Title: SF-1 Supervisory Approach

Date: FINAL

Purpose: Explanation of NBRM Risk-based Supervision Approach

Issue Type: Guidance, in conjunction with the Decision on the manner of conducting supervision on banks and procedure for eliminating the identified irregularities ("Official Gazette of the Republic of Macedonia" No.111/2000).

Supersedes Previous Issue: None

Application: All Licensed Institutions

Contents:
1. Supervisory Approach
   1.1. Introduction
   1.2. Risk-Based Approach and Supervisory Process
   1.3. Risk Assessment System
   1.4. CAMEL Rating System and Risk-based Supervision
   1.5. Supervisory Activities
2. Assessing Risk Management
   2.1. Elements of an Effective Risk Management System
   2.2. Assessing Risk Management
   2.3. Integration into CAMEL Rating System
3. Risk Categories
   3.1. Credit Risk
   3.2. Liquidity Risk
   3.3. Market Risk
   3.4. Operation Risk
   3.5. Information Technology Risk
   3.6. Legal Risk
   3.7. Strategic Risk
1. SUPERVISORY APPROACH

1.1. Introduction

1.1.1. The Law on the National Bank of the Republic of Macedonia (Official Gazette of RM No.3/02, 51/03, 85/03, 40/04, 61/05 and 129/06) establishes the functions of supervising the banking sector for the purpose of maintaining a sound banking environment pursuant to and compliant with the respective legal and regulative framework.

1.1.2. The National Bank of the Republic of Macedonia (NBRM), being responsible for licensing banks and savings houses, exercises continuous and independent supervision of all licensed institutions. In the implementation of its supervisory function, the NBRM aims at a high level of integrity, professionalism, efficiency and transparency.

1.1.3. Pursuant to the legal responsibilities as its supervisory authority of banks and savings houses in the Republic of Macedonia, the NBRM:

- Conducts effective and efficient supervision using an ongoing risk-based supervisory approach that employs meaningful onsite examinations and continuous offsite monitoring of licensed institutions, on an individual and consolidated basis;
- Undertakes a wide range of corrective measures in cases where problems and weaknesses in corporate governance, risk management practices, internal controls systems, and/or compliance with prudential regulations have been identified;
- Develops and improves, on a continuous basis, the supervisory framework in accordance with best international practices, principles and guidelines set out by the Basel Committee on Banking Supervision, with the goal of staying abreast of the ever growing complexities of the risks inherent in, and the banking services offered by, licensed institutions;
- Ensures proper market access to those new institution applicants, shareholders and members of executive bodies who meet extensive fit and proper tests and other licensing requirements;
- Cooperates with licensed institutions, other domestic financial market participants, and other domestic and foreign supervisory authorities to ensure an orderly and sustainable market environment; and
- Builds public trust in the banking system, by promoting market discipline and transparency of financial markets activity.

1.1.4. The NBRM banking supervision and banking regulatory functions play a crucial and anticipatory role in identifying weaknesses and problems that may emerge within a licensed institution, with the primary purpose of preventing the institution from becoming a potential threat to the stability of the banking system or the Macedonian financial industry. Such threats may damage public confidence in the banking system, and tarnish the reputation of all licensed institutions. The erosion of public confidence may not only impact the soundness and stability of the
banking system, but could also severely impede the growth of the Macedonian economy.

1.1.5. However, it is not the intention of NBRM to prevent the failure of insolvent and poorly managed individual licensed institutions, or to mediate complaints filed against licensed institutions by their clients. It is the responsibility of the institution’s executive management to fairly deal with clients, effectively manage risks, ensure compliance with prudential regulations, and realize financial targets set by shareholders. The Supervisory Board and General Meeting of Shareholders are charged with exercising supervision and control over the affairs of the institution to ensure the Board of Directors meet these responsibilities. All the institution’s statutory bodies are responsible for ensuring that the institution’s control mechanisms and risk management practices are functioning properly.

1.1.6. The NBRM establishes supervisory standards and regulations, in accordance with European Union regulations and international best practices as set out in the Core Principles of Effective Banking Supervision, developed by the Basel Committee on Banking Supervision. The NBRM’s charge is to carry out supervisory and regulatory activities that focus on assessing the risks to which institutions are exposed and to determine whether the institution is in compliance with sound risk management practices and prudential regulations.

1.1.7. These supervisory and regulatory activities, however, cannot prevent institutions from entering into loss-making transactions that may jeopardize the institution’s solvency or its clients’ deposits. In such situations, the NBRM is obliged to take action, including the revocation of the institution’s license or appointing a conservator, to ensure corrective action, preserve the institution’s assets, and/or protect depositors.

1.1.8. The Supervisory Approach of the NBRM is a process that follows a structured methodology designed to establish a forward-looking view of the risk profiles of regulated institutions. This allows a direct and specific focus on the areas of greatest risk, and enables the NBRM to be more proactive in supervising and maintaining the stability of the Macedonian banking system. This framework also allows the NBRM to deliver consistent, high-quality supervision as the banking sector develops and risk profiles of institutions change in reaction to competitive forces. This approach should benefit regulated institutions as the supervisory effort is more focused on high-risk areas and provides for more efficient supervision.

1.2. Risk-based Approach and Supervisory Process

1.2.1. The NBRM risk-based supervisory approach is a process that allows for assessing the overall Risk Profile of an institution on an ongoing basis, and to take supervisory actions, if warranted. This process involves both onsite examinations and offsite activities, which feeds into the development and maintenance of an institution’s Risk Profile.
1.2.2. The risk-based supervisory approach also emphasizes effective planning and supervisor judgment, and customizes examinations to suit the size and activities of the institutions. The risk-based methodology, shown in the diagram below, consists of six major events that complete the supervisory cycle, and allows for the development and maintenance of an institution’s Risk Profile.

1.2.3. The Risk Profile is essentially a document that provides:
- Basic information about the institution;
- Summarizes aggregate risk (quantity and quality) and direction of risk for each major risk category;
- Summarizes the composite and component CAMEL ratings; and
- Lays out a supervisory strategy for the NBRM to follow.

At the end of every onsite examination, the risk profile is thoroughly updated and all risk assessment factors and CAMEL components are reaffirmed. Additionally, the supervisory strategy is updated for the institution. The Risk Profile is further reviewed and updated, if needed, after every offsite and targeted onsite activity. Any changes to the Risk Profile, either from offsite activities or following an onsite examination, require NBRM management approval.
1.2.4. The first major event in the supervisory cycle is the Risked-focused Examination and CAMEL Rating. This event is essentially an onsite examination of the institution that confirms the NBRM’s understanding of the institution's business, inherent risks, and risk management systems. NBRM supervisors, using minimum standardized procedures, review and analyze the institution’s financial condition/performance, policies/procedures, risk management processes, internal controls and compliance with regulatory requirements. Expanded procedures are used for new or high-risk areas and/or product lines. This event is conducted periodically for all institutions. All risk categories are reviewed and assessed, determining the quantity (were applicable), quality of risk management and direction of risk. This risk assessment is used in reaffirming CAMEL ratings, and determining the need for corrective and/or administrative actions. Based on the findings of the examination, the institution’s Risk Profile is thoroughly updated, a Report of Examination covering all activities since the previous onsite examination is developed, and the NBRM’s strategy for supervising the institution is revised, if needed.

1.2.5. The Report of Examination (ROE) is the NBRM’s primary vehicle for communicating the findings of supervisory activities in writing to an institution's Supervisory Board (Board) and Board of Directors (Directors), as well as to the senior management of the NBRM. The ROE is intended to focus attention on the NBRM’s major conclusions, including any significant problems and actions needed to address them. It records the supervisor’s conclusions and concerns, and the actions the institution has committed to take. The ROE informs its readers, be they regulators, Board members, or Directors, of an institution’s present condition and recommends a course of action to maintain or regain safe and sound operations. This record, along with other related correspondence, helps establish and support an institution's Risk Profile and supervisory strategy.

1.2.6. The Supervisory Strategy is a plan of supervisory activities which guides the NBRM throughout the supervisory cycle and directs examination and monitoring functions. As part of an institution’s Risk Profile, supervisory strategies are dynamic documents that are reviewed and updated frequently based on institutional, industry and economic developments. It focuses on the areas of greatest risk and supervisory concern, and provides sufficient detail for the budgeting of NBRM limited resources.

1.2.7. Offsite activities are performed between each examination and allow the NBRM to keep apprised of changes in an institution’s financial condition/performance, product lines, corporate structure and overall risk profile. While most offsite activities are routine for every institution and included in the supervisory strategy, there are other activities that arise between onsite examinations that can not be accurately anticipated. Regardless if the activity is scheduled or unscheduled, the Risk Profile must be reviewed and updated, as necessary.
1.2.8. Pre-examination Planning is a critical event of the supervisory cycle that pulls together the findings of all activities since the previous onsite examination to develop the scope of the next onsite examination. Pre-examination Planning is comprised of four elements: 1) understanding the institution’s Risk Profile; 2) analyzing the institution’s financial performance; 3) reviewing the institution’s audit function; and 4) meeting with the institution’s management (if needed). Upon completion of these four parts, the examiner-in-charge develops a scope memorandum, and a resource and time management plan for the upcoming onsite examination.

1.2.9. The Examination Scope is essentially a plan used by NBRM in conducting an upcoming onsite examination. The plan identifies which areas of the examination is to be expanded on (based on the institution’s Risk Profile and information gathered from pre-examination planning activities), the specific examination procedures for each area, sampling techniques and the staffing/timing necessary to accomplish the examination. A letter requesting specific information to be available upon the supervisors’ arrival is developed and submitted to the institution’s management, who then is informed of the scope and timing of the examination.

1.2.10. The current supervisory cycle (as shown in the above diagram) ends and a new cycle begins at the completion of the risk-focused examination and assignment of CAMEL ratings. At key points within the supervisory cycle, the NBRM conducts quality control reviews to ensure adherence to NBRM internal procedures, and that all decisions and assessments are well founded and supported by appropriate documentation.

1.3. Risk Assessment System

1.3.1. The development of a formal risk assessment process represents an important addition to the NBRM supervisory approach. The purpose of this risk assessment undertaking is to identify the type, level and direction of all significant risks of an institution. And where applicable the assessment of risks is also conducted for individual product lines or activities. The process consists of identifying the quantity of risk (were applicable), quality of risk management, aggregate risk, and direction of risk for each of the identified risk categories. It concludes with a composite risk level for each and an overall risk profile for the institution.

1.3.2. The following seven inherent risks, which have been identified by the NBRM at a minimum, are to be assessed during this process:

- Credit
- Liquidity
- Market
- Operation
- Information Technology
- Legal
- Strategic
1.3.3. Quantity of risk is the level or volume of risk that the institution faces and is characterized as low, moderate, or high. The quantity of risk simply reflects the level of risk the institution accepts in the course of doing business, and whether this is good or bad depends on whether its risk management systems are adequate. Quantity of risk is specifically measure for Credit, Liquidity, and Market risks.

1.3.3.1. **High risk** exists where the risk position is significant or is large in relation to the institution’s resources, where there are a substantial number of transactions, or where the nature of the activity is inherently more complex than normal. Thus, the activity potentially could result in a significant and harmful loss to the institution.

1.3.3.2. **Moderate risk** exists where positions are average in relation to the institution’s resources, where the volume of transactions is average, and where the activity is more typical or traditional. Thus, while the activity potentially could result in a loss to the organization, the loss could be absorbed by the organization in the normal course of business.

1.3.3.3. **Low risk** exists where the volume, size, or nature of the activity is such that even if the internal controls have weaknesses, the risk of loss is remote or, if a loss were to occur, it would have little negative impact on the institution’s overall financial condition.

1.3.4. Quality of risk management is how well the institution identifies, measures, controls, and monitors risk globally and by business activity. Quality of risk management is characterized as strong, satisfactory, or weak. When reviewing Operation, Information Technology, Legal and Strategic Risks, quality of risk management equates to aggregate risk.

1.3.4.1. **Strong risk management** indicates that management effectively identifies and controls all major types of risk posed by relevant activities or functions. The Board and Directors participate in managing risk and ensure that appropriate policies and limits exist, and the Board understands, reviews, and approves them. Policies and limits are supported by risk monitoring procedures, reports, and management information systems that provide the necessary information and analyses to make timely and appropriate responses to changing conditions. Internal controls and audit procedures are appropriate and there are few exceptions to established policies and procedures, and none of these exceptions would likely lead to a significant loss to the institution.

1.3.4.2. **Acceptable risk management** indicates that the institution’s risk management systems, although largely effective, may be lacking to some modest degree. It reflects an ability to cope successfully with existing and foreseeable exposure that may arise in carrying out the institution’s business plan. While the institution may have some minor risk management weaknesses, these problems have been recognized and are being addressed. Overall, Board and Directors oversight, policies and limits, risk monitoring procedures, reports, and management information systems are considered effective in maintaining a safe and sound institution. Risks are generally
1.3.4.3. **Weak risk management** indicates risk management systems that are lacking in important ways and, therefore, are a cause for more than normal supervisory attention. The internal control system may be lacking in important respects, particularly as indicated by continued control exceptions or by the failure to adhere to written policies and procedures. The deficiencies associated in these systems could have adverse effects on the safety and soundness of the institution or could lead to a material misstatement of its financial statements if corrective actions are not taken.

1.3.5. Aggregate risk is a summary judgment that reflects the level of supervisory concern considering both the quantity of risk and the quality of risk management, weighing the relative importance of each. It is assessed as high, moderate, or low for each of the seven categories of risk. Aggregate risk assessments direct the specific activities and resources outlined in supervisory strategies.

1.3.5.1. **Aggregate Risk Matrix.**

<table>
<thead>
<tr>
<th>Quality of Risk Management</th>
<th>Quantity of Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Strong</td>
<td>Low Aggregate Risk</td>
</tr>
<tr>
<td>Acceptable</td>
<td>Low Aggregate Risk</td>
</tr>
<tr>
<td>Weak</td>
<td>Moderate Aggregate Risk</td>
</tr>
</tbody>
</table>

1.3.5.2. **High Aggregate risk** generally would be assigned where the risk management system does not significantly mitigate the high risk of the activity. Thus, the activity could potentially result in a financial loss that would have a significant negative impact on the institution’s overall condition, even in some cases where the systems are considered strong. For an activity with moderate inherent risk, a risk management system that has significant weaknesses could result in a high aggregate risk assessment because management appears to have an insufficient understanding of the risk and uncertain capacity to anticipate and respond to changing conditions.

1.3.5.3. **Moderate Aggregate risk** generally would be assigned where the risk management systems appropriately mitigate the risk. For low quantity of risk, significant weaknesses in the risk management system may result in a moderate aggregate risk assessment. On the other hand, a strong risk management system may reduce the risks of a high risk activity so that any potential financial loss would have only a moderate negative impact on the financial condition of the institution.

1.3.5.4. **Low Aggregate risk** generally would be assigned to low quantity risks. A category with moderate risk may be assessed a low aggregate risk where
internal controls and risk management systems are strong and effectively mitigate much of the risk.

1.3.6. Direction of Risk is the probable change in the aggregate level of risk over the next 12 months and is characterized as decreasing, stable, or increasing. The following factors are taken into consideration when assessing the direction of risk:

- Changes in the institution’s ownership, affiliations, internal structure or strategic plans. For example: the institution has plans to strongly expand in one or more business lines or activities in the medium term. This is likely to impose additional risk on the institution. The risk level is therefore expected to increase.
- Changes in management. For example: the management team of the institution or a business activity is expected to undergo significant changes in the coming period; and the NBRM questions the level of experience of one or more of the supposed new members of the management team. This is likely to have a deteriorating effect on the quality of the internal control environment of the institution, and more specifically on the internal control environment of one or more of the major risk categories.
- Trends in the major indicators used to assess the quantity and volume of risk.
- Real and/or potential changes in market conditions or the institution’s competitive environment.

1.3.7. Once the Aggregate Risk assessment is made and the direction of risk is characterized, the NBRM determines the type of supervisory regime required for each risk category. The type of supervisory regime falls under three broad categories: Normal, Closely Monitor, or Supervisory Action. These broad categories provide direction to the NBRM in establishing an institution's supervisory strategy.

1.3.7.1. **Risk Conclusions and Recommended Supervisory Regime Matrix.**

<table>
<thead>
<tr>
<th>Direction of Risk</th>
<th>Aggregate Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Decreasing</strong></td>
<td>Normal Regime</td>
</tr>
<tr>
<td><strong>Stable</strong></td>
<td>Normal Regime</td>
</tr>
<tr>
<td><strong>Increasing</strong></td>
<td>Closely Monitor</td>
</tr>
</tbody>
</table>
1.3.7.2. **Normal Regime** indicates the risk category is of normal supervisory concern and the scope of the supervisory activities is routine with minimum procedures used during onsite examinations. However, any suspected changes in the aggregate risk or direction of risk would warrant expanded supervisory activities to determine the impact of changes.

1.3.7.3. **Closely Monitor** indicates the risk category is of sufficient supervisory concern for the NBRM to increase offsite and onsite supervision, request corrective action, and/or impose administrative actions against the institution.

1.3.7.4. **Supervisory Action** indicates the NBRM will significantly increase offsite and onsite supervision, require immediate and effective corrective action; and most likely impose some form of administrative action, including the revocation of the institution’s license or appointing a conservator.

1.3.7.5. While the Supervisory Regime Matrix is an important tool in developing an institution’s risk profile, the matrix is meant as only a guide. The NBRM tailors supervisory strategies for each institution, and the recommended regime reflected in the matrix does not prevent the NBRM from taking whatever action is warranted, including enforcement actions, to effectively supervise an institution.

1.4. **CAMEL Rating System and Risk-based Supervision**

1.4.1. The CAMEL rating system is an internationally recognized framework for assessing **Capital adequacy**, **Asset quality**, **Management**, **Earning performance**, and **Liquidity**. The CAMEL rating system is designed to assess in a comprehensive manner an institution’s financial condition, compliance with laws and regulations, risk management systems and overall operating soundness. Its primary purpose is to help identify those institutions where weaknesses in the aforementioned areas require special supervisory attention or warrant a higher than normal degree of supervisory concern.

1.4.2. Each of the CAMEL component ratings and overall composite rating is expressed through the use of a numerical scale of 1 to 5 in ascending order of supervisory concern. A composite 1 rating indicates the strongest performance and risk management practices relative to the institution's size, complexity, and risk profile; and the level of least supervisory concern. A composite 5 rating indicates the most critically deficient level of performance and inadequate risk management practices relative to the institution's size, complexity, and risk profile; and the greatest supervisory concern.

1.4.3. The risk-based methodology incorporates the risk profile, which is ascertained by balancing the level of inherent risk with the quality of risk management systems at institutions, into the CAMEL rating system. Each of the CAMEL components is affected by one or more of the seven risk categories, which the NBRM has identified as risks to be assessed during the supervisory process.
1.4.4. Under the risk based approach, a change in the CAMEL rating of an institution may result from the qualitative analysis of its risk profile in addition to the more traditional quantitative analysis of its financial data. An example of such a change would be a down-grade in asset quality to a “3” for an institution which displays current quantity indicators representing an asset quality of “2” but whose credit risk, as a result of recent aggressive lending practices and less than satisfactory credit risk management systems, has been assessed as high.

1.4.5. This approach to supervision does not eliminate or change the quantitative approach to assessing the components of the CAMEL rating system but it adds a new dimension, which enables the supervisory process to inject more judgment, based on a forward perspective, in arriving at a final rating.

1.5. Supervisory Activities

1.5.1. As mentioned earlier, the NBRM’s risk-based supervisory approach, using a variety of supervisory activities, is an ongoing process that continually feeds into the development and maintenance of an institution’s Risk Profile. The many activities conducted by the NBRM are essential to understanding the characteristics of each institution’s business and the risks they face. These activities allow for better evaluation of risks, and greater emphasis on early identification of emerging risks in individual institutions and on a sector-wide basis. The findings from all the activities culminate into a unique Risk Profile for each institution and allow the NBRM to develop a supervisory strategy tailored to address the major risks and concerns for each institution.

1.5.2. While the supervisory cycle ends and a new cycle begins at the end of an onsite examination (as described in section 1.2 above), the offsite activities conducted throughout the supervisory cycle are key to maintaining an ongoing supervision process. After each offsite activity, an institution’s Risk Profile is reviewed and updated, as needed. Each activity also requires the analyst to summarize in writing the essence of the activity, the analyst’s conclusions, and recommendations to change the Risk Profile. This document and changes to the Risk Profile require NBRM management review and approval. Below are brief descriptions of each of the major offsite activities:

1.5.2.1. Quarterly CAEL Reviews - Every quarter, each institution’s financial performance is analyzed using regulatory reports submitted by the institution, information from the most recent onsite examination, and any information obtained since the previous quarterly review or recent onsite examination. The reviews involve an analysis of the institution’s capital adequacy, liquidity position, asset quality and earnings performance. Additionally, each risk category is reviewed as thoroughly as possible given the limited information, to determine changes in the overall risk profile of the institution. Any material changes in the Supervisory Board, Directors, key personnel, corporate structure, and/or product lines are also reviewed to determine what impact, if any, the changes have on the overall condition and
future prospects of the institution. The reviews may prompt a phone call or
meeting with management or key personnel, and/or possibly a targeted
examination of areas of particular concern.

1.5.2.2. *Pre-Onsite Examination* - The NBRM may conduct onsite examinations at
any phase of the supervisory cycle and their basic aim is to gather enough
information in order to be able to update the risk assessment process prior to
the start of the next onsite examination. The purpose of these "pre-onsite"
examinations is in addition to the information received with the offsite
reviews to obtain additional information about recent developments, which
may have an effect on the risk profile of the institution, such as the
introduction of new products or any significant changes in the risk
management systems. Also during the pre-onsite visitation, the examiner-in-
charge is required to perform an assessment of the internal audit function of
the institution. The assessment would include a review of the internal audit’s
independence and performance. The results of the assessment later will be
used to decide the scope for the risk focused onsite examination. If the
internal audit function is acceptable and meets the standards established by
the NBRM, the NBRM will be able to place more reliance on its work and
the scope for the onsite examination can be suitably reduced.

1.5.2.3. *Annual Meetings* - During each calendar year, NBRM personnel meet with
an institution’s external auditors, Board, and Directors. These meetings may
be held as part of the examination process if the examination is held during
the calendar year. If not, separate meetings are scheduled. These meetings
allow the auditors, Board members and Directors to update the NBRM on
issues of concern or any current and planned events affecting the institution.
The meetings also allow NBRM personnel to discuss market conditions and
any upcoming regulatory initiatives.

1.5.2.4. *Examination Follow-up* - Often there are issues that arise from onsite
examinations and offsite activities that can not be immediately resolved, and
require time for the institution’s management to properly address. These
issues require follow-up by the NBRM to ensure the institution’s
management properly corrects weaknesses, eliminates violations of law and
regulations, develops appropriate policies and procedures, or takes other
actions require by the NBRM. Additionally, institutions under
administrative actions must routinely submit information to the NBRM for
its review. These follow-up activities can be performed either during the
Quarterly CAEL Review, or separate from the reviews, depending on when
information is submitted to the NBRM.

1.5.2.5. *Correspondence* - All correspondence submitted by an institution to the
NBRM receives a prompt review and response. The NBRM analyst prepares
a brief written summary of, and issues related to, the correspondence and
official response.
1.5.2.6. Corporate Applications - Licensing applications, change-in-control applications/notifications, or requests to approve certain activities receive prompt consideration and response from the NBRM. In addition to following the formal procedures to process applications and address other corporate issues, the NBRM analyst prepares a brief written summary describing the request and NBRM decision.

1.5.2.7. Targeted Examinations - Based on the findings of onsite examinations and/or offsite activities, a scheduled (incorporated in the institution’s Supervisory Strategy) or unscheduled targeted examination may be warranted. Targeted examinations are necessary if the issue is of great concern or importance and it would be imprudent to wait until the next scheduled onsite examination, or impractical to conduct the next onsite examination earlier than originally scheduled.

1.5.2.8. Other Offsite Activities - From time to time the NBRM conducts reviews and supervisory activities that encompass the entire industry rather than just one specific institution. These reviews or activities may be in the form of systemic reviews (conducted semi-annually), horizontal examinations (where one area, risk category, or product line is reviewed in all institutions simultaneously), and/or impact studies. The findings from these reviews and activities may reveal that an individual institution’s condition has significantly changed, and a review of the institution’s Risk Profile is warranted.

2. ASSESSING RISK MANAGEMENT

2.1. Elements of an Effective Risk Management System

2.1.1. While risk management systems vary among institutions, there are four basic elements contributing to a sound risk management environment:

- Active Board and Directors oversight;
- Organizational policies, procedures, and limits that have been developed and implemented to manage business activities effectively;
- Adequate risk measurement, monitoring, and management information systems that are in place to support all business activities; and
- Established internal controls and the performance of comprehensive audits (both internal and external) to detect, in a timely fashion, any deficiencies in the internal control environment and risk management system.

2.1.2. The quality of Board and Directors oversight is evaluated by determining whether they:

- Have identified and clearly understand the types of risk inherent in business lines and whether they have taken appropriate steps to ensure continued awareness of any changes in the levels of risk;
- Have been actively involved in the development and approval of policies to limit the risks, consistent with the institutions risk appetite;
• Are knowledgeable about the methods available to measure risks for various activities;
• Have carefully evaluated all the risks associated with new activities and ensured that the proper infrastructure and internal controls are in place; and
• Have provided adequate staffing for the activity and designated staff with appropriate credentials to supervise the activity.

2.1.3. Policies, procedures and limits are evaluated to determine whether they:
• Are properly documented, drawn up after careful consideration of the risk associated with the activity, and reviewed and approved by management at the appropriate level;
• Assign full accountability and clear lines of authority for each activity and product area; and
• Are monitored with well developed compliance procedures. (These procedures should include internal compliance checks for adherence to all policies, procedures and limits by an independent function within an institution such as an internal audit unit.)

2.1.4. Effective risk monitoring requires institutions to identify and measure all quantifiable and material risk factors. Consequently, risk monitoring activities must be supported by information systems that provide the Board and management with timely and accurate reports on the financial condition, operating performance and risk exposure of the institution. The following factors are considered when assessing the effectiveness of the risk measurement, monitoring and management information systems:
• Management information systems are regular and sufficiently detailed to allow line managers to engage in the day-to-day management of the institution’s business activities;
• Risk monitoring and management information systems provide Directors with a clear understanding of the institution’s positions and risk exposures;
• Risk monitoring practices and reports, on a historical basis, address all material risks of the institution;
• Key assumptions, data sources and procedures used to measure and monitor risk are adequate and appropriate;
• Occurrences of any material changes in lines of business or products that might require changes in the measuring and monitoring systems are identified;
• Occurrences of any changes in information technology, or the management information system environment that significantly changes the production process for reports or the assumptions on which reports are based, are taken into consideration;
• Management information reports and other forms of communication consistently monitor all meaningful exposures, check compliance with established limits, goals or objectives and compare actual with expected performance; and
• Reports to the Board and Directors (and regulatory authorities) are adequate, accurate and timely; and whether such reports contain sufficient information for the users to identify any adverse trends and to fully evaluate the level of risks.

2.1.5. A critical element of an institution's ability to operate in a safe and sound manner and to maintain an acceptable risk management system is the adequacy of its internal control environment. Establishing and maintaining an effective system of controls, including the enforcement of official lines of authority and the appropriate segregation of duties, is one of management's most important responsibilities. Serious lapses or deficiencies in internal controls such as inadequate segregation of duties may warrant supervisory action. The following factors should be considered in evaluating the adequacy of the internal control environment:

• The appropriateness of the system of internal controls in relation to the type and level of risks posed by the nature and scope of the institution's business activities and products;
• The extent to which the institution's organizational structure establishes adequate clear lines of authority and responsibility for monitoring compliance with policies, procedures and limits;
• The effectiveness of reporting lines to provide for sufficient independence of control functions from business areas, as well as adequate segregation of duties throughout the organization (such as those relating to trading, custodial and back-office operations or loan origination, marketing and processing);
• The extent that the official organizational structure reflects actual operating practices;
• The reliability, accuracy and timeliness of all financial, operational and regulatory reports;
• The adequacy of procedures for ensuring compliance with applicable laws, regulations, internal policies and procedures;
• The effectiveness, independence and objectivity of internal audit or other control and review procedures in providing adequate coverage of the institution’s operations;
• The adequacy of testing and reviewing controls and information systems;
• The adequacy of the documentation that supports the coverage, procedures, findings and management responses to audits; and
• Whether identified material weaknesses are given appropriate and timely high-level attention and management’s actions to correct material deficiencies are objectively verified and reviewed.

2.2. Assessing Risk Management

2.2.1. The following factors are considered in assessing the overall risk management system at the conclusion of the risk-focused onsite examination:

• The extent to which the Board and Directors are able to manage all the risks inherent in the institution’s lending, trading, treasury and other major activities
and in particular its ability to identify, measure, monitor and control these risks;

- The soundness of the qualitative and quantitative assumptions implicit in the risk management system;
- The appropriateness and consistency of risk policies, guidelines and limits with lending, trading and other activities, management experience level and the institution’s overall financial strength;
- The consistency of the management information system and other forms of communication with the level of business activity and complexity of products offered at the institution, and whether they provide sufficient support to accurately monitor risk exposure and compliance with established limits; and
- The ability of management to recognize and accommodate new risks that may arise from the changing environment and to identify and address risks not readily quantified in a risk management system.

2.2.2. For example, in the lending area, an institution would be expected to have qualified and experienced lending officers, an effective credit approval and review function and, where appropriate, a credit work-out function. The lending area should also have a credit risk evaluation system that is capable of assessing adherence to credit risk lending limits, lending guidelines, portfolio policies and underwriting standards. In addition, the credit area should have a system that identifies existing and potential problem credits, the adequacy of provisioning and a method for assessing the likely impact of those credits on current and future profits. Procedures should also be in place for assessing the impact to the portfolio brought by specific or general changes in the business climate.

2.3. **Integration into the CAMEL Rating System**

2.3.1. The evaluation, which is determined at the conclusion of the onsite risk-focused examination, of an institution’s risk management system is assessed as strong, satisfactory or weak. This assessment focuses on the four elements of sound risk management as outlined in section 2.1. The risk management assessment will be factored into the management component of the CAMEL rating for the institution. It may also influence the rating for one or more of the other CAMEL components. This concept adds a new dimension to the traditional methodology for assessing the CAMEL components and by extension could affect the composite CAMEL rating. The following indicates what this process entails.

2.3.2. The overall risk management assessment is incorporated and heavily weighted in relation to the other factors included in the analysis for assessing and rating the management component of CAMEL. If the risk management is assessed as weak the management component of the CAMEL cannot usually be better than "3".

2.3.3. As to how the risk management rating can affect other components of the CAMEL, it is necessary to consider the factors which in the above example led to an overall assessment of risk management as weak. If serious deficiencies were found in the credit risk management process, it may be necessary to rate the asset
quality component as "3" notwithstanding that the quantitative indicators for portfolio quality may support a "2" rating.

2.3.4. Since the risk-based approach views the financial condition of an institution from a forward perspective, the CAMEL rating must also reflect this view, whereas the traditional methodology only captured the current position.

3. RISK CATEGORIES

3.1. Credit Risk

3.1.1. 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.

3.1.2. 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.

3.2. Liquidity Risk

3.2.1. Liquidity risk is the current or prospective risk to earnings and capital arising from an institution’s inability to meet its liabilities when they come due without incurring unacceptable losses. Liquidity risk is caused by an inability to manage unplanned outflows of funds and changes in funding sources and/or to meet off-balance sheet liabilities. Liquidity risk is also present when the institution’s management fails to recognize or address changes in market conditions that affect the ability to attract funds in necessary volumes and at acceptable rates, and/or to liquidate assets quickly and with minimal loss in value.

3.3. Market Risk

3.3.1. Market risk is the current or prospective risk to earnings and capital arising from unacceptable levels of interest rate risk, foreign exchange risk, and/or price risk.

3.3.2. Interest rate risk is the current or prospective risk to earnings and capital arising from adverse movements in interest rates. This risk impacts both the earnings of an institution and the economic value of its assets, liabilities and off-balance sheet instruments. The primary types of interest rate risk to which institutions are typically exposed are: (1) re-pricing risk, which arises from timing differences in
the maturity (for fixed rate) and re-pricing (for variable rate) of assets, liabilities and off-balance sheet positions; (2) yield curve risk, which arises from changes in the slope and shape of the yield curve; (3) basis risk, which arises from imperfect correlation in the adjustment of the rates earned and paid on different instruments with otherwise similar re-pricing characteristics; and (4) options risk, which arises from the expressed or implied options imbedded in many assets, liabilities and off-balance sheet portfolios.

3.3.3. Foreign exchange risk is the current or prospective risk to earnings and capital arising from adverse movements in currency exchange rates. Foreign exchange risk can be separated into 1) Transaction risk which refers to the impact of adverse movements in currency exchange rates from actual foreign exchange transactions (trading exposure); 2) Translation risk which refers to the variability in accounting values that result from variations in exchange rates used to translate carrying values in foreign currencies to the base (domestic) currency; and 3) Economic foreign exchange risk which refers to changes in the competitive strength of the institution or its entities in the foreign market due to fundamental changes in exchange rates.

3.3.4. Price risk is the current or prospective risk to earnings and capital arising from adverse movements in bond, security and commodity prices, and foreign exchange rates in the trading book. This risk arises from market making, dealing, and position taking in debt and equity securities, currencies, commodities, and derivatives (bonds, securities, currencies, and commodities). Market risk focuses on the changes in market factors (e.g., interest rates, market liquidity, and volatilities) that affect the value of traded instruments. The primary accounts affected by price risk are those which are revalued for financial presentation (e.g., trading accounts for securities, derivatives, and foreign exchange products).

3.4. Operation Risk

3.4.1. Operation risk affects the long-term existence of an institution, and arises from breakdowns in corporate governance or internal controls. Such breakdowns can lead to financial losses through error, fraud, or failure to perform in a timely manner or cause the interests of the institution to be compromised in some other way; for example, by its dealers, lending officers or other staff exceeding their authority or conducting business in an unethical or risky manner. Other aspects of operations risk include major failure of information technology systems or events such as major fires or other disasters.

3.5. Information Technology Risk

3.5.1. Information Technology (IT) risk is the current or prospective risk to earnings and capital arising from inadequate information technology and processing in terms of manageability, exclusivity, integrity, controllability, continuity and data security. Further, IT risk arises from an inadequate IT strategy and policy, and from inadequate use of available information technology.
3.6. Legal Risk

3.6.1. Legal risk is the current or prospective risk to earnings and capital arising from violations or non-compliance with laws, rules, regulations, agreements, prescribed practices, or ethical standards, as well as from the possibility of dubious interpretation of effective laws or rules. Institutions are exposed to legal risk due to relations with a great number of stakeholders, e.g. customers, counter parties, intermediaries, etc., as well as regulators, tax authorities, and other authorized agencies. Legal risk can lead to fines and penalties, payment of damages, deteriorating position in the market, reduced expansion potential, and lack of contract enforceability.

3.6.2. Legal risk can also lead to a diminished reputation, also known as Reputation risk, arising from an adverse perception of the image of the institution by customers, counter parties, shareholders, or regulators. This affects the institution’s ability to establish new relationships or products, or service existing relationships. This risk may expose the institution to administrative, civil and criminal liability, financial loss or a decline in its customer base. Legal and Reputation risk exposure is present throughout the organization and, therefore, institutions are obligated to exercise appropriate treatment in dealing with its customers and other stakeholders.

3.7. Strategic Risk

3.7.1. Strategic risk is the current or prospective risk to earnings and capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to changes in the business environment. This risk is a function of the compatibility of an institution’s strategic goals, the business strategies developed and resources employed to achieve strategic goals, and the quality of implementation. The resources needed to carry out business strategies are both tangible and intangible. They include communication channels, operating systems, delivery networks, and managerial capacities and capabilities. The organization’s internal characteristics must be evaluated against the impact of economic, technological, competitive, regulatory, and other environmental changes.