

Circular No.169/B/2002-DSB/AMCM
(Date: 21/11/2002)

THE INTERNAL CONTROL GUIDELINE FOR THE AUTHORISED CREDIT INSTITUTIONS

The Monetary Authority of Macau (AMCM), under the powers conferred by Article 9 of the Charter approved by Decree Law no. 14/96/M of 11th March and by Article 6 of Financial System Act of Macau approved by Decree law no.32/93/M of 5th July, establishes the followings:

1. INTRODUCTION

1.1 A system of effective internal controls is a critical component of bank management and a foundation for the safe and sound operations of banking organizations. Weak or ineffective internal control has caused losses in many banks and has contributed to the failure of others around the world. Some of these cases involved could have been prevented or discovered through effective control mechanisms before the losses actually incurred by the banks. Viewing the fact of increasing importance of the effective internal control system in ensuring the prudent and safe operations of the banks, the Authority hereby issues this Guideline.

1.2 This guideline applies to all authorized credit institutions (for simplicity, hereafter referred as “bank”), either locally incorporated or being branches of overseas banks in Macau. While the Authority recognizes that not all institutions may implement all aspects of this guideline, banks are encouraged and required to establish, maintain and operate an effective system of internal control that is appropriate to the size of the bank and the nature, scope, and risk of its activity. However, even though small banks are likely to be less formal and less structured, a bank’s internal control system should be as effective as those at more complex and larger banks. The Authority will, based on this guideline, closely monitor and evaluate the quality and effectiveness of banks’ internal control system.

2. INTERNAL CONTROL OBJECTIVES

Despite the rapid changes in the banking industry, the fundamental concept behind effective internal controls remains the same. The internal controls are intended to ensure banks achieve their goals and long-term profitability targets in a safe, prudent and controllable manner. To be concrete, an effective internal control system can assure banks to meet the following objectives:

- Business operations are efficient and effective.
- Recorded transactions are accurate.
- Financial and management reportings are reliable and complete.
- Risk management systems are effective.
- The bank complies with applicable laws and regulations, internal policies and procedures.

3. INTERNAL CONTROL PRINCIPLES

A bank, when establishing its internal control system, should comply with the following principles:

3.1 Efficient and Effective. Internal control must be consistently applied and well understood by bank staff so that the board and management policies are to be efficiently and effectively implemented. Meanwhile, internal control should not tolerate any mismanagement by the board and top managers.

3.2 Prudent. The core of internal control is to effectively mitigate banking risks. Prudence should always be the priority in establishing the internal control system.

3.3 Comprehensive. Internal control policies and procedures should cover all aspects of banking business and its operation.

3.4 Timely. Internal control should be established from the very beginning of the bank's business commencement and function properly to send early warning signals allowing the management to take corrective actions to mitigate and avoid the potential risks.

3.5 Independent. The duty of evaluating the effectiveness of internal control system should be separated from that of formulating and executing the internal controls. The quality and appropriateness of internal controls should be evaluated independently.

4. INTERNAL CONTROL COMPONENTS

Internal control consists of five critical elements:

- A control environment;
- Risk recognition and assessment;
- Control activities;
- Accounting, information, and communication systems, and
- Monitoring and correcting.

4.1 *CONTROL ENVIRONMENT*

The control environment reflects the board of directors' and management's commitment to internal control. It provides discipline and structure to the control system. Elements of the control environment include:

- The organizational structure of the institution;
- Management philosophy and operating style;
- The integrity, ethics, and competence of personnel;
- The external influences that affect the bank's operations and risk management practices, e.g., independent audit;
- The attention and direction provided by the board of directors and its committees;
- The effectiveness of human resources policies and procedures.

4.1.1 The board of directors should have responsibility for formulating, approving and periodically reviewing the overall business strategies and significant policies of the bank; understanding the major risks run by the banks, setting tolerance limits for these risks and ensuring that the senior management takes the steps essential to identify, measure, monitor and control these risks; approving the organizational structure; and clearly defining the authorities and responsibilities, effectively utilizing the work conducted by internal and external auditors, in recognition of the important control function they provide.

The board of directors should periodically discuss with management concerning the effectiveness of the internal control system; timely review the evaluation procedure and results of internal controls; instantly ensure management's prompt follow-up on recommendations and concerns expressed by stakeholders like regulators, shareholders and customers on internal control weaknesses; and periodically review the appropriateness of the bank's strategy and risk limits.

4.1.2 Senior management should have responsibility for carrying out the directives of the board of directors, including the implementation of strategies and policies.

Senior management should maintain an organizational structure that clearly assigns responsibility, authority and reporting relationships. The allocation of duties and responsibilities should ensure that there are no gaps in reporting lines and that an effective level of management control is extended to all levels of the bank and its various activities. Delegation is an essential part of the management. It is important for the senior management to oversee the managers to whom they have delegated these responsibilities to ensure that they take the duties properly.

Senior management should be responsible for developing processes that identify, measure, monitor and control risks, and developing processes that recruit, remunerate, motivate and reward capable staff to attract those qualified to be with the bank.

4.1.3 An essential element of an effective internal control system is a strong control culture. The board of directors and senior management are responsible for promoting high ethical and integrity standards, and for establishing a culture within the organization that emphasizes and demonstrates to all levels of personnel the importance of internal controls. All personnel at a banking organization need to understand their role in the internal control process and be fully engaged in the process.

In reinforcing ethical values, banks should avoid policies and practices that may inadvertently provide incentives or temptations for inappropriate activities. Performance targets or other operational results should not be achieved at the price of ignoring the long-term risks.

4.2 Risk Recognition and Assessment

Risk recognition and assessment is the process the board and management use to identify and analyze risks that could keep the bank from achieving planned objectives. The assessment should help determine what the risks are, how they should be managed, and what controls are needed. Risks can arise or change due to factors such as:

- A change in the bank's operating environment;
- New personnel;
- New or revamped information systems;
- Rapid growth;
- New technology;
- New or expanded lines of business, products, or activities;
- Mergers or other corporate restructuring, and
- Changes in accounting requirement.

4.2.1 A risk assessment should identify and evaluate the internal and external factors that could adversely affect the achievement of the bank's performance, information and compliance objectives. This assessment should cover all risks facing the bank (that is, credit risk, country and transfer risk, market risk, interest risk, liquidity risk, operational risk, legal risk and reputation risk).

4.2.2 The risk assessment should be conducted at all level of individual businesses and across the wide spectrum of activities. Effective risk assessment addresses both measurable and non-measurable aspects and weighs costs of controls against the benefits they provide.

4.2.3 The risk assessment should also determine which risks are controllable by the bank and which are not. For those risks that are controllable, the bank must assess whether to accept those risks or the extent to which it wishes to mitigate the risks through control procedures. For those risks that cannot be controlled, the bank must decide whether to accept these risks or to withdraw from or reduce the level of business activity concerned.

4.2.4 Internal controls may need to be revised to appropriately address any new or previously uncontrolled risks. For example, as new financial innovation occurs, a bank needs to evaluate new financial instruments and market transactions and consider the risks associated with these activities.

4.3 *Control Activities*

4.3.1 Control activities include the policies, procedures and practices established to help ensure that bank personnel carry out board and management directives. These activities help ensure that the board and management manage and control risks that could affect bank operating performance or cause financial loss. Policies governing control activities should ensure that bank officers who perform internal control functions in addition to their operational duties do not evaluate their own work.

Control activities involve two typical steps: (1) establishment of control policies and procedures; and (2) verification that the control policies and procedures are being complied with.

4.3.2 Control activities are applied at various organizational and functional levels and include:

- *Operational performance reviews.* These control activities include risk assessments and reviews of actual financial performance versus budgets, forecasts, and prior-period performance as well as operational activities control. In performing these reviews, the bank relates various sets of data to one another. The bank uses these comparisons to analyze the bank's actual versus projected or required performance to identify reasons for significant variances and to determine whether any specific bank activity should be adjusted.
- *Information processing.* Information systems control activities can be broadly grouped into two categories: general controls and application controls. General controls commonly include controls over data center operations, system software acquisition and maintenance. These controls apply to mainframes, servers, end user workstations, and internal or external networks. Application controls apply to programs the bank uses to process transactions and help ensure that transactions are valid, properly authorized and accurate.

- *Compliance with exposure limits.* The establishment of prudent limits on risk exposures is an important aspect of risk management. For example, compliance with limits for exposure to borrowers and other counter parties reduces the bank's concentration of credit risk and helps to diversify its risk profile. Consequently, an important aspect of internal controls is a process for reviewing compliance with such limits and follow-up on instances of non-compliance.
- *Physical controls.* Generally, these activities ensure the physical security of bank assets. They include safeguarding assets and records, limiting access to computer programs and data files, and periodically comparing actual asset or liability values with those shown on control records.
- *Approvals and authorizations.* Appropriate authority delegation and/or devolutions shall not compromise necessary approval and authorization, Requiring approval and authorization for transactions over certain limits ensures that management is aware of the transaction or situation so as to enhance the accountability system.
- *Verification and reconciliations.* Verifications of transaction details, activities and the output of various processing and management systems are very important for the bank to ensure accuracy and reliability of operational, financial and management reports. Reconciliations shall be carried out periodically in order to identify activities and records that need rectification or other kind of actions. Consequently, any exceptional or extraordinary result of these verifications and reconciliations should be reported timely to the appropriate level of management.
- *Segregation of duties.* Banks establish segregation of duties by assigning different people the responsibilities for authorizing transactions, recording transactions, and maintaining custody of assets. Such segregation is intended to make it impossible for any person to be in a position to both perpetrate and conceal errors or irregularities in the normal course of his or her duties. Areas of potential conflicts of interest should be identified, minimized and subject to careful independent monitoring.

4.3.3 Control activities are most effective when they are viewed as an integral part of, rather than an addition to, the daily activities of the bank. It is not sufficient for senior management to simply establish appropriate policies and procedures for the various activities and divisions of the bank. They must regularly ensure that all areas of the bank are in compliance with such policies and procedures and also determine that existing policies and procedures remain adequate.

4.4 *Accounting, Information and Communication Systems*

Accounting, information and communication systems identify, capture and exchange information in a form that enables bank personnel to carry out their responsibilities. Accounting systems include methods and records that identify, assemble, analyze, classify, record and report a bank's transactions. Information systems produce reports on operations, finance, risk management and compliance that enable the board and management to manage the bank. Communication systems impart information throughout the bank and to external parties such as regulators, examiners, shareholders and customers.

4.4.1 An effective internal control system requires that there are adequate and comprehensive internal accounting, financial, operational and compliance data, as well as external market information about events and conditions that are relevant to decisions making. Information should be reliable, timely, accessible and provided in a consistent manner.

4.4.2 An effective internal control system also requires the establishment and maintenance of management information systems that cover the full range of the bank's activities. These systems, including those that hold and use data in an electronic form, must be secure, monitored independently and supported by adequate contingency arrangements.

4.4.3 An effective internal control system requires effective communication channels to ensure that all staff fully understand and adhere to policies and procedures affecting their duties and responsibilities and that other relevant information is reaching the appropriate personnel.

The senior management should be responsible for establishing a communication path ensuring the relevant information is reaching the right personnel, and establishing an organizational structure facilitating the adequate flow of information, either upward, downward, or across the organization.

4.5 *Monitoring and Correcting*

This includes at least five areas:

- The overall effectiveness of the bank's internal control system should be monitored on an on-going basis. On-going monitoring can have the advantage of quickly detecting and correcting the deficiencies in the system, and facilitating the senior management to take actions at the earliest time. Some of the key risks should be part of the daily activities of the bank. Meanwhile, the external auditors play an important role in monitoring the bank's internal control policies and procedures. External auditor's functioning in this field is, viewed by the Authority, an integral part of its quality assessment.

- Internal audit should function independently. The internal auditors should report to the board of directors, either directly or through audit committee, as deemed appropriate by individual banks. The board of directors is responsible for establishing and monitoring effective audit functioning, and determines how intensive auditing must be to effectively test and monitor internal controls and to ensure the reliability of the bank's financial statements and reporting. A clear and focused internal audit program can be a key defense against control breakdowns or fraud by providing independent assessments of the internal control system's quality and effectiveness. Due to the important nature of this function, internal audit must be staffed with competent, appropriately trained staff who have a clear understanding of their role and responsibilities.
- Monitoring the effectiveness of internal controls can be done by personnel from several different areas, including the business function itself, internal audit and financial control, etc.
- Internal control deficiencies, whether identified by business line, internal audit, or other control personnel, should be reported timely to the appropriate management level, with serious matters reported to senior management and the board of directors.
- The management should rectify the deficiencies identified on a timely basis. It is also important that the board of directors and senior management periodically receive reports summarizing all control issues and establish a system to track the internal control weaknesses.

5. ESTABLISHMENT OF SPECIALIZED COMMITTEES

The Authority believes it is necessary for a bank to establish some or all of the following specialized committees or structures having similar functions, including:

- *An Audit Committee.* It is important that the audit committee report directly to the board of directors. This allows for the proper functioning of corporate governance by giving the board unbiased information. The committee provides oversight of the bank's internal and external auditors, approves their appointments and dismissal, reviews and approves audit scope and frequency, and ensure the management take prompt and proper corrective actions to address control weaknesses, non-compliance with policies, laws and regulations, and other problems identified by the auditors.
- *Asset and Liability Management Committee.* The most fundamental function of this committee is to oversee the bank's market risk and in particular to ensure that the bank have the liquidity to meet its obligations. The members of

the committee should represent both the asset sides and the liability sides of the balance sheet. Typically, it includes the chief executive officer, the chief financial officer, the treasurer, the chief credit officer, and the officer in charge of the deposit-taking. Other members, from the business lines, are highly encouraged.

- A *Risk Management Committee*. It provides oversight of senior management's activities in managing credit, market, liquidity, operational, legal and other risks of the bank. Members of the committee should come from management of major business lines. Representatives from certain particular departments, e.g. credit administration, audit, are extremely important.
- A *Compensation Committee*. This committee provides oversight of remuneration of senior management and other key personnel and ensures a consistent compensation with the bank's culture, strategy, vision and control environment. The board should approve the relevant remuneration policies and packages based on the committee's recommendations.
- A *Nomination Committee*. It provides important assessment of board effectiveness and directs the process of renewing and replacing board members. The committee should ensure that only the most competent individuals are appointed to the board and key management positions. It is responsible for making recommendations to the board on all new appointments of directors and senior executives. The Board should approve the appointments based on the committee's recommendations.