operationally, they consist of simulating scenarios relating to the default of a certain percentage of the Group's counterparties. The ultimate objective is to measure the impact on provisions and, as a result, on profitability and prudential capital.

The various scenarios are reviewed regularly and at least twice per year to ensure that they are relevant. This assessment is carried out on the basis of the objectives set for conducting stress tests and whenever the market conditions suggest any potentially adverse changes that are likely to seriously impact the Group's ability to withstand them.

The results of the stress tests are made known to the Group Steering and Risk Management Committee and the Group Risks Committee.

Country Risk

In a constantly changing world and within the constraints of the Group's overseas growth strategy and regulatory requirements, the country risk management system will enable BANK OF AFRICA Group to identify, measure and control its cross-border risks.

The country risk management methodology in place is based on the following points:

Country risk management policy **External Provisioning** ratinas Country risk Country risk Stress tests management reporting process Monthly review Setting limits and alerts

Country risk management policy

The country risk management policy aims to define a framework for overseeing all overseas business activities that generate risks for the Bank.

It establishes management standards and rules in order to harmonise regulatory requirements and in-company governance.

Country risk reporting

Monthly reporting by overseas subsidiaries and the parent company enables the Group Risk Management Department to assess each country's potential risk factors and helps to establish risk-mitigation strategies.

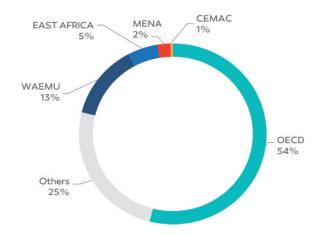
Identifying cross-border risks

BANK OF AFRICA Group is exposed to international risks through the various types of commitment entered into by the Bank with respect to a non-resident counterparty in dirhams or in foreign currencies.

These include:

- · Loans to non-residents
- Trade Finance operations
- Foreign assets
- · Market operations.

Breakdown of BOA Group SA's risk exposure by geographic zone at 31/12/2021



Consolidation

Country risk commitments are identified in such a way as to establish a position for the parent company, for each subsidiary and for the Group as a whole, offering an overview of the Group's overall exposure to cross-border risks.

Alerts system adopted

This system consists of monitoring regulatory, economic and financial factors by tracking all the prominent events occurring during the week. These items are disseminated to all interested parties in a Monthly Report.

An additional module monitors country risk trends and consists of specific research and in-company requests.

Ratings system

BANK OF AFRICA Group bases its country risk assessments on the ratings of external rating agencies such as Coface, S&P and Moody's.

Setting limits

When establishing country limits for loan commitments, BANK OF AFRICA Group takes into consideration:

· Each issuer's risk profile

- · Quantitative and qualitative indicators
- · A track record of consolidated exposures
- · The extent to which the bank is capitalised.

These limits are constantly monitored and requests for overruns are assessed based on the levels of decision-making powers in force.

Stress tests

Stress tests are conducted on a regular basis to ensure that the Bank is able to withstand scenarios of extreme deterioration in country risk and to quantify the impact on the Bank's balance sheet and profitability.

Provisioning

A provision is recognised for country risk whenever the latter materialises, in the event of debt rescheduling, a political crisis or any other factor which may negatively impact the Bank's profitability.

An annual review is systematically carried out to reassess the country supposedly in default, which may potentially require the Group to recognise a provision.

RISK MANAGEMENT SYSTEM ROLL OUT AT OVERSEAS SUBSIDIARIES

In 2021, Group Risk General Management continued to focus its efforts on dealing with the pandemic. Adaptability was order of the day with the constantly evolving situation requiring close monitoring to be able to proactively adjust the risk management and control system to ensure that the Group remained resilient and that its risk profile was consistent with Group strategy.

Market risk management system

The market risk management system was rolled out at the BOA Benin pilot site as well as at BOA Madagascar and BOA Ivory Coast. The roll-out is now underway at other subsidiaries.

Country risk management system

A country risk management roll-out kit has been prepared and roll-out is expected to begin in 2022.

ICRP and ICAAP system

A roll-out kit has also been prepared in relation to the Internal Crisis Recovery Plan (ICRP) and Internal Capital Adequacy Assessment Process (ICAAP) systems and has been conveyed to BOA HOLDING.

MANAGEMENT OF GROUP RISK TRANSVERSAL PROJECTS

In 2021, work focused on a number of major cornerstone risk projects in line with BANK OF AFRICA Group's Risk Management Department strategy:

- The roll-out of the latest version of the Group Loan Commitments Database (BEG) was completed at BOA, Moroccan and European subsidiaries.
- Enhancements were made to the solution for calculating capital requirements and producing 'Risk Authority' regulatory declarations at BANK OF AFRICA.

 Work continued on a number of projects relating to the roll-out of software solutions for recovery of substandard and non-performing loans, IFRS9 and internal ratings.

Risk projects portfolio

The Group Risk Management Department's project portfolio consists of around twenty projects grouped together under 3 headings: Transformation Projects, Regulatory Projects and Transversal Projects.

DESCRIPTION OF THE POLICY FOR MANAGING LIQUIDITY AND INTEREST RATE RISKS

BANK OF AFRICA has established a policy for controlling balance sheet risks such as liquidity and interest rate risks so that it is able to as to continuously monitor changes in financial market trends and their impact on the Bank's operations.

In order to maintain balance sheet stability from a medium- to long-term perspective, the Bank's liquidity and interest rate risk management policy aims to:

- Ensure income stability when interest rates change, thereby maintaining net interest income and optimising the economic value of equity;
- Ensure an adequate level of liquidity, thereby enabling the Bank to meet its obligations at any given time and protecting it from any eventual crisis;
- Ensure that the risk inherent in its foreign exchange positions does not have a negative impact on the Bank's profit margins;
- Steer the bank's strategy so as to take full advantage of growth opportunities available in the market.

The Bank has established an ALCO committee to ensure that these targets are met. The main tasks of this committee are as follows:

- Set asset-liability policy;
- Organise and direct asset-liability sub-committees;
- Possess in-depth knowledge of types of risk inherent in the Bank's operations and keep abreast of any changes in these risks based on financial market trends, risk management practices and the Bank's operations;
- Review and approve procedures aimed at limiting the risks inherent in the Bank's operations in terms of credit approval, investments, trading and other significant activities and products;
- Master the reporting systems that measure and control the main sources of risk on a daily basis;
- Review and approve risk limits periodically given changes to the institutional strategy, approve new products and respond to important changes in market conditions;
- Ensure that the different business lines are properly managed by HR, the latter possessing a high level of competence, experience and expertise in relation to supervised activities.



Responsibilities of the different parties involved in interest rate and liquidity risk management

Maintaining short- and medium-term balance sheet stability entails the involvement of all parties within the Bank and requires that each party's responsibilities are clearly defined in respect of interest rate and liquidity risk management.

In this regard, each of the Bank's entities will have its own budget and objectives, validated by the general management team on a medium-term basis. This enables the relevant bodies to ensure orderly monitoring and control of the three-year plan while balance sheet stability and compliance with regulatory capital requirements.

The ALM department regularly tracks changes in the Bank's balance sheet structure by comparison with the plan's objectives and indicates any divergence during ALCO committee meetings, attended by representative of all entities, and any required corrective measures.

Liquidity Risk

The Bank's strategy in terms of liquidity risk management aims to ensure that its financing mix is adapted to its growth ambitions to enable it successfully expand its operations in a stable manner.

Liquidity risk is the risk of the Bank being unable to fulfil its commitments in the event of unforeseen cash or collateral requirements by using its liquid assets.

Such an event may be due to reasons other than liquidity, for example, significant losses that result from counterparties in default or due to adverse changes in market conditions.

The following two major sources may generate liquidity risk:

- Inability of the institution to raise the required funds to deal with unexpected situations in the short term, such as a massive withdrawal from deposits or a maximum drawdown of off- balance sheet commitments;
- A mismatch of assets and liabilities or the financing of medium- or long- term assets by short-term liabilities.

An acceptable liquidity level is a level that enables the bank to finance asset growth and to fulfil its commitments when they are due, thereby protecting the bank from any eventual crisis.

Two indicators are used to evaluate the Bank's liquidity profile:

- The Liquidity Coverage Ratio (LCR) was 175% on a consolidated basis at 31 December 2021, above the 100% regulatory limit set by Bank Al-Maghrib.
- The profile of cumulative impasses: the technique of periodic or cumulative impasses / Gap in dirhams and currencies, makes it possible to assess the level of liquidity risk incurred by the Bank in the short, medium and long term.

This technique makes it possible to estimate the net refinancing needs on different horizons and determine the appropriate terms of coverage.

Interest Rate Risk

Interest rate risk is the risk that future changes in interest rates have a negative impact on the Bank's profit margins.

Changes in interest rates also impact the net present value of expected cash flows. The extent to which the economic value of assets and liabilities is impacted will depend on the sensitivity of the various components of the balance sheet to changes in interest rates.

Interest rate risk is measured by conducting simulationbased stress tests under a scenario in which interest rates are raised by 200 basis points as recommended by the Basel Committee.

The Bank's strategy in terms of interest rate risk management aims to ensure the stability of results against changes in interest rates, thereby maintaining net interest income and optimising the economic value of equity.

Changes in interest rates may negatively impact net interest income and result in the Bank significantly undershooting its initial projections.

In order to counter such risks, the ALM department regularly steers the Bank's strategy by establishing rules for matching assets and liabilities by maturity and by defining a maximum tolerance departure threshold for net interest income by comparison with projected net banking income.

The method of periodic or cumulative gaps in dirhams and in foreign currencies helps measure the level of interest rate risk incurred by the Bank over the short, medium and long term.

This method is used to estimate asset-liability mismatches over different time periods and determine an appropriate hedging strategy

Sensitivity of the value of the banking portfolio

Simulation-based stress-tests are conducted to measure the impact of changes in interest rates on net interest income and on economic value of equity.

At 31 December 2021, with the trading book portfolio excluded, the impact from a 200-basis points change in interest rates on net interest income was an estimated at MAD -0.253 billion or -5.86% of projected net interest income (and + MAD 0.248 billion for an interest rate variation of -200 basis points, i.e. +5.75% of projected net interest income).

The change in the economic value of shareholders' equity in the event of a 200-basis points shock was an estimated MAD 0.937 billion or 7.5% of regulatory capital.

MARKET RISK

Market risk management at BANK OF AFRICA Group adheres to regulatory standards as defined by supervisory authorities and in application of best international management practices as defined by the Basel Accords.

Market risk is defined as the risk of loss on balance sheet and off-balance sheet positions due to changes in market prices. For BANK OF AFRICA, these risks encompass the following:

- Interest rate risk;
- Foreign currency risk:
- Credit risk on market transactions.

Mapping of financial instruments

The following table shows products traded as part of BANK OF AFRICA Group's trading portfolio, mapped by risk factor:

	I- Corporate and	interbank				
	loans/borrowings					
	Fixed rate (MAD and foreig					
	Floating rate (MAD of currencies)	and foreign				
	II-Treasury bills and neg	otiable debt				
	instruments					
	II-1 Sovereign securities					
	Fixed rate (MAD and foreig	n currencies)				
	Floating rate (MAD					
	currencies)					
	II-2 Securities issued by cre					
	institutions and companies					
Fixed income	Fixed rate (MAD and foreig					
Instruments	J (and foreign				
	currencies)					
	III- Stock lending/borrowin	g				
	Stock lending/borrowing					
	Repos/Reverse repos					
	IV- Interest rate derivativ	es (MAD and				
	foreign currencies)					
	Interest rate swaps					
	Swap futures					
	Forward Rate Agreement					
	Money market mutual fund	ls				
	Bond mutual funds					
Mutual funds	Equity mutual funds					
	Composite mutual funds					
	I-Foreign exchange					
	FX spot					
Foreign Exchange	FX forwards					
Instruments	II-FX derivatives					
	FX swaps					
	Foreign exchange options					
Equity	Equities					
Instruments	Equity/index derivatives					
	Commodity futures					
Commodity	Commodity options					
Products	Commodity swaps					
	, 1					

Market risk management policy

Governance

The main contributors to BANK OF AFRICA Group's market risk management policy are as follows:

- General Management, which implements market risk management strategies and policies approved by the

Board of Directors;

- Group Risk Committee, which defines Group market risk management policy and validates any amendment to the steering of market risk across the entire Group;
- The Group Market Risk Committee, which ensures the efficiency of the Market Risk Management System of the BANK OF AFRICA and its adequacy with the risk management policy of Group market;
- Group Market Risk Department, which centralises
 market risk management for BANK OF AFRICA Group
 as a department which is independent from the Group's
 front-offices. This gives it maximum objectivity in
 steering market risks and arbitrating between the
 Group's various market activities;
- Risk Management Units of BANK OF AFRICA Group entities, which provide a first level check on market activities within their entity and send regular reports to Group Risk Management;
- Internal Audit, which ensures implementation of the market risk management policy and rigorous compliance with procedures.

Description of the Market Risk Management Policy

BANK OF AFRICA Group's market risk management policy is based on four main factors:

- Limits:
- Risk indicators :
- Capital requirements;

Limits

• Counterparty limits in market transactions

The process for approving limits for counterparties and applications to exceed those limits in market transactions is governed within BANK OF AFRICA Group by a system of delegation of powers within a framework of procedures specific to each counterparty type.

Market transactions are subject to a fixing priori limits, according to a delegation scheme based on the principle of the Troika.

Market limits

In order to control market risk within BANK OF AFRICA Group and to diversify the trading portfolio, a set of market limits has been adopted. These limits reflect the Group's risk profile and help to steer market risk management by arbitrating between the Group's various market activities.

BANK OF AFRICA Group's set of market limits are as follows:

- Stop-loss limits by activity over different time horizons;
- Position limits by activity;
- Transaction limits.



VaR limits are in the process of being defined and will be included in the project relating to adoption of the advance approach in respect of market risks. This is a dynamic limit management policy that takes into account fluctuations in different risk factors as well as existing correlations in order to assess more accurately the diversification of the portfolio.

Regulatory limits

In addition to the limits adopted for internal purposes, BANK OF AFRICA Group also complies with regulatory limits defined by Bank Al-Maghrib such as:

- Limits on foreign currency positions which should not exceed 10% of shareholders' equity;
- Limit on the overall foreign exchange position which should not exceed 20% of shareholders' equity.

Risk indicators

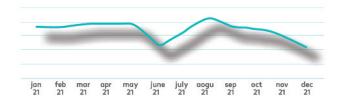
Different risk indicators reflecting the level of exposure to market risks are used within BANK OF AFRICA Group as follows:

• Overall Value-at-Risk (VaR) and VaR by asset class

Value-at-Risk is a probability-based technique used to measure overall market risk. It helps to measure the risk incurred by calculating the potential loss a given time horizon and degree of probability.

Unlike traditional risk indicators, Value-at-Risk combines several risk factors and measures their interaction, thereby taking into consideration the diversification of portfolios.

BANK OF AFRICA Group uses KVar software to calculate



overall Value-at-Risk and VaR by asset class as well as back-testing by using different methods.

Stressed VaR

The Group has established different scenarios for calculating stressed VaR.

The Group has focused on events that create a high level of volatility in financial markets. These events include

- The bankruptcy of Lehman Brothers, which was unable to withstand the sub-prime crisis;
- USD 1.000 billion widening in the US budget deficit to support financial markets;
- The Greek crisis and the threat of contagion spreading to the "PIIGS" countries.

The reaction by Morocco's financial markets to these events was limited however. A number of scenarios were

applied to simulate global market conditions:

- Fluctuation in the Casablanca stock market identical to that of the United States;
- Fluctuation in the dirham rate identical to that of USD:
- Repercussion of EUR/USD volatility on EUR/MAD and USD/MAD;
- Repercussion of EUR/USD volatility on EUR/MAD volatility and USD/MAD volatility.

Stress-testing by risk factor

BANK OF AFRICA Group conducts stress tests to assess the vulnerability of the Group's trading portfolio to extreme scenarios. Stress tests cover all components of the trading portfolio by simulating all risk factors which have an impact on the portfolio. The results of stress tests for interest rate risks and exchange rate risks on the trade portfolio are described below:

a- Fixed income portfolio

1st scenario: A 25 basis point parallel shift in the yield curve.

This scenario would result in a MAD 32 million impact on the P&L.

2nd scenario: A 50 basis point parallel shift in the yield

This scenario would result in a MAD 64 million impact on the P&L.

b- Equity portfolio

1st scenario: A 15% fall in the value of the equity portfolio.

This scenario would result in a MAD 9 million impact on the P&L.

2nd **scenario:** A 25% fall in the value of the equity portfolio.

This scenario would result in a MAD 15 million impact on the P&L.

c- Foreign exchange

1st scenario: A 2.5% rise or fall in the value of the dirham.

This scenario would result in a MAD 10 million impact on the P&L.

 2^{nd} scenario: A 5% rise or fall in the value of the dirham.

This scenario would result in a MAD 20 million impact on the P&L.

The results of the stress tests show that the Group has adequate capital to withstand adverse stress scenarios and to be able to comply with regulatory standards, even in crisis situations.

CAPITAL USE

BANK OF AFRICA Group uses Risk Authority software to calculate capital requirements under the standardised approach for market risks. This enables it to meet regulatory requirements in terms of reporting and monitor capital requirements regarding the Group's trading portfolio.

CAPITAL REQUIREMENTS BY TYPE	CAPITAL REQUIRED
Capital required in respect of fixed income risk	615 391
Capital required in respect of equity risk	148 968
Capital required in respect of foreign exchange risk	14 213
Total capital required in respect of market risk	778 572
Total market risk-weighted assets	9 732 152

Consolidated capital requirements in respect of market risk at 31 December 2021 were as follows:

METHOD FOR VALUING TRADING PORTFOLIO ITEMS

Dirham-denominated fixed income and money market instruments

Market values of fixed income and money market assets are calculated on Kondor+ using the dirham yield curve published by Bank Al-Maghrib and each transaction's characteristics.

Money Market and fixed income mutual funds

Mutual funds are valued on the basis of net asset value calculated on a daily or weekly basis.

Foreign currency-denominated fixed income products

Foreign currency-denominated fixed income products are valued on Kondor+ on the basis of the yield curves for the foreign currencies in question and each transaction's characteristics.

Foreign exchange options

Foreign exchange options are valued on the following basis: volatility curve, yield curves (EUR, MAD and USD) and foreign exchange crosses for the three currencies.

The foreign exchange options position is included in the overall foreign exchange position using the delta equivalent method.

Overall foreign exchange position

Branch-based foreign exchange transactions are executed at BANK OF AFRICA's fixing rate (nonnegotiable rate).

A final statement of orders awaiting execution is transmitted to the Foreign Exchange Desk on day «N» which deals with it immediately. On «N+1» in the morning, the Middle Office receives a statement highlighting possible amendments to Network positions and updates on Kondor+.

Positive Fair Value of Contracts (quarantees)

Guarantees relating to market risks concern "repo"

agreements. The latter are securities sold under repurchase agreements in order to raise funds.

OPERATIONAL RISK

Operational risk is defined as the risk of loss due to inadequate or failed internal procedures, employee error, systems failure or external events, liable to impact the smooth running of the business.

Operational risk management policy

Operational risk management objective

The operational risk management policy has the following objectives:

- · Assess and prevent operational risks;
- Assess controls;
- Implement preventive and/or corrective action for major risks.

The management of operational risks through the implementation of preventive actions and / or corrective address the identified major risks.

The risk management system is regularly reviewed and monitored, allowing continuous improvement of said device.

Classification

Operational risks or losses can be analysed and categorised on the basis of two factors and it is important to differentiate between them: cause and effect, in terms of their financial or other impact. They are classified under Basel by event type.

Links to other risk types (market/credit risks)

The management of operational risks is potentially linked to the management of other risks (market/credit risks) at two levels:

- Overall level, analysis of the Bank's overall level of risk aversion (and in terms of allocation of capital) must be carried and monitoring of "trans-risks";
- Detailed level, some operational risks can be directly linked to market and credit risk management.

Operational risk management organisation

The framework governing operational risk management within BANK OF AFRICA Group is based on three main objectives:

- Define a target policy consistent with BANK OF AFRICA Group's business organisation and inspired by best practice;
- Involve and empower business lines and subsidiaries in the day-to-day management of operational risk management;
- Ensure that Audit/Control function is separate from the Operational Risk Management function.

Operational risk management at BANK OF AFRICA Group



involves four major entities:

- BANK OF AFRICA's Group Operational Risk Department;
- BANK OF AFRICA network:
- BANK OF AFRICA business divisions;
- Subsidiaries.

Operational risks coordinators have been appointed by the aforementioned entities. These include:

- Operational Risk Correspondents (CRO);
- Operational Risk Coordinators (CORO);
- Operational Risk Liaison Officers (RRO)

The operational risk management's remit includes other Group subsidiaries.

Governance of operational risk management

Governance of operational risks within BANK OF AFRICA Group is organised by three Operational Risk Committees:

- Group Operational Risks Committee;
- Operational Risk Monitoring (Business Lines)
 Committee;
- Operational Risk (Subsidiaries) Committee.

These committees are tasked with periodically:

- Reviewing changes in the exposure to operational risks and in the environment for controlling such risks;
- Identifying the main areas of risk, in terms of activities and risk types;
- Defining preventive and corrective action required to reduce the level of risk;
- Reviewing the amount of capital to be allocated to operational risks, the cost of preventive action required and the costs of insurance.

Fundamental methodology principles

BANK OF AFRICA Group's operational risk management policy has two strategic objectives:

- Reduce exposure to operational risks;
- Optimise capital requirements relating to operational risks.

The internal system for measuring operational risks is closely linked to the Group's day-to-day risk management process via:

- Collecting risk events;
- Mapping operational risks,
- Key risk indicators.

The data produced are part of the process of monitoring and control of operational risk profile.

The management of the entity in question, general management and the board of directors are regularly

notified of operational risk exposure and losses incurred. Management systems are properly documented, ensuring compliance with a formalised set of controls, internal procedures and corrective measures in the event of noncompliance. Internal and/or external auditors are invited to periodically review management processes and systems for measuring operational risk. These audits relate to units' activities and the independent operational risk management function.

Management of operational risks at BANK OF AFRICA Group is entirely automated by means of a dedicated system, "MEGA GRC". The collection of risk events, the mapping of operational risks and the key risk indicators are currently managed by this system which is used at Bank level as well as by Moroccan and European subsidiaries.

Operational risk control and mitigation

Several types of action may be taken to manage operational risks:

- Reinforce checks;
- Hedge risks, especially through insurance contracts;
- Avoid risks, in particular, by redeploying activities
- Draw up business continuity plans.
- Closely monitoring the compliance with the assigned risk limits or thresholds.

BANK OF AFRICA Group has a very strong control policy, resulting in a significant reduction in operational risks. However, in terms of operational risk management and via its dedicated policy, the Group is at liberty to identify optimal behaviour, on a case by case basis, depending on the different types of risks described above.

Additionally, the Group has insurance policies to mitigate risks such as damage to office buildings, fraud, theft of valuable items and third-party liability cover etc.

Business continuity plan

The Business Continuity Plan is a response to the rising demand to minimise the impact in the event of any interruption to the Bank's operations. This is due to a growing reliance on the resources underpinning those operations, including human, IT or logistical resources.

The Plan comprises a set of measures and procedures aimed at ensuring that the Bank, under different crisis scenarios such as a major shock, is able to maintain essential services in fail-soft mode on a temporary basis, prior to the planned resumption of normal operations.

A targeted rescue organisation has been set up, along with alternative locations and backup systems. A specific project is underway at Group level, with disaster avoidance planning a priority.

The strategic transversal principles underpinning the Business Continuity Plan are as follows:

 BANK OF AFRICA has a moral responsibility to allow its customers access to the funds that they have entrusted to it. Any breach of this obligation in times of crisis may have an impact on public order.

This principle shall prevail above any other.

- BANK OF AFRICA must guarantee its commitments towards Morocco's interbank clearing system;
- BANK OF AFRICA intends, as a priority, to comply with every one of the existing legal and contractual commitments entered into (relating to loans and other commitments) before it enters into any other commitment;
- BANK OF AFRICA intends to maintain its international credibility by guaranteeing, as a priority, its commitments vis-à-vis foreign correspondents;
- BANK OF AFRICA Group's existing customers take priority over all others benefiting from its services.
- Services are provided along the entire chain from frontoffice to back-office e.g. from branch level up until recognition in accounting terms.

ICAAP SYSTEM

The Internal Capital Adequacy Assessment Process (ICAAP) is a process for assessing internal capital adequacy. Its objective is to ensure that the Bank, on a continuous basis, has adequate internal capital in relation to its risk profile.

There are 3 essential elements to ICCAP:

- Determining and steering BANK OF AFRICA S.A.'s risk appetite;
- Identifying and steering risks as well as establishing a capital buffer aimed at mitigating Pillar 2 risks (interest rate risk, liquidity risk, concentration risk, compliance risk etc.);

The Internal Capital Adequacy Assessment Process (ICAAP) enables the Bank to define a capital structure, dynamic projections of solvency ratios and additional capital requirements. To complement this process, the Bank carries out simulations and stress tests based on various criteria to assess the impact of risk factors on its resilience in terms of equity.

The introduction of a risk appetite framework has been achieved by incorporating two frames of reference: - A risk appetite framework which defines the governance and organisational scheme, the definition process and the Bank's risk appetite;

 A risk appetite statement which, consistent with the Group's development strategy, defines the risk appetite aspects which reflect the Bank's risk profile. These aspects have been broken down into quantitative indicators with related thresholds.

The Risk Department ensures that the risk appetite system is properly aligned to the capital allocation process and limits system. As far as the Group's main risks are concerned, the Group's risk appetite is governed by limits and alert thresholds. These indicators ensure that the Group is well-positioned to meet its target values and reach its goals in terms of profitability.

INTERNAL CRISIS RECOVERY PLAN (PRCI)

In response to new measures introduced under Bank Al Maghrib's Circular 4/W/2017 relating to the introduction of an Internal Crisis Recovery (PRCI), BANK OF AFRICA has taken the necessary steps to comply with this regulation.

The purpose of this prevention system is to assess BANK OF AFRICA Group's resilience, as a systemic institution, in the event of an extreme crisis and to identify the key drivers to restore its viability in terms of solvency, liquidity, asset quality and profitability. The various risks to which the group is exposed are also covered by this PRCI. These include credit risk, market risk, country risk, balance sheet risk, operational risk, cybercrime risk, non-compliance risk and reputational risk. restore its viability in terms of solvency, liquidity, asset quality and profitability. The various risks to which the group is exposed are also covered by this PRCI. These include credit risk, market risk, country risk, balance sheet risk, operational risk, cybercrime risk, non-compliance risk and reputational risk.

As a result, a taxonomy of the Group's risks has been developed in conjunction with the ICAAP system, with more robust internal stress tests based on extreme but plausible scenarios covering every category of risk to which the Group is exposed.

The work carried out has enabled the Group to draw up an inventory of which businesses are considered as significant, which operations are fundamental and which functions are critical in the event of a major crisis. Crisis scenarios have been drawn up and simulations and impact calculations carried out. In addition, a simulation of the Covid-19 health crisis has been factored in which assumes a pessimistic and extreme development of the pandemic, similar to the scenarios considered by the IMF.

As a result, for each estimated impact, recovery measures have been defined with objectives established to restore the Bank's financial viability via previously identified quantifiable drivers. As such, the list of recovery measures has been reviewed, detailing the preparatory and prerequisite measures and the operational and financial risks to facilitate implementation of recovery measures as well as prioritising the defined measures.

BANK OF AFRICA – BMCE GROUP has adopted a system of early warning indicators for crises with the aim of identifying crises in a timely manner as well as defining a set of indicators for triggering recovery measures. The monitoring of these indicators is carried out as part of the Group's overall risk management and monitoring system.

This plan is updated annually to ensure that is complies with the relevant regulatory requirements.

The aim is for it to become a genuine tool within the risk prevention process.

CORPORATE SOCIAL RESPONSABILITY

Underpinning BANK OF AFRICA - BMCE Group's management framework relating to its undertakings regarding the environment, climate change and social responsibility is a set of values and an underlying



commitment to respecting human rights and the environment. This framework has been adopted by every one of the Group's banking and banking-related subsidiaries.

It should also be noted that this framework applies to all financial products and services offered by the Bank. As a result, BANK OF AFRICA - BMCE Group factors sustainable development considerations and goals into its commercial approach and manages the environmental, climate-related and social risks associated with its commercial commitments.

The risks resulting from environmental, climate-related and social (ECS) issues are inherent in any financial transaction. They translate into financial, legal, collateral-related or reputational impacts for the Bank.

The ECS risk identification, measurement and internal analysis systems are now closely linked to the day-to-day operational risk management process.

MEASUREMENT OF CAPITAL ADEQUACY

BANK OF AFRICA Group has opted for the standardised approach as outlined in Bank Al Maghrib circulars (BAM).

The latter require banks to have a Tier 1 capital ratio of 9% and a solvency ratio of 12% at both the parent company and consolidated levels.

These threshold calculated for BANK OF AFRICA Group comply with the regulatory prerogatives established by Bank Al- Maghrib.

CAPITAL ADEQUACY AND COMPOSITION

Main characteristics of items constituting shareholders' equity

BANK OF AFRICA's share capital stood at MAD 2 056 066 480 made up of 205 606 648 ordinary shares, each with a nominal value of 10 dirhams. The shares are fully paid-up. Each ordinary share entitles the holder to one voting right.

Measurement of capital adequacy

BANK OF AFRICA Group has opted for the standardised approach to calculating risk-weighted assets as prescribed by Bank Al-Maghrib circulars (BAM):

Since 30 June 2014, capital adequacy ratios have been calculated in accordance with Basel III regulatory standards as defined by BAM.

The method for calculating capital was reviewed in the light of these new regulations and temporary measures have been adopted for a period until 2019.

The circulars governing these Declarations are as follows:

- Circular No. 26/G/2006 relating to calculating capital requirements based on the standardised approach for hedging credit institutions' credit, market and operational risks;
- Circular No. 8/G/2010 relating to calculating capital requirements based on internal approaches for hedging credit institutions' credit, market and operational risks

 Circular No. 14/G/13 relating to capital requirements for credit institutions

Composition of capital and capital adequacy ratio

Tier 1 capital	23 174 837
Items to be included in Tier 1 capital	26 553 390
Share Capital	2 056 066
Consolidated reserves, including premiums related	
to share capital and not included in hidden reserves	19 138 907
Retained earnings	26 741
Net income for the previous period	2 007 058
Minority interests	3 324 618
Items to be deducted from Tier 1 capital	3 378 553
Good will	1 032 114
Other adjustments to Tier 1 capital	1 502 481
Immobilisations	809 905
Other deductions	34 053
Additional core capital	2 000 000
Perpetual subordinated debt	2 000 000
Tier 2 capital	7 191 632
Perpetual subordinated debt	6 332 602
Revaluation differences	676 116
Hidden reserves	182 914
Total	32 366 469

Capital Requirements by Risk Type	Dec 2021
Risk-weighted credit risks	222 904 789
Risk-weighted market risks	9 732 152
Risk-weighted operational assets	26 022 125
Total risk-weighted assets	258 659 066
Tier 1 Capital	25 174 837
Tier 1 Capital ratio	9.7%
Total capital	32 366 469
Capital adequacy ratio	12.5%

18-month forward-looking ratios

Parent company	Dec 2021	Jun 2022	Dec 2022	Jun 2023
Regulatory Capital	12 921	13 381	13 566	13 731
Tier 1 Capital	14 921	15 381	15 566	15 731
Tier 2 Capital	21 067	21 927	22 512	23 127
Total Capital	140 955	143 856	146 173	148 454
Risk-weighted assets	9.2%	9.3%	9.3%	9.2%
Tier 1 Capital Ratio	10.6%	10.7%	10.6%	10.6%
Capital Adequacy				
Ratio	14.9%	15.2%	15.4%	15.6%

Consolidated	Dec 2021	Jun 2022	Dec 2022	Jun 2023
Regulatory Capital	23 175	23 546	24 483	26 450
Tier 1 Capital	25 175	25 546	26 483	28 450
Tier 2 Capital	32 366	33 196	34 533	36 950
Total Capital	258 659	273 636	281 274	288 285
Risk-weighted assets	9.0%	8.6%	8.7%	9.2%
Tier 1 Capital Ratio	9.7%	9.3%	9.4%	9.9%
Capital Adequacy Ratio	12.5%	12.1%	12.3%	12.8%

