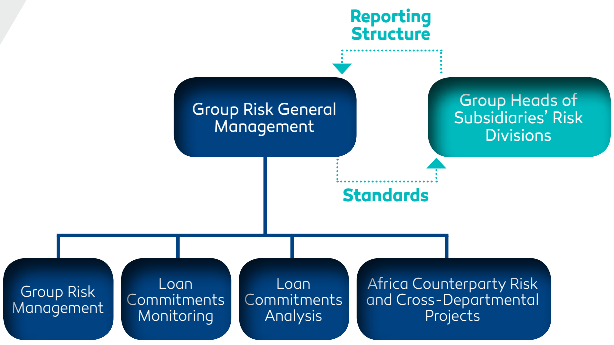
BANK OF AFRICA

RISK **MANAGEMENT**

RISK MANAGEMENT ORGANISATION AND RESPONSIBILITIES

Board of Directors' responsibilities with regard to controlling the risks related to the Bank's operations include reviewing the systems implemented by General Management to manage these risks to ensure that it complies with the applicable requirements relating to regulations, companies, transferable securities and other legal obligations. As a result, BANK OF AFRICA has set up a risk management system that is underpinned by a number of governance bodies as well as bodies responsible for day-to-day management.

The following bodies are involved in managing and monitoring the risks of the Bank and the Group – the Group Risks Committee, the Group CACI, the General Management Committee, the Credit Committees, the Committee for Monitoring Accounts Showing Anomalies and Downgrading and the Group Risk Steering and Management Committee.



Furthermore, Group General Control is tasked with carrying out inspection and audit missions at the Group's various operational entities in Morocco and abroad.

The Risk function is entirely independent of any of the Group's operational functions and business entities so as to ensure that the information provided to senior management regarding the Group's risk situation is independent, objective and comprehensive.

It also ensures that the risk management system is efficient, exhaustive and homogeneous and that the level of risk assumed is consistent with the Group's corporate strategy, in particular, the strategic goals and the resources of the Group and of its business entities.

The Group and its business entities also ensure ongoing compliance with the regulatory requirements decreed by Bank Al Maghrib as well as those required by local central banks.

Group Risks General Management, through its Group Risk Management Divisions, Loan Commitments Analysis, Loan Commitments Monitoring and Africa Counterparty Risk and Cross-Departmental Projects, with the support of the Group's business entities, ensures that risks are managed and monitored in addition to reviewing credit approval procedures. The Group Risks Division is responsible for managing risk by actively contributing to:

- Determining BANK OF AFRICA Group's risk policy
- Establishing a risk control system
- Determining and managing the credit approval and monitoring processes.

CREDIT RISK

Credit risk is the risk of customers not repaying their 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.

Decision-making system

The Group has adopted a dual approach to the credit approval process as follows:

A standardised approach for commonplace products intended for retail customers, which may be implemented in two ways:

- Use of a self-check form with formatted acceptance criteria forming the basis of the risk assessment. This self-check form outlines the credit approval terms and checks that credit standards are complied with and adhered to.
- A delegation system by which credit approval decisions are delegated to different levels of power. This ensures consistency in decision-making in the credit approval process and a high level of integrity from the person to whom powers have been delegated. Each credit application is processed by subordinate entities prior to its approval by the duly responsible decision-making entity.

An individualised approach based on the particular characteristics and requirements of corporates based on three fundamental principles:

- The management of the loan portfolio, which provides Senior Management with sufficient information to be able to assess the customer's risk profile

- The delegation of authority to intuitu personae individuals on the basis of their experience, judgement, competence, and professional training
- The balance of powers, with an offer of credit made based on the judgment of at least three persons ('Troika' principle).

For certain risk levels, approval must be sought from the Senior Credit Committee or the Major Loan Commitments Committee (CGE). It is also worth noting that Group General Control provides additional independent control of credit quality and ensures that procedures have been complied with.

Similarly, Group Risks General Management independently monitors and maintains a high quality of risk management and ensures that internal rules and procedures are complied with.

The level of approval required is generally determined by the amount offered to the customer, the customer's rating, whether the loan needs to be approved by a business sector specialist, whether a reliable loan guarantee has been provided and the loan's maturity date.

Portfolio diversification

The diversification of the loan portfolio remains an ongoing priority of Group risk policy. Potential concentration by counterparty or by business sector must be regularly reviewed and, if necessary, corrective action taken to enable the exposure to be managed proactively.

As a result, concentration limits are introduced and reviewed every six months for business sectors as well as for economic interest groups. Also, regular reports are sent to Bank Al-Maghrib, including a report on the Bank's risk division ratio.

Monitoring and steering

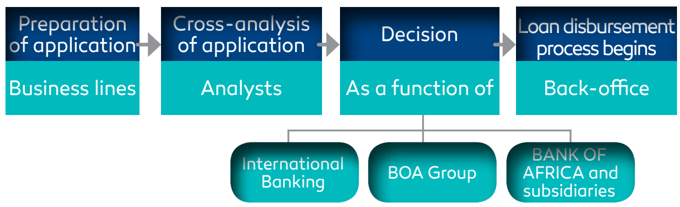
Group Risks General Management is responsible for carrying out missions to prevent and monitor credit risks on a continuous basis at BANK OF AFRICA Group level.

This type of preventive management, which is a key function within the risk management process, consists of pre-empting situations in which there has been a deterioration in the risk outlook and making the appropriate adjustments.

In carrying out this function, Group Risks General Management is required to:

- Monitor loan commitments' regularity – compliance with the initially stated purpose of the loan and with credit limits, investigating payment incidents, reviewing loans in arrears etc.
- Detect loans exhibiting persistent signs of weakness
- Monitor, in partnership with the network, any developments in relation to the main risks incurred (problem loans, the largest or most sensitive loan commitments)

New credit application



- Determine which loans are eligible for downgrading as required by regulations governing non-performing loans
- Monitor credit risk indicators on a continuous basis, including healthy loans, sensitive loans and non-performing loans, stating loan-loss provisions, the non-performing loan ratio and the loan-loss coverage ratio.

Non-performing loans

On carrying out a monthly review of its portfolio and an analysis of high-risk accounts, each subsidiary reviews its regulatory loan classification as required by local regulatory requirements.

This review is finalised by the Committees for Monitoring Accounts Showing Anomalies and Downgrading on the recommendation of each entity's Risk function. The decisions taken by these committees are implemented by executing and monitoring the transfer of these accounts from the 'healthy' to the 'non-performing, requires provisioning' category. Provisioning is checked and monitored by Group General Control, the external auditors and the Group Risks Committee.

Internal rating system

An internal rating system for businesses – large enterprises and SMEs – is employed by the commercial network. Similarly, the Bank has a specialised decision-making system for approving consumer credit for retail customers. This has been integrated into the Bank's credit decision-making information systems.

BANK OF AFRICA also uses score-based matrices for Moroccans living abroad, professional customers and small businesses. These matrices are also integrated into the Bank's information systems.

MARKET RISK

Market risk, defined as the risk of loss on balance sheet and off-balance sheet positions resulting from adverse changes in market prices, includes:

- Interest rate risk
- Equity risk
- Foreign currency risk
- Commodity risk.

And two types of credit risk relating to market transactions:

- Counterparty risk
- Settlement risk.

BANK OF AFRICA Group's market risk management system is structured around two main aspects:

LIMITS

Counterparty limits on market transactions

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

Limits are set beforehand for market transactions in accordance with a scheme of delegation based on the troika principle.

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 jointly adopted. These limits reflect the Group's risk profile and help it steer market risk effectively by arbitrating between the various market activities. BANK OF AFRICA Group's set of market limits comprises the following:

- Stop-loss limits
- Position limits
- VaR limits
- Trading limits.

Risk indicators

A variety of risk indicators, reflecting the level of exposure to market risk, are used by BANK OF AFRICA Group:

Overall value-at-Risk (VaR) and by asset class

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

Stress-testing by risk factor

BANK OF AFRICA Group conducts stress tests in order to evaluate the vulnerability of the Group's trading portfolio under extreme scenarios. Stress tests encompass every component of the trading portfolio by simulating all risk factors that might impact it.

OVERALL LIQUIDITY AND INTEREST RATE RISK

In order to maintain balance sheet stability in a context of asset growth, the system adopted by BANK OF AFRICA for managing liquidity and interest rate risks is designed to:

- Ensure earnings 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 protect 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 in such a way as to be able to take full advantage of growth opportunities available in the market.

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 to 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 defaulting counterparties or due to adverse changes in market conditions.

There are two major sources of liquidity risk:

• The institution's inability to raise the required funds to deal with unexpected situations in the short term, such as a massive deposit withdrawal 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), in line with the Basel III standard

• The profile of static periodic or cumulative gaps over a 12-month horizon.

The method of periodic or cumulative gaps in dirhams and in foreign currencies helps measure the level of liquidity 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.

Interest Rate Risk

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

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 simulation-based 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 is aimed to ensuring earnings stability when interest rates change, 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.

OPERATIONAL RISK

Operational risk relates to the possibility of incurring a loss as a result of a failing internal procedure, systems failure, human error or an external event.

The primary goal of BANK OF AFRICA - BMCE Group's operational risk management system is to reduce exposure to operational risks, optimise monitoring processes and bolster its control system.

The internal system for measuring operational risks is closely linked to the Group's day-to-day risk management process via risk events collection, mapping operational risks and Key Risk Indicators (K.R.I).

A specific operational risk management organisational structure has been put in place based on operational risk intermediaries.

These include Operational Risk Correspondents – Business Lines and Subsidiaries (CRO), Operational Risk Coordinators (CORO) and Operational Risk Liaison Officers (RRO).

Several types of attitude may be envisaged to manage operational risks:

• Reinforce checks

• Hedge risks, especially via insurance contracts

• Avoid risks, in particular, by redeploying activities

• Draw up business continuity plans

BANK OF AFRICA - BMCE Group has a control policy, resulting in a significant reduction in operational risks. However, in terms of operational risk management, over and above its risk control policy, the Group is at liberty to find the best possible solution on a case-by-case basis, depending on the different types of risks.

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.

Governance of operational risks within BMCE Bank Group is organised by three operational risk Committees:

- Operational Risk Monitoring Committee
- Operational Risk (Subsidiaries) Committee
- Group Operational Risk Committee.

These committees are tasked with periodically:

- Reviewing changes in operational risk exposure and in the environment for controlling the risks
- Identifying the main risk areas in terms of business activity and risk type
- Determining the preventive and corrective action required to mitigate the level of risk
- Reviewing the amount of capital to be allocated to operational risks, the cost of preventive action required and the insurance cost.

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.

The environment, climate change and social responsibility

Underpinning BANK OF AFRICA 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 each 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 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.

Risks arising from environmental, climate-related and social (ECS) factors are inherent in any financial transaction. They translate into financial, legal, collateral-related or reputational impacts on the Bank.

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

COUNTRY RISK

Country risk refers to the possibility that a sovereign counterparty in a given country, as well as other counterparties in this country, is unable to or refuses to fulfil its foreign obligations due to socio-political, economic or financial reasons. The Group's country risk management system, which is described in detail in its country risk management policy, is underpinned by the following aspects:

- Identifying country risk
- Calculating exposure for each country and on a consolidated basis
- Drawing up a country risk profile including a country risk rating
- Assigning country limits
- Reporting and alerts
- Provisioning.

The process of monitoring the Group's country risk exposure is carried out by a monthly report from overseas subsidiaries to Group Risk Management.

STRESS TESTING

Stress testing consists of analysing a variety of scenarios in light of extreme shocks that might impact the Group's business activities and its credit, market and country risk profiles. It has a dual purpose – to bolster risk measurement systems so as to enable the Bank to anticipate and pre-empt potential risk situations and to allocate capital more effectively.

Stress testing is a fundamental component of BANK OF AFRICA Group's risk management policy. As such, stress tests are carried out regularly in addition to the requirement instigated by the regulatory authority to file half-yearly reports.

ICAAP SYSEM

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

There are 3 main aspects to ICAAP:

- Determining and steering BANK OF AFRICA SA'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 capital.

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 and the process for defining and presenting 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.

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.