MANAGING MARKET RISK GUIDELINE

1. INTRODUCTION

The Central Bank of Barbados (Bank), in furtherance of its responsibility for the regulation and supervision of licensees under the Financial Institutions Act 1996-16 and the International Financial Services Act 2002-5, has developed this Guideline on the management of market risks to encourage licensees to strengthen their processes for identifying, monitoring and mitigating market risks.

Financial instruments and trading strategies have become increasingly complex and licensees may be subject to market risk i.e. the risk of losses in on and off balance sheet positions arising from movements in market prices, including interest rates, exchange rates, equity values, credit spreads and/or commodity prices. The market risk exposure may be explicit in portfolios of securities/equities and instruments that are actively traded or it may be implicit, such as interest rate risk due to mismatch of loans and deposits. Losses may result from both general market price movements and, in the case of interest rate and equity instruments, from price movements specific to particular issuers.

To absorb the impact of losses, prudent risk management requires licensees to hold capital commensurate with the level of risk involved. It is equally important that licensees ensure that appropriate systems of risk measurement and management are in place. This Guideline, together with the companion Guidelines on the procedures for measuring the capital requirements for market risk, the management of interest rate risk in the banking book, the management of foreign exchange and settlement risk and the requirements for stress testing and scenario analysis, should provide licensees with a sound basis for building their risk management frameworks to govern market risks.

2. APPLICATION

The principles in this Guideline are applicable to entities that operate under the Financial Institutions Act 1996-16 and the International Financial Services Act 2002-5. They are intended for use at both the consolidated and subsidiary level but their specific application will depend on the complexity and range of activities undertaken by individual licensees.

3. RISK MANAGEMENT FRAMEWORK

Licensees are expected to develop risk management frameworks that enable them to identify and aggregate risk and that allows for measurement systems that quantify and control risk. The framework should incorporate clearly defined policies and sound oversight.

3.1 *Board and Senior Management*

Market risk management must be driven by the Board of Directors (Board) and senior management. The Board is responsible inter alia, for:

a. Defining the risks and determining the licensee's risk appetite. This requires the Board or its appropriate delegated committee to approve major hedging or risk management initiatives in advance;
b. Formulating and/or approving sound strategies and policies for the identification, measurement, monitoring and control of the risks;
c. Reviewing regularly the licensee's overall market risk exposure to ensure that it is maintained at prudent levels and is consistent with available capital; and
d. Ensuring that adequate resources, both technical and human, are available for evaluating and controlling this risk.

While the overall responsibility of market risk management rests with the Board, it is senior management's responsibility to transform the strategic direction into the implementation and execution of policies and procedures and ensure that this strategy is effectively communicated to all staff. Accordingly, senior management is responsible for:

a. The development and implementation of policies and procedures;
b. Ensuring adherence to the lines of authority, responsibility and limits that the Board established for measuring, managing and reporting market risk;
c. Establishing effective internal controls to monitor and control market risk;
d. Establishing adequate systems and standards for the measurement of risk;
e. Setting standards for monitoring risk with adequate reporting methodologies in place; and
f. Evaluating, in conjunction with the Board, risk management personnel and traders, and whether risk management procedures remain adequate.

Where the activities that give rise to market risk are outsourced, senior management needs to monitor the performance of the portfolio and the risk management practices of the third party provider for compliance with the licensee's mandate. Licensees should ensure that any outsourcing relationship meets the requirements given in the Outsourcing Guideline.

3.2 *Risk Management Policies and Procedures*

The Board and Senior Management need to ensure that:

a. Market risk policies and procedures are clearly defined and consistent with the nature and complexity of the licensee's activities. This should include ensuring that:

    i. The individuals and/or committees responsible for managing market risk are clearly defined;
    ii. There is adequate separation of duties in key elements of the risk management process to avoid potential conflicts of interest; and

iii. Risk measurement, monitoring and control functions are clearly defined duties that are sufficiently independent from position-taking functions and report risk exposures directly to senior management and the Board. Larger or more complex licensees should have a designated independent unit responsible for the design and administration of risk measurement, monitoring and control functions.

b. Positions in the trading book, including those positions, which are less liquid, are prudently valued.
c. The policies are communicated to all concerned and embedded within the organization's culture;
d. The policies provide for any material exceptions to the documented policies and limits to be drawn immediately to management's attention and for management to assess and determine appropriate corrective measures. These exceptions can also serve to evaluate the appropriateness of systems and procedures; and
e. The risks inherent in new products and activities are evaluated and that adequate procedures and controls are introduced before the project is undertaken.

3.3 *Risk Measurement, Monitoring and Control Functions*

Licensees should at a minimum:

a. Develop market risk measurement systems that capture all material sources of risk. The assumptions underlying the system should be documented and be clearly understood by risk managers and senior management;
b. Ensure that transactions are captured on a timely basis;
c. Ensure that marked to marked positions are revalued frequently;
d. Establish and enforce operating limits and other practices that maintain risk exposures within the levels identified in the internal policies;
e. Assess their vulnerability to loss under stressful market conditions, including the breakdown of key assumptions, and consider those results when establishing and reviewing their policies and limits for market risk. Any risk measurement framework that employs quantitative techniques should undergo rigorous testing to determine the robustness of its analytical methodologies, the controls surrounding data inputs and its appropriate application;
f. In purchasing vendor based application for the measurement and/or management of market risks, ensure that they understand the formulation of and inputs into the model and that the vendors share the model's parameters with them;
g. Develop adequate information systems for measuring, monitoring, controlling and reporting exposures. Reports must be provided on a timely basis to the licensee's Board, senior management and the appropriate business line managers and there should be a system to effectively address observed exceptions;
h. Ensure that the internal control procedures also cover its branch network and its subsidiaries, if applicable;
i. Require branches and subsidiaries to report their open positions to head office daily in order to facilitate internal supervision and monitoring of open positions;

j. Have an adequate system of internal controls over their market risk management process. In order to be effective:

   i. There must be an adequate process for identifying and evaluating risk;
   ii. There should be adequate information systems;
   iii. There must be enforcement of the official lines of authority and segregation of duties;
   iv. Evaluations of the effectiveness of the system should be undertaken and, where necessary, appropriate revisions or enhancements to internal controls made. The results of such reviews should be available to the Bank; and
   v. The review functions should have sufficient authority, expertise and corporate stature so that the identification and reporting of their findings could be accomplished without hindrance.

3.4 Internal Audit

The internal audit should be functionally separate from management oversight of the trading function. It will be the responsibility of internal audit to, inter alia:

a. Ensure that dealers observe the policies and procedures and the licensee's code of behaviour;
b. Ensure that accounting procedures meet the necessary standards of accuracy, promptness and completeness;
c. Verify the adequacy and accuracy of management information reports;
d. Conduct internal audits regularly and to make occasional spot checks; and
e. Seek periodically, in conjunction with management, an exchange of information on outstanding contracts with the counterparties to the contracts as a safeguard against malpractices. The Bank should be informed if there appears to be a lack of control or cooperation on the part of the counterparty.

4. ROLE OF THE BANK

As regulator, the Bank will, inter alia assess adherence to policy and compliance with the requirements of this Guideline by:

a. Assessing management's effectiveness in identifing, measuring, monitoring and controlling the risk involved in trading activities;
b. Receiving quantitative and qualitative reports on the measurement and management of market risk;
c. Ensuring that there is adequate capital to support risks. Where the Bank perceives that there is insufficient capital to support the risks, it reserves the right to require licensees to increase their capital holdings; and
d. Monitoring market risk, including at the subsidiary level, to ensure that significant imbalances within a group do not go unsupervised.