National Bank of the Republic of Macedonia
Supervisory Policy Manual

Title: **CR-1** Credit Risk Management

Date: **FINAL**

Purpose: To set out the approach which the NBRM will adopt in the supervision of licensed institutions' credit risk, and to provide guidance to licensed institutions on the key elements of effective credit risk management.

Issue Type: Supervisory Guidance, in conjunction with:
- Decision on determining the methodology for classification of the on-balance and off-balance sheet asset items of banks according to the their risk level ("Official Gazette of the Republic of Macedonia" No.21/2002 - revised text and No.80/2006)
- Decision on the amount and the method of establishing special reserves for coverage of the banks' potential losses ("Official Gazette of the Republic of Macedonia" No.50/2001)
- Decision on the supervisory standards for regulating the banks' past due claims ("Official Gazette of the Republic of Macedonia" No. 134/2007)
- Decision on the terms and the manner of extending foreign exchange loans and foreign exchange indexed loans between residents ("Official Gazette of the Republic of Macedonia" no. 41/2006)
- Decision on bank's credit exposure limits ("Official Gazette of the Republic of Macedonia" no. 1/2004 - revised text)

Supersedes Previous Issue: None

Application: All licensed institutions

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4.3. Quality of Credit Risk Management

1. Introduction

1.1. Definition of Credit Risk

1.1.1. Credit risk is the current or prospective risk to earnings and capital arising from an obligor's failure to meet the terms of any contract with the institution or otherwise fails to perform as agreed. Credit risk is found in all activities where profitability depends on counter party, issuer, or borrower performance. It arises any time the institution's funds are extended, committed, invested or otherwise exposed through actual or implied contractual agreements, whether reflected on- or off-balance sheet.

1.1.2. Credit risk takes into consideration market risks such as interest rate risk, foreign exchange risk and price risk (changes in the value of collateral), that if not controlled may impede the counterparty's ability to repay or decrease the institution's overall asset value (from a portfolio perspective). In addition, international lending includes country risk, which refers to risks associated with the economic, social and political environments of the borrower's home country. There is also a component of country risk called transfer risk which arises when the foreign currency required under the borrower's obligation becomes unavailable to the borrower regardless of its particular financial condition.

1.2. Background

1.2.1. The purpose of this supervisory guidance is to provide an integrated review of all aspects related to credit risk management. It will also provide guidelines for effective implementation of the credit risk management process by institutions and its involvement in the overall process of managing all risks institutions are exposed to in their operations. The provisions of the Banking Law and other NBRM regulations mentioned above, the recommendations of the Basle Committee for Banking Supervision[1], as well as the experience and the practice of several foreign supervisory bodies underlie the preparation of this document.

1.2.2. Credit risk is most simply defined as the potential that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms. Institutions need to manage the credit risk of individual credits or transactions and also the risk on a portfolio level.

1.2.3. Since exposure to credit risk continues to be the leading source of problems in banks world-wide, it is directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can lead to deterioration in the credit standing of an institution's counterparties.

1.2.4. Institutions should have credit risk management systems appropriate to their type, scope and complexity of operations. The credit risk management system must enable an institution to

[1] Sound Credit Risk Assessment and Valuation for Loans – June, 2006.

identify, measure, monitor and control credit risk. Institutions should hold sufficient capital to cover credit risk, i.e., to maintain appropriate balance between the risks taken in their credit portfolios related to their own funds.

2. Requirements for Effective Credit Risk Management

The first step in the establishment and development of an effective credit risk management system is the creation of adequate conditions for its implementation, including:

- Credit risk strategy and policy.
- Organizational structure, segregation of duties, authorities and responsibilities.
- Independent audit.
- Management information system.

The above requirements should be compatible with the nature, the features and the complexity of an institution and the activities it performs, as well as the surrounding market of the institution's operations.

2.1. Credit Risk Strategy and Policy

2.1.1. Effective credit risk management systems can exist only if there is proper oversight by the Supervisory Board (Board) and Board of Directors (Directors). The primary role of the Board is to adopt and, on a regular basis, review and supervise the implementation of the credit strategy and policy. Directors and senior management have an active role in implementing the credit strategy and policy, and in developing systems that will enable the institution to identify measure, monitor and control its exposure to credit risk.

2.1.2. The establishment of a sound credit strategy and policy by an institution provides a foundation for sound credit risk management. The Board must ensure that credit exposures in their institution's portfolio are created following basic objectives on a sound and collectible basis.

2.1.3. The Board is responsible for approving the credit strategy and policy, and to make sure that they are in line with the business goals and objectives of the institution. In addition to establishing strategic objectives for the loan portfolio, the Board and Directors are responsible for setting risk limits on the institution's credit risk taking activities. Risk limits should take into consideration the institution's historical loss experience, its ability to absorb future losses, and desired level of return.

2.1.4. Credit risk policies should also be in compliance with an institution's overall risk management policy. An institution's credit policy should be consistent with applicable accounting frameworks, prudential requirements and other appropriate supervisory guidance. The contents of the policy should be contingent upon the nature, the complexity and type of activities the institution performs; and should be in line with regulations relevant to credit risk management. The Board can delegate part of its credit authority to Credit Committees or Directors within the institution, but ultimately remains responsible for overseeing the credit risk management process. Credit authority should be appropriate for the products or portfolios assigned to Credit Committees, the Directors, or individual credit officers; and should be commensurate with their credit experience and expertise. The institution should ensure that a system of credit authorization is in place for all types of credit exposures, including the use of any derivative instruments for hedging or for trading purposes. All delegated credit authorities should be subject to regular reviews to ensure that they remain appropriate under current market conditions and the level of performance.

2.1.5. Taking into account that credit risk management is not within the competency of only one organizational unit of the institution (e.g., Credit Department), the policy should be communicated to all organizational units which are either directly or indirectly involved in credit risk management (treasury, problem loan department, internal audit, etc.). Conditions should be provided so that policies are understood and uniformly applied by all employees of the institution.

2.1.6. The credit policy should contain, but is not limited to, the following elements:

2.1.6.1. <u>Products and types of lending</u>. The institution should define the products it will offer to customers. The decision about the types of loans to be granted should be based on a credit strategy, the deposit structure of the institution, consideration and expertise of the lending officers and anticipated credit demands of the community. As an example, an institution could offer as part of their core lending business the following loan products:

- Trade finance
- Investment and construction loans
- Mortgage and real estate loans
- SME and micro finance
- Consumer loans
- Credit cards
- Car loans
- Guarantees and letters of credit
- Syndicated loans

Each of the products has its own characteristics and the institution has to gain expertise and develop appropriate procedures if the product is offered on the market. The institution should test the adequacy of operational procedures and the internal controls developed for managing the credit risk related to new products before introducing them. Additionally, before an institution offers new types of products and activities, it should ensure that personnel fully understand the risks associated with such products or services. Procedures and controls should be approved in advance by relevant management bodies according to the statute of the institution. A formal risk assessment of new products and services should always be performed and properly documented.

2.1.6.2. <u>Sound credit criteria</u>. The credit risk strategy and policy should be effectively communicated throughout the institution and special emphasis should be placed on credit portfolio objectives, risk tolerances, underwriting and selection standards. All relevant personnel should clearly understand the institution's approach in taking credit risk and credit risk management. The credit policy must define credit-granting criteria that include understanding the borrower’s business, financial condition, intended use of the funds as well as the stream of its future cash flows, i.e. the source of repayment. Also the criteria should include, but not limited to, the following:

- Integrity and reputation of the borrower;
- Borrower's credit history and current financial position;

- Forward looking analyses of borrower's business with projections of its future cash flow; and
- Borrower's sensitivity to economic and market changes (changes in foreign exchange rates, interest rates, as well as changes in market prices of its product or services); as well as available collateral and guaranties.

2.1.6.3. Risk tolerance, risk limits and risk concentrations. Institutions should ensure that the credit approval function is properly managed, and credit exposures comply with prudential standards and internal limits. An institution should be clear about credit risk tolerance, including how much and what type of risk they are prepared to take. Risk tolerance should be compatible with an institution's strategic goals set by the Board. The credit risk policy should specify, among other items:

- s Types of facilities offered, along with ceilings, pricing, profitability targets, maximum maturities and maximum debt-servicing ratios for each type of lending activity;
- Ceiling for the total loan portfolio, in terms, of loan-to-deposit ratio and un-drawn commitment ratio in absolute value (MKD) or as a percentage of the institution's capital base or total assets;
- Portfolio limits for maximum aggregate exposures by country, industry, category of borrower/counterparty (e.g., banks, non-bank financial institutions, corporate, households, etc.), product, groups of related parties, connected parties and single borrowers;
- Limits, terms and conditions approval and review procedures, and records kept for connected lending. All institutions should have a formal policy statement, endorsed by the Board, on lending to connected parties covering these matters;
- Types of acceptable collateral, loan-to-value ratios and the criteria for accepting guarantees; and
- Minimum information required from loan applicants.

2.1.6.3.1. Additionally, institutions should have systems in place that will enable them to control their risk from concentrations in a particular industry or economic sector, geographic region, type of credit products, type of collateral, etc. The basis for these systems should be set within the credit policy, endorsed by the Board, to control and monitor all risk concentrations and large exposures. Institutions should carefully and independently manage and avoid excessive risk concentrations. Established limits should not be exceeded, but if a breach occurs, a procedure for approving the breached limit should be clearly documented and properly reported to the appropriate level of management. In such cases institutions should have appropriate credit risk mitigation that will cover the excess risk.

2.1.6.3.2. Effective approval processes, internal controls, tracking and management reporting systems should be in place in order for senior management to be able to monitor limits and exceptions. All these elements will ensure that appropriate levels of management are involved in approving and monitoring credit risk positions taken by the institution.

2.1.6.3.3. Institutions should analyze their portfolios and seek to identify the existence of any inter-dependencies. This importance can be illustrated by the potential contagion effects that a substantial decline in property or stock prices may have on the default rate of those commercial and industrial loans which heavily rely on such types of collateral. Institutions should beware when lending to fast growing industries, and all credit activities should be based on sound banking principles. Also, institutions should guard against over-extending credit to asset dependant sectors such as property and stock markets, and to other investments that contain speculative elements. Such risk concentrations can leave an institution unduly exposed to a possible collapse in asset prices with consequent increased defaults by borrowers.

2.1.6.3.4. Institutions should be especially aware in cases where they finance long-term domestic lending with short-term external borrowing. Possible reversal of capital flows can lead to a liquidity squeeze and expose the institution to possible adverse movements in exchange rate movements. Institutions involved in such types of lending should establish prudent mismatch limits to control such risk.

2.1.6.4. <u>Credit monitoring</u>. Well-designed monitoring processes will assist the Board in assessing management's performance in achieving the strategic and financial objectives set within the credit strategy and policy. The Board must determine whether the Directors and senior management have established proper controls that will enable the institution to effectively implement the adopted credit strategic and policy guidance. All institutions should have in place a system for monitoring individual credit portfolios and overall quality and performance of their credit activities (and any other portfolios that bear credit risk), as well as an adequate information system that will provide timely and accurate information on the institutions credit risk profile. The information system should act as an early warning system that will enable problems to be promptly identified and alert all responsible levels of management to take appropriate actions.

2.1.6.5. <u>Internal credit risk rating system</u>. Institutions are encouraged, but not obligated, to introduce and implement internal credit risk rating systems for their own credit risk management purposes. The internal rating system should be consistent with the nature, size and complexity of the institution's credit exposures.

2.1.6.6. <u>Credit workouts</u>. All institutions should develop effective workout programs to manage problem credits in their portfolio. After identification of problem credits, institutions should delegate the responsibility for their management and define the actions to be taken. It is prudent practice that workout measures be undertaken by employees that did not participate in the credit approval process. The workout program should also cover the requirements laid down in prudential regulations, contractual law, and other relevant laws and regulations.

2.2. Organizational Structure, Segregation of Duties, Authorities and Responsibilities

2.2.1. Essential parts in the effective implementation of a credit risk management process are:

- Establishing a proper organization;
- Establishing clear definitions of the tasks and responsibilities of management bodies and respective organizational units;
- Establishing proper communication between all organizational bodies and persons involved in credit risk management; and

- Appointing senior management and staff that will ensure compliance with the standards defined in the credit strategy and policy.

2.2.2. Three important management bodies responsible for the implementation of sound credit risk management processes are the Board, the Risk Management Committee and the Credit Committee.

2.2.2.1.***Supervisory Board*** - The Board is responsible for defining the level of credit risk the institution may be exposed to in its operations. It means adopting a credit risk management policy and establishing clear lines of responsibility for effective monitoring and control of credit risk. The Board should continually monitor the credit risk profile of the institution and determine whether Directors are appropriately implementing its strategic directives and policy guidance; and managing risk positions, control systems, and policy exceptions in an effective manner.

2.2.2.2. The Board should clearly delegate the credit authority and the operational implementation of the credit risk management process. The process may be assisted through the activities of other risk monitoring functions such as risk management, audit, and compliance groups; but the ultimate responsibility and liability rests with the Board and the Directors.

2.2.2.3. Effective management of credit risk requires that the Board understands and oversees the institution's credit risk profile and its credit culture. To accomplish this, the Board must have a thorough knowledge about the following issues:

- Composition of the institution's portfolios and the inherent risks inherent in these portfolios; and
- Understanding of the portfolios' product mix, industry and geographic concentrations; and other aggregate characteristics.

Additionally, the Board must be sure that the policies, processes, and practices implemented to control the risks of individual loans and portfolio segments are sound and that lending personnel maintain adherence.

2.2.2.4. ***Risk Management Committee* -** The Risk Management Committee, as a specialized body of the Board, is responsible for:

- Developing procedures and practices which will ensure adherence to the credit strategy and policy approved by the Board; and
- Establishing proper tools for effective credit risk management including tools to properly measure, monitoring and mitigate credit risk,

2.2.2.5. ***Credit Committee* -** The Board should, directly or indirectly through the Directors, establish one or several Credit Committees and delegate part of their authority to create credit exposures and the responsibility for the implementation of the approved credit strategy and policy. These bodies shall be responsible for the operational implementation of the credit strategy and policy; and should be effectively included in the credit risk management process.

2.2.2.6. The Credit Committee is responsible for the final step in the credit approval process when it is analyzing credit proposals, taking into account all relevant criteria defined in the credit strategy and policy. It is responsible for ensuring that the institution's portfolios comply with internal limits and prudential standards, risk concentrations limits and reporting obligations to the Board and Directors.

2.2.2.7. Institutions can form one or several Credit Committees depending on the complexity and diversity of credit products offered to clients. In cases where credit exposures are significant in size, or the institution is offering complex credit products that involve significant risk, approval should be performed by the Board or, in line with the credit policy of the institution, at least by a Credit Committee with membership comprising of at least one Director. Members of this Credit Committee should also be representative of the organizational units that are closely involved in the credit process.

2.2.3. **Compliance Function**

2.2.3.1. Institutions should establish an adequate compliance function which is consistent with their portfolio characteristics, complexities and risk profile; and capable of adjusting to the conditions and the environment in which the institution operates.

2.2.3.2. The compliance function should provide the institution the ability to monitor compliance with internal policies and procedures; as well as the legal framework regulating the credit activity of the institution. The compliance function, if properly established, should enable the institution to operate in conformity with internal rules and be in compliance with legal requirements; as well as to introduce systemic methods of assessing overall compliance with an institution's credit processes.

2.2.3.3.The compliance function plays an important role with respect to a sound credit risk management system. The role of the compliance function, among other things, is to ensure that the risk management system and the adopted credit processes are in compliance with relevant statutory provisions and regulatory requirements.

2.2.4. **Accountability**

2.2.4.1. The institution's staff should comply with established credit policies and procedures and be held accountable, ultimately to the Board through their reporting officers, for their decisions when discharging their responsibilities. The institution's remuneration policies should be consistent with established credit risk strategies. Policies should not encourage officers to generate short-term profits by taking an unacceptably high level of risk.

2.2.5. **Staff Competence**

2.2.5.1. Institutions should ensure that the staff involved in credit activities are competent and fully understand the institution's strategic direction, policies, tolerance of risk and limits. The staff should have appropriate professional qualifications, technical and managerial skills, and experience to be able to efficiently execute their duties. Institutions should ensure that staffing levels are adequate and should encourage the staff to acquire additional qualifications through in-house training or external programs.

2.3. Independent Audit and Internal Control System

2.3.1. Internal Control System

2.3.1.1. Institutions should have an adequate system of internal controls which is consistent with credit portfolio characteristics, complexities and risk profile; and capable of adjusting to the conditions and the environment in which the institution operates.

2.3.1.2. An internal control system should provide appropriate segregation of authorizations and responsibilities in order to protect the value of an institution’s assets, thus preventing conflicts of interest and responsibilities with one person,.

2.3.1.3. The internal control of credit risk management should be an integral part of the overall internal control system established in the institution. Internal controls should protect the institution from making bad credit decisions by avoiding credit exposures that are not in accordance with the approved credit strategy, credit policy and established credit approval procedures; or if such exceptions occur, make it obligatory to report to the Board or Directors.

2.3.2. Internal Audit

2.3.2.1. An institution should also have an internal audit department that will value the adequacy and efficiency of the internal control system and assess compliance with established internal policies and procedures**.** The internal audit function, if properly established, should enable the institution to achieve the targets set out in the credit strategy and policy, as well as introduce systematic methods for assessing the credit risk management process and timely correction of identified deficiencies.

2.3.2.2. The internal audit department should report its findings to the Board and Directors; and monitor and report adherence by organizational units to any proposed measures and time-frames for overcoming identified problems.

2.4. Management Information System

2.4.1. Institutions should develop adequate information systems that provide information on the risk profile and the structure of credit portfolios. Effective risk control is dependent on accurate and relevant information processing and reporting systems. The Board and Directors must receive adequate and timely information on the performance of lending operations and activities to properly fulfill their responsibilities.

2.4.2. An institution’s management information systems (MIS) should ensure timely and accurate measuring, monitoring and controlling of credit risk; allowing management and other responsible individuals to make appropriate and timely decisions related to credit risk exposures.

2.4.3. MIS should enable management to receive at least the following reports:

- Past Due and Non-accrual Loans report – shows seriously delinquent borrowers and tells the percent of loans past due by loan category.
- New Loans Approved - shows new loans approved for a certain period of time and credit growth comparisons to strategy.
- Restructured Loan report – identifies loans whose original terms or structure have been modified, usually due to financial stress of the borrower.
- Problem Loan report – identifies problem or watch credits, and quantifies the institution's potential loss on each significant problem credit. It should be a basis for workout measures.
- Loan Collection report - Shows the collection of interest and principal.
- Loan Commitments and Contingent Liabilities report - identifies the institution's exposure to loan commitments and contingent liabilities.
- Concentration report – shows lending concentrations by type of loan, industry, regions, etc.
- Risk Rating report – summarizes the total amount of loans in each risk rating category, often by division or product. These reports are especially useful for monitoring risk-rating trends.
- Adequacy of the Level of Impairment report and Expected Loss report – details the following information:
  - Management's evaluation of the level of impairment and the level of expected losses; at a minimum, as of regulatory reporting dates;
  - Charge-off and recovery experience;
  - Reconcilement of the level of impairment for the current period and previous year-end;
  - Any independent analysis of the impairment of the credit portfolios and other assets tested for impairment.
- Rating Migration report – shows how loan ratings have changed over time. At a base date, each loan is categorized by risk rating, with ratings periodically updated (generally quarterly). This format enables the analyst to observe changes in the risk ratings and provides a view of portfolio quality over time.
- Other Real Estate Owned report – details efforts to dispose of each piece of other real estate owned and shows if appraisals are current for all parcels.
- Exceptions report – lists exceptions to loan policies, procedures, and underwriting standards. The reports should include the trend in number and amount of loans approved that are exceptions to policy as well as the percentage of loans that are exceptions to policy.

3. Process of Credit Risk Management

The credit risk management process includes a number of issues that must be fully addressed in order for institutions to be able to control their exposure to credit risk.

3.1. Overview of the Credit Process

3.1.1. Sound credit process is a basic pre-requirement for good credit risk management. The credit process that underlines the management of an institution's credit risk exposures, normally includes the following functions:

- Credit strategy and policy approved by the Board. The Board is ultimately responsible for approving an institution's credit risk strategies and ensuring that these are appropriate to the business and observed within the organization;
- Risk Management function is established within the institution. Institutions are recommended to maintain an independent risk management function within their organizational structure to assist the Board in managing credit risk. The risk management function which is directly accountable to the Board, Risk Management Committee, Credit Committee, the Directors and senior management, is responsible for formulating credit risk management methodologies and strategies as well as day-to-day measurement, monitoring and evaluation of an institution's exposure to credit risk;
- Credit initiation is usually performed by the front office of the institution. The account managers solicit credit businesses within the approved credit policies and strategies and manage the relationship with customers. They are usually responsible for preparing credit analysis and proposal for new credit facilities or for the renewal of existing facilities;
- Credit evaluation, approval and review involves independent evaluation of credit appraisals by the middle office e.g. credit control or risk management unit, and the approval of facilities by designated credit officers, Directors, the Credit Committee, Risk Management Committee or the Board in accordance with established credit authority. The process should cover both extensions of new exposures and renewal of existing credits. The latter is embodied in the credit review process in which the credit worthiness of existing borrowers is periodically updated and evaluated;
- Credit administration is usually undertaken by the back office. It carries out such responsibilities as checking credit approval and documentation, lien perfection, loan disbursement, collateral valuation, maintenance of credit files and compilation of management information reports;
- Credit measurement and monitoring functions are usually performed at different levels. The Board, the Risk Management Committee and the Credit Committee oversees credit monitoring on a portfolio basis and should take part in reviewing large and connected exposures. The front office usually monitors individual accounts on a daily basis and recommends changes in the risk classification and the level of provisioning (impairment) of the credit exposure if deemed to be necessary. The middle office monitors limits and other risk parameters established by the credit policy, reviews exception reports and checks that problem accounts are properly graded and provisioned. It also performs periodic reviews and analyses of the quality of the credit portfolio using stress tests or other quantitative techniques. The back office provides support to the process through the measurement and reporting of credit risk exposures for management information purposes;
- Problem loan management function ensures that problem loans are handled effectively to minimize ultimate credit losses. While less serious cases should be followed by the front office, more serious credit exposures, if problems are revealed, should be transferred to a separate workout unit for collection of problem loans. This unit is usually located within the middle office. On the other hand the provisioning (impairment) and the collection of the large nonperforming credit exposures should be overseen by Directors, the Risk Management Committee, and the Board; and

- Independent audit and compliance process conduct regular reviews on the effectiveness of the credit process and the quality of the credit portfolio as well as compliance with internal procedures and regulatory policies. According to the overall organization of the institution, the internal audit and compliance officer should report to the Auditing Committee and the Board, respectively.

3.1.2. While each institution precisely structures the credit process within its organization, key functions and components mentioned above should be present, however named, and kept separate. The credit initiation function specifically should be independent of the credit approval and review functions in order to avoid potential conflicts of interest. In cases where institutions find it necessary to delegate small lending limits to the staff in the front office, there should be adequate safeguards, e.g., independent reviews of credits granted in order to prevent potential abuse. The way in which institutions may structure the credit management functions can be presented with the following diagram. It should be emphasized that the structure presented is for illustrative purposes only, e.g. institutions have discretion as to precisely what organizational structure they adopt, provided that the general principles set out in this document are observed accordingly.

SUPERVISORY BOARD

Approving credit strategy and policies
Credit approval and monitoring (large, connected, or related transactions)
Delegation of credit authority
Oversight of credit risk management

CREDIT COMMITTEE/ BOARD OF DIRECTORS

Credit policy review
Implementing credit strategy and policies
Establishing credit policies and manuals
Credit approval (in line with delegated limits) and monitoring
Approval of credit ratings, asset impairment and provisioning
Oversight over loan recovery progress
Monitoring the efficiency of credit risk management process and giving recommendations for its improvement

FRONT OFFICE	MIDDLE OFFICE	BACK OFFICE	INTERNAL AUDIT AND COMPLIANCE
Credit initiation/appraisal	Recommending risk management methodologies	Checking credit approval documentation	Audit of the credit process
Credit approval (in line with delegated limits)	Limit/exceptions monitoring	Checking lien documentation	Audit of the credit risk management process
Recommending credit rating, credit impairment and provisions	Independent credit evaluation /review	Funds disbursement	Compliance audit:
On-going monitoring of individual credit exposures	Credit approval (within delegated limits)	Credit file maintenance	Internal policies
	Independent review of credit ratings, credit impairment and provisioning	Measurement and reporting of credit risk exposures	Regulatory requirements and prudential limits
	Portfolio review and analysis	Collateral valuation	
	Stress-testing		
	Problem loan work-out		

3.2. Prudent Procedures for Approving Credit Exposures

3.2.1. Major principles for sound credit approval processes are summarized as follows:

- Institutions should have a written statement (credit procedures manual) setting out the criteria and procedures for granting new credits, for approving extensions of existing credit exposures and exceptions, for conducting periodic and independent reviews of credits granted, and for maintaining records.
- Procedures should establish sound, well defined criteria for granting credit exposures, including a thorough understanding of the risk profile of a borrower or counterparty, the purpose and the structure of the credit facility; as well as all the risks related to the borrower's ability to repay the debt including sources of repayment.
- Institutions should have a proper "Know Your Customer" policy and ensure policy adherence.
- Credit decisions should be supported by an adequate evaluation of a borrower's creditworthiness based on timely and reliable information. The flow of information between the institution and the counterparty should not stop after the credit facility is granted, but should continue until the credit is repaid, i.e., the institution should be able to closely and effectively monitor the counterparty risk profile.
- All credit exposures should be granted at an arms length basis. All credit exposures to related and connected counterparties should be continuously monitored. Proper internal controls should be in place to prevent institutions from breaching limits; and proper management information systems should be in place to actively monitor all credit exposure. Additionally, a proper system for exception reporting should be embedded in the procedures in order to record every deviation from the limits defined by the Board in the credit strategy and policy.
- Institutions should not become over reliant on collateral or guarantees. The collateral on a loan should be viewed only as a secondary means of repayment. While the collateral can provide protection to the institution if the counterparty defaults, the primary focus should be placed on monitoring the borrower's risk profile and its debt servicing capacity.
- Institutions should be wary of rapid expansion of particular types of lending. Especially in cases where there is a high level of competition, inadequately set business targets, indications of relaxed credit standards, and/or an increased focus on marginal borrowers.
- Institutions should insure through periodic independent audits that the credit approval function is being properly managed and that credit exposures comply with prudential standards and internal limits. All the results of the audits performed should be reported directly to the Board and the Auditing Committee.

3.3. Credit Risk Management Environment

3.3.1. In order to implement their credit strategy and policy, institutions should have in place a sound credit risk management environment that will include at least the following elements:

1. Proper organization of the credit process and credit administration;
2. Sound client eligibility criteria for creating credit exposures;
3. Measuring and monitoring of credit exposures;
4. Loan classification and loan provisioning processes; and

5. Proper risk management tools.

3.3.2. Organization of the credit process and credit administration. Institutions should have formal credit processes that incorporate all the functions described in point 3.1. Proper organization of the credit process should ensure a sound basis for proper credit risk management. Additionally, within the policy and the operating procedures, institutions should establish clear definitions of the duties and responsibilities of all responsible management bodies and respective organizational units involved in the credit process. The organizational structure and the credit policy should delegate proper authorizations to persons and management bodies involved in the credit process and enable effective communication between them. All these should ensure that all management bodies and persons involved in the credit process are aware of the institution's credit risk management structure, credit portfolio objectives, the institution's risk tolerance on individual portfolios, and underwriting and selection standards. Institutions should also have systems for administering their credit portfolios, including the maintenance of appropriate credit files, obtaining current financial information on borrowers and other counterparties, maintaining funds transfer documentation, and the safe-keeping of other important documents. The credit administration function should enable institutions to have sufficient and timely data that will support all sub-processes in the credit process (ref. to paragraph 3.1.). Properly established credit administration should be understood as the first step in implementation of an efficient internal control system.

3.3.3. Sound client eligibility criteria for creating credit exposures. Institutions should operate under sound, well-defined client eligibility criteria that is clearly communicated in an institution's policies and credit approval procedures. The eligibility criteria should be applied to all new credit exposures or when considering amending, renewing or re-financing existing credit exposures. These eligibility criteria should include a thorough understanding of the counterparty, i.e., the purpose of the credit facility, the counterparty's financial standing, sources of repayment, and the value and marketability of collateral needed to secure the credit facility. Institutions should have a system in place that will enable them to gather sufficient information in order to perform comprehensive credit risk assessment and properly determine the risk profile of the counterparty. Credit policies and procedures should require the minimum documents necessary for institutions to create a fair view about the counterparty's credit standing. The credit file for each client, as specified by NBRM instructions for keeping credit files; and at a minimum, should include documents and information about:

- Purpose of the credit and source of repayment;
- Integrity and reputation of the borrower or counterparty;
- Current risk profile (including the nature and aggregate amounts of risks) of the borrower or counterparty, and its sensitivity to economic and market developments;
- Borrower's repayment history and current capacity to repay, based on historical financial trends and cash flow projections;
- Forward-looking analysis of the capacity to repay based on various scenarios;
- Legal capacity of the borrower or counterparty to assume the liability;
- For commercial credits, the borrower's business expertise and the status of the borrower's economic sector and its position within that sector;

- Proposed terms and conditions of the credit, including covenants designed to limit changes in the future risk profile of the borrower; and
- Where applicable, the adequacy and enforceability of collateral or guarantees, taking into consideration various scenarios.

3.3.4. <u>Measuring and monitoring of credit exposures</u>. Institutions should establish comprehensive procedures for measuring credit risk (including credit risk from off-balance sheet exposures and any other financial product that has imbedded credit risk). Also, institutions should have in place adequate management information systems that will enable proper management levels to monitor credit exposures in the portfolios on an aggregate basis, as well as on an individual credit exposure basis. How elaborate and complex the credit risk measurement tools should be will depend on the complexity and level of inherent risks imbedded in the credit products offered on the market, but should be at a minimum in line with the requirements set by the NBRM. The established management information system and the analytical techniques used should provide sufficient information to management on the risk profile and structure of all credit portfolios. The system should be flexible and should enable management to have in-depth understanding of any credit concentration and the overall performance of the portfolios, to include at least the following characteristics:

- Size of exposures,
- Exposures to related and connected borrowers,
- Product types,
- Sectors (geographical, industrial, market segments, demographic profile etc.),
- Performance of credit facilities (interest and principle days overdue),
- Assigned credit ratings (internal and for regulatory purposes),
- Outstanding credit facilities versus commitments, and
- Types and coverage of collateral.

The reporting system should also be designed to alert appropriate levels of management of adverse developments in the credit portfolios. In that sense the institutions should define internal indicators that will detect the problems in the behavior of customers at an early stage and also record changes in the overall credit portfolio that may cause negative implications on earnings and capital. The information that should be captured by the system should be quantitative as well as qualitative. The indicators should be used as an early warning tool and should take into consideration at least the following information:

- Past due interest and principal payments,
- Adverse changes in financial conditions (increase of debt level, increase in inventory, decrease in profit, loss in the current year, etc.),
- Changes in the counterparty’s business policy and business environment, and
- changes in the value of collateral securing credit exposures.

3.4. Loan Classification, Provisioning and Impairment

3.4.1. Institutions should establish a system that will enable them to properly classify credit exposures according to their risk profile. They should not relay only on the system developed for regulatory purposes by the NBRM, but should develop internally more in-depth systems for risk classification based on criteria set out in their internal policies.

Institutions should continually monitor the effectiveness of their internal loan classification systems and make changes if deemed necessary to improve effectiveness. The systems should, over time, enable institutions to determine the level of expected losses in the portfolio based on the probabilities of default for individual risk classes and the level of loss given default for individual types of collateral.

3.4.2. Additionally, institutions are encouraged to employ statistical models which will provide information on the statistical distribution of losses in credit portfolios. This information can further be used for credit modeling purposes and the calculation of an institution's economic capital as well as regulatory capital once the requirements of Basel II are adopted by the NBRM. For regulatory purposes, institutions should follow the requirements currently set out by the NBRM and implement proper systems that will identify impaired assets and the level of impairment; and generate an adequate risk classification based on the determined level of impairment. The impairment should ideally be determined on a loan by loan basis. For smaller portfolios, however, institutions can employ the approach suggested by NBRM regulations and perform an analysis that determines the level of impairment on a portfolio basis.

3.5. Proper Risk Management Tools

3.5.1. Institutions should have at least the following internal controls imbedded in their risk management procedures in order to properly manage credit risk:

3.5.2. ***Segregation of duties***. Institutions should have an internal organization and appropriate procedures that will enable effective segregation of different credit functions within the credit approval process. Namely, the functions of credit initiation, approval, review, administration and work-out should be kept separately, where possible. However, the organization of the credit process should reflect the volume and the complexity of the institution's credit operations. See also point 3.1. on how functions can generally be organized.

3.5.3. ***Credit exposure limits.*** Institutions should establish overall credit exposure limits on the level of individual borrowers/counterparties and groups of connected counterparties. In addition to establishing strategic objectives in the credit strategy and policy, the Board and Directors are responsible for setting credit exposure limits. Credit exposure limits should take into consideration an institution's: risk tolerance, historical experience related to credit losses, ability to absorb future losses, the desired level of return (risk return trade off), etc. Institutions should have a system in place that will ensure that credit exposures approaching risk limits as well as any exceptions from these limits are brought to the attention of appropriate management levels in an accurate and timely manner;

3.5.4. ***Exception reporting***. Institutions should establish and enforce internal controls and practices so that deviations from internal policies, procedures, limits, and prudential guidelines are promptly reported to appropriate levels of management. This should be supported by proper management reporting systems whereby relevant reports on the credit portfolio are generated to various levels of management on a timely basis;

3.5.5. ***Risk mitigation***. In controlling credit risk institutions can utilize certain mitigation techniques. Normally they include:

- Requiring collateral, stand by letters of credit or guaranties;
- Entering into netting arrangements;
- Setting strict loan covenants; and
- Using credit derivatives and other hedging instruments as well as credit protection instruments like credit insurance.

3.5.5.1.1. In determining what types of credit mitigation techniques to be used, institutions should consider the following:

- Management's knowledge and experience in using such techniques and instruments;
- Cost effectiveness;
- Type and financial strength of the counterparties;
- Correlation with the underlying credits;
- Availability, liquidity and marketability of the credit mitigation instruments;
- Extent to which legally recognized documentation can be adopted (e.g. ISDA Master agreement); and
- Degree of supervisory recognition of the mitigation technique.

3.5.5.2. While mitigation through collateral and guaranties is usually dealt with at the time of granting credits, credit derivatives and netting arrangements are often employed after the credit is in place, or used to manage the overall portfolio credit risk. In cases where mitigation agreements are in place they should be closely controlled. Institutions should have in place written policies, procedures and controls for the use of credit mitigation techniques and ensure that adequate systems are in place to manage these activities. Institutions should also have procedures that will require reevaluation of the collateral and credit mitigation instruments on a regular basis. The method depends on the nature of the mitigation instrument, and the frequency of revaluation should be conducted at least once a year.

3.5.6. ***Stress test procedures.*** Institutions should have in place a system that will allow monitoring of the credit portfolio performance under stress conditions. Institutions should be conscious of business and economic cycles and regularly stress test their portfolios against adverse market scenarios. Based on the results of stress tests, adequate contingency planning should be developed for crisis situations that may quickly and unexpectedly develop. Institutions should also assess potential future changes in economic conditions when assessing individual credits and their credit portfolios, and assess credit risk exposures under stressful conditions.

3.5.6.1. When performing stress test analyses, institutions should use different assumptions concerning one or more financial, structural, or economic variables; and seek to determine the potential effect on the performance of individual credit exposures, portfolio segments or groups of homogenous loans. An important element in a sound credit risk management process involves discussing the effects of extreme market conditions that can influence credit portfolios and impact the adequacy of earnings and capital.

3.5.6.2. Institutions should establish tolerance limits for credit risk, including how much and what types of risk they are prepared to undertake in various portfolios. Risk tolerance should be compatible with the institutions strategic objectives set by the Board.

3.5.6.3. Stress tests and scenario analysis can reveal previously undetected areas of potential credit problems due to correlations between the portfolio clients. Additionally, the links between different categories of risk are likely to emerge in times of crisis. In case of adverse circumstances; there may be a substantial correlation of various risks, especially credit, market and liquidity risks that may influence the overall risk of the credit portfolios. Scenario analysis and stress tests should be used as tools for assessing these areas of potential problems that can emerge under stress conditions.

3.5.6.4. Institutions should perform stress test and scenario analysis that will incorporate at least the following: (i) economic or industry downturns; (ii) market-risk events; and (iii) liquidity conditions.

3.5.6.5. Stress test should include adequate contingency planning against the possible adverse movements used in the stress tests. The contingency plans should incorporate the actions to be taken by the institutions in stress conditions to preserve earning and capital. Results from the stress test and scenario analysis should be reported to the Board and the Risk Management Committee on a regular basis. The Board should take appropriate action in cases where the losses exceed defined risk tolerance limits against capital and earnings.

3.5.7. ***Procedures for managing bad loans***. Institutions should establish a dedicated unit that will handle the recovery and work-out of problem loans, and put in place policies for early identification and referral of these loans to the unit. The unit should develop proper reporting systems that will enable appropriate management levels to receive timely and accurate information on the status of problem assets (time to ultimate collection, value, costs related to handling, etc.).

3.5.7.1. Institutions should clearly set out in policies how they will manage problem loans. Best practices show that the responsibility for managing problem assets is better fulfilled when assigned to a specialized workout section. The primary function of this unit should be to maximize the recovery of bad loans, employing all legal actions available. Institutions should have adequate procedures and policies covering the bad loan recovery process including proper internal controls and reporting. Management should have all relevant factors necessary to make an estimate of the recoverable amount and to properly determine the level of impairment of such assets, and consequently their proper risk classification.

3.5.8. ***An independent audit review***. Institutions should establish a system of regular independent credit and compliance audits. These audits should be performed by independent parties (e.g., internal audit function and compliance function) which independently reports to the Board and Auditing Committee. Credit audits can be conducted on a “monetary unit” sampling basis that will enable the internal auditors to reach a statistically valid audit opinion about the overall quality of the credit portfolio and the potential losses (level of impairment). Such audits should also be used as a tool for testing the performance of the staff and the effectiveness of procedures and overall credit processes. They can also enable the institutions to take early measures to control credit risk.

3.5.8.1. Audits are also performed to test compliance with established credit policies, procedures and regulations, i.e., credit approval, credit rating, application of credit pricing policies, adequacy of allocated provisions for potential losses (impairment), adherence to limits, statutory restrictions, and operating procedures. Such audits should also be used to identify credit control or process weaknesses, irregularities and exceptions; and to test whether reporting to senior management is accurate as to composition, credit quality, value of the portfolio, etc. The findings of these audits should be reported to the Board and Auditing Committee, and remedial actions should be taken on a timely basis to address any concerns and weaknesses.

3.6. Other Aspects Related to Use of Risk Management Tools

3.6.1. There are certain market risks that can affect the risk profile of borrowers. In the credit approval process, institutions must take into consideration the impact of these risks on the credit risk profile of a borrower. These risks if not taken in consideration when determining a borrower's risk profile may cause institutions to not properly determine the overall credit risk of the client. Institutions should have in place procedures that will enable the identification of the following risks and take them in consideration when deciding to advance credit to certain counterparties.

3.6.1.1. ***Interest rate risk.*** In cases where pricing of a loan contains variable features that depend on market interest rates, institutions must perform a solid analysis of how possible changes in interest rates will affect the borrower's ability to repay the interest and the principal of the loan. Institutions should perform stress test analysis to determine whether the borrower will be able to repay its obligations if interest rates rise (e.g., 200 basis points) and what kind of effects this can have on the overall credit standing of the borrower.

3.6.1.2. ***Foreign exchange risk.*** In approving credit exposures to resident clients in foreign currencies or when credit exposures are in Denar, but with a foreign exchange clause, institutions should perform stress test analysis that will show the effects of possible changes in foreign exchange rates on the borrower's overall credit standing; and evaluate the borrower's ability to repay its debts as agreed (e.g. stress test the devaluation of at least 20% of the local currency against the currency in which the loan is financed). Institutions should have in place written policies and procedures that will address their approach in assessing the risks related to this type of lending, including the information needed and analysis performed during the credit approval process; and the institution's approach in monitoring and measurement the credit risk inherent in these types of credit exposures. The starting point in developing these policies should be the minimum requirements set by NBRM regulations.

3.6.1.3. ***Price risk.*** Credit exposures secured with collateral that have volatile market prices have inherent embedded price risk. Institutions' policies and procedures should define loan-to-value ratios for each type of credit product. Additionally, institutions should actively monitor the markets and assess the risks arising from adverse price changes that can affect the value of collateral. On a regular basis, institutions should perform stress test analysis on the value of collateral and determine the impact of adverse movements on credit portfolios. Institutions should also have protective covenants that, if at any time the value of collateral changes, additional collateral is needed to maintain loan-to-value covenants established by the loan contract.

3.6.1.4. ***Country risk.*** International lending and long term positions with foreign banks includes risks associated with the economic, social and political environment of the borrower's home country. When institutions approve credit exposures to non-resident customers, they should take in consideration particular country risk factors that may affect the customers credit standing and ability to repay as agreed. According to NBRM guidelines, institutions should have in place a country risk management policy that will define at least the following:

- Approach to country risk assessment;
- Measurement of the institution's exposure to country risk;
- Country risk exposure limits and authorization requirements;
- Management information and reporting systems;
- Systems for monitoring and control of the institution's exposure to country risk; and
- Quantification of potential losses (impairment) of credit exposures to non-resident clients.

3.6.1.4.1. There is also a component of country risk called transfer risk which arises when the foreign currency required under the borrower's obligation becomes unavailable to the borrower or there are severe problems in the payment system of that country regardless of its particular financial condition. Institutions should also analyze the potential for realizing this type of risk factor.

4. Supervisory Approach to Credit Risk

4.1. Overview

4.1.1. In supervising credit risk, the NBRM adopts an approach that focuses on the processes and controls established by the institution. Prudent management of credit risk, through the establishment of proper strategies, systems and controls, is the primary responsibility of the institution's Board and Directors. Institutions should put in place adequate risk management systems to identify, measure, monitor and control credit risk. The Board and Directors must be committed to effectively implement the risk management function in order for the processes to be effective. Acknowledged acceptance and oversight of the risk management process by the Board and Directors is of major importance to the NBRM.

4.1.2. The NBRM monitors the credit risk profile of institutions during off-site reviews and evaluates the effectiveness of their credit risk management systems during on-site examinations. Supervisors determine the adequacy and effectiveness of an institution's credit risk management process, the level and trend of risk exposure, as well as the adequacy of capital relative to credit risk exposure and risk management process.

4.1.3. The credit risk management system must enable the institution to identify, measure, monitor and control credit risk. In evaluating the level of credit risk, the NBRM will consider quantitative and qualitative factors related to credit risk management. These are crucial for NBRM to gain a complete picture of the level of credit risk in balance sheet and off-balance sheet activities and the quality of risk management processes established within an institution.

4.1.4. Supervisors determine, normally through discussion with management, the major sources of credit risk exposures and evaluate whether the institution's measurement systems provide a sufficient basis for identifying and quantifying such exposures. They also analyze the integrity and effectiveness of credit risk control and management processes to ensure that practices comply with the stated objectives and risk tolerances set by the Board and Directors.

4.2. Quantity of Credit Risk

4.2.1. Issues that will be taken in consideration by the NBRM when quantifying the level of credit risk include at least the following:

- Level of loans outstanding and credit commitments to total assets;
- Level of concentrations in credit portfolios;
- Exceptions from internally established credit exposure limits as well as breach of legally established prudential limits;
- Structure of credit portfolios, trends in portfolio performance, and speed of credit growth;
- Level of loan impairment and the major causes;
- Differences in the level of impairment recognized by the institution compared to the level of impairment determined by NBRM supervisors during on-site reviews;
- Level and number of days of past due loans;
- Value of the collateral;
- Level of impaired assets where interest or/and principle are overdue more than 90 days;
- Level of impairment determined by the NBRM in relation to the institution's earnings and capital; and
- Results of stress tests and scenario analysis.

4.3. Quality of Credit Risk Management

4.3.1. Issues that will be taken in consideration by the NBRM when assessing the quality of credit risk management are the following:

- Complexity of the products offered and level of credit risk in the balance sheet and off-balance sheet activities;
- Implementation of the institution's credit strategy and policy;
- Adequacy and effectiveness of the Board, Directors and senior management oversight;
- Management's knowledge and ability to identify and manage sources of credit risk;
- Adequacy of internal measurement, monitoring, and management information systems;
- Adequacy and effectiveness of risk limits and controls that set the institution's tolerances on credit risk exposures (effectiveness of risk management tools);
- Effectiveness of the organizational structure of the credit process and implementation of credit procedures;
- Adequacy of internal reviews and audits of the credit risk management process;
- Adequacy and effectiveness of risk management practices and strategies as evidenced by past and projected financial performance according to adopted strategies and financial plans;

- Management's opinion on the institution's ability to respond to adverse changes in market conditions (contingency plans), based on stress test analyses; and
- Appropriateness of the level of credit risk in relation to earnings and capital; and the effectiveness of established risk management systems.