BANK OF JAMAICA

STANDARDS OF SOUND BUSINESS PRACTICES

FOREIGN EXCHANGE RISK MANAGEMENT

Bank of Jamaica
March 1996

FOREIGN EXCHANGE RISK MANAGEMENT

A. PURPOSE

This document sets out the minimum policies and procedures that each financial institution needs to have in place and apply within its foreign exchange risk management programme, and the minimum criteria it should use to prudently manage and control its exposure to foreign exchange risk.

Foreign exchange risk management must be conducted in the context of a comprehensive business plan. Although this document focuses on the responsibility of an institution for managing foreign exchange risk, it is not meant to imply that foreign exchange risk management can be conducted in isolation from other risks or asset/liability management considerations, such as the paramount need to maintain adequate liquidity.

B. DEFINITION

Foreign exchange risk is the exposure of an institution to the potential impact of movements in foreign exchange rates. The risk is that adverse fluctuations in exchange rates may result in a loss in Jamaican dollar terms to the institution.

Foreign exchange risk arises from two factors: currency mismatches in an institution's assets and liabilities (both on- and off-balance sheet) that are not subject to a fixed exchange rate vis-a-vis the Jamaican dollar, and currency cash flow mismatches. Such risk continues until the foreign exchange position is covered. This risk may arise from a variety of sources such as foreign currency retail accounts and retail cash transactions and services, foreign exchange trading, investments denominated in foreign currencies and investments in foreign companies. The amount at risk is a function of the magnitude of potential exchange rate changes and the size and duration of the foreign currency exposure.

C. FOREIGN EXCHANGE RISK MANAGEMENT PROGRAMME

Managing foreign exchange risk is a fundamental component in the safe and sound management of all institutions that have exposures in foreign currencies. It involves prudently managing foreign currency positions in order to control, within set parameters, the impact of changes in exchange rates on the financial position of the institution. The frequency and direction of rate changes, the extent of the foreign currency exposure and the ability of counterparts to honour their obligations to the institution are significant factors in foreign exchange risk management.

Although the particulars of foreign exchange risk management will differ among institutions depending upon the nature and complexity of their foreign exchange activities, a comprehensive foreign exchange risk management programme requires:

- establishing and implementing sound and prudent foreign exchange risk management policies; and

- developing and implementing appropriate and effective foreign exchange risk management and control procedures.

Foreign Exchange Risk Management Policies

Well articulated policies, setting forth the objectives of the institution's foreign exchange risk management strategy and the parameters within which this strategy is to be controlled, are the focal point of effective and prudent foreign exchange risk management. These policies need to include:

- a statement of risk principles and objectives governing the extent to which the institution is willing to assume foreign exchange risk;

- explicit and prudent limits on the institutions' exposure to foreign exchange risk; and

- clearly defined levels of delegation of trading authorities.

i) Statement of Foreign Exchange Risk Principles and Objectives

Before foreign exchange risk limits and management controls can be set it is necessary for an institution to decide the objectives of its foreign exchange risk management programme and in particular its willingness to assume risk.

The tolerance of each institution to assume foreign exchange risk will vary with the extent of other risks (e.g. liquidity, credit risk, interest rate risk, investment risk) and the institution's ability to absorb potential losses. As with other aspects of financial management, a trade-off exists between risk and return. Although the avoidance of foreign currency exposure or the hedging of such exposure may eliminate foreign exchange risk, such a position may not be desirable for other sound business reasons. Accordingly, the objective of foreign exchange risk management need not necessarily be the complete elimination of exposure to changes in exchange rates. Rather, it should be to manage the impact of exchange rate changes within self imposed limits after careful consideration of a range of possible foreign exchange rate scenarios.

ii) Foreign Exchange Risk Limits

Each institution needs to establish explicit and prudent foreign exchange limits, and ensure that the level of its foreign exchange risk exposure does not exceed these limits. Where applicable, these limits need to cover, at a minimum:

- the currencies in which the institution is permitted to incur exposure; and
- the level of foreign currency exposure that the institution is prepared to assume.

Foreign exchange risk limits need to be set within an institution's overall risk profile, which reflects factors such as its capital adequacy, liquidity, credit quality, investment risk and interest rate risk. Foreign exchange positions should be managed within an institution's ability to quickly cover such positions if necessary. Moreover, foreign exchange risk limits needs to be reassessed on a regular basis to reflect potential changes in exchange rate volatility, the institution's overall risk philosophy and risk profile.

Authorised currencies will normally include currencies in which the institution may be called on to settle foreign exchange transactions. These are usually the currencies in which the institution or its customers conduct business.

Limits on an institution's foreign exchange exposure should reflect both the specific foreign currency exposures that arise from daily foreign currency dealing or trading activities (transactional positions) and those exposures that arise from an institution's overall asset/liability infrastructure, both on- and off-balance sheet (structural or translational positions). The establishment of aggregate foreign exchange limits that reflect both foreign currency dealing and structural positions helps to ensure that the size and composition of both positions are appropriately and prudently managed and controlled and do not overextend an institution's overall foreign exchange exposure.

Usually, risk limits are established in terms of a relationship between the foreign exchange position and earnings or capital, or in terms of foreign exchange volume, such as total dollars or numbers of transactions.

Although the overall assessment of foreign exchange counterparties is an integral component of any foreign exchange operation, this may be conducted by an institution's credit risk management function, thus obviating the need for separate counterparty assessment within the institution's foreign exchange operations.

iii) Delegation of Authority

Clearly defined levels of delegated authority help to ensure that an institution's foreign exchange positions do not exceed the limits established under its foreign exchange risk management policies. Authorities may be absolute, incremental or a combination thereof, and may also be individual, pooled, or shared within a committee.
The delegation of authority needs to be clearly documented, and must include at a minimum,

- the absolute and/or incremental authority being delegated;
- the units, individuals, positions or committees to whom authority is being delegated;
- the ability of recipients to further delegate authority; and
- the restrictions, if any, placed on the use of delegated authority.

The extent to which authority is delegated will vary among institutions according to a number of factors including:

- the institution's foreign exchange risk philosophy;
- the size and nature of an institution's foreign exchange operations; and
- the experience and ability of the individuals for carrying out the foreign exchange risk management activities.

Foreign Exchange Risk Management and Control Procedures

Each institution engaged in foreign exchange activities is responsible for developing, implementing and overseeing procedures to manage and control foreign exchange risk in accordance with its foreign exchange risk management policies. These procedures must be at a level of sophistication commensurate with the size, frequency and complexity of the institution's foreign exchange activities.

Foreign exchange risk management procedures need to include, at a minimum:

- accounting and management information systems to measure and monitor foreign exchange positions, foreign exchange risk and foreign exchange gains or losses;
- controls governing the management of foreign currency activities; and
- independent inspections or audits.

i) Measurement of Foreign Exchange Risk

Managing foreign exchange risk requires a clear understanding of the amount at risk and the impact of changes in exchange rates on this foreign currency exposure. To make these determinations, sufficient information must be readily available to permit appropriate action to be taken within acceptable, often very short, time periods.

It is only through the accurate and timely recording and reporting of information on exchange transactions and currency transfers that foreign currency exposure can be measured and foreign exchange risk controlled. Accordingly, each institution engaged in foreign exchange activities needs to have an effective accounting and management information system in place that accurately and frequently records and measures:

- its foreign exchange exposure; and
- the impact of potential exchange rate changes on the institution.

At a minimum, each institution should have in place monitoring and reporting techniques that measure:

- the net spot and forward positions in each currency or pairings of currencies in which the institution is authorised to have exposure;
- the aggregate net spot and forward positions in all currencies; and
- transactional and translational gains and losses relating to trading and structural foreign exchange activities and exposures.

ii) Control of Foreign Exchange Activities

Although the controls over foreign activities will vary among institutions depending upon the nature and extent of their foreign exchange activities, the key elements of any foreign exchange control programme are well-defined procedures governing:

- organizational controls to ensure that there exists a clear and effective segregation of duties between those persons who;
  - ~ initiate foreign exchange transactions; and
  - ~ are responsible for operational functions such as arranging prompt and accurate settlement, and timely exchanging and reconciliation of confirmations, or account for foreign exchange activities.
- procedural controls to ensure that:

  - ~ transactions are fully recorded in the records and accounts of the institution;
  - ~ transactions are promptly and correctly settled; and
  - ~ unauthorized dealing is promptly identified and reported to management; and

- controls to ensure that foreign exchange activities are monitored frequently against the institution's foreign exchange risk, counterparty and other limits and that excesses are reported.

Moreover, each institution needs to ensure that employees conducting foreign exchange trading activities on behalf of the institution do so within a written code of conduct governing foreign exchange dealing. Such a code of conduct should include guidance respecting trading with related parties and transactions in which potential conflicts of interest exists. These should include trading with affiliated entities, personal foreign exchange trading activities of foreign exchange traders, and foreign exchange trading relationships with foreign exchange and money market brokers with whom the institution deals. Each institution should ensure that these guidelines are periodically reviewed with all foreign exchange traders.

The use of hedging techniques is one means of managing and controlling foreign exchange risk. In this regard, many different financial instruments can be used for hedging purposes, the most commonly used, being derivative instruments. Examples include forward foreign exchange contracts, foreign currency futures contracts, foreign currency options, and foreign currency swaps.

Generally, few institutions will need to use the full range of hedging techniques or instruments. Each institution should consider which ones are appropriate for the nature and extent of its foreign exchange activities, the skills and experience of trading staff and management, and the capacity of foreign exchange rate risk reporting and control systems.

Financial instruments used for hedging are not distinguishable in form from instruments that may be used to take risk positions. Before using hedging products, institutions must ensure that they understand the hedging techniques and that they are satisfied that the instrument meets their specific needs in a cost-effective manner.

Further, the effectiveness of hedging activities should be assessed not only on the basis of the technical attributes of individual transactions but also in the context of the overall risk exposure of the institution resulting from a potential change in asset/liability mix and other risk exposures such as credit, interest rate and position risk.

In this context, hedging activities need to take place within the framework of a clear hedging strategy, the implications of which are well understood by the institution under varying market scenarios. In particular, the objectives and limitations of using hedging products should be uniformly understood, so as to ensure that hedging strategies result in an effective hedge of an exposure rather than the unintentional assumption of additional or alternate forms of risk.

iii) Independent Inspections/Audits

Independent inspections/audits are a key element in managing and controlling an institution's foreign exchange risk management programme. Each institution should use them to ensure compliance with, and the integrity of, the foreign exchange policies and procedures. Independent inspections/audits should, at a minimum, and over a reasonable period of time, test the institution's foreign exchange risk management activities in order to:

- ensure foreign exchange management policies and procedures are being adhered to;
- ensure effective management controls over foreign exchange positions;
- verify the adequacy and accuracy of management information reports regarding the institution's foreign exchange risk management activities;
- ensure that foreign exchange hedging activities are consistent with the institution's foreign exchange risk management policies, strategies and procedures; and
- ensure that personnel involved in foreign exchange risk management are provided with accurate and complete information about the institution's foreign exchange risk policies and risk limits and positions and have the expertise required to make effective decisions consistent with the foreign exchange risk management policies.

Assessments of the foreign exchange risk operations should be presented to the institution's Board of Directors on a timely basis for review.

D. ROLE OF THE BOARD OF DIRECTORS

The Board of Directors of each institution is ultimately responsible for its exposure to foreign exchange risk and the level of risk assumed. In discharging this responsibility, a

Board of Directors usually charges management with developing foreign exchange risk management policies for the board's approval, and developing and implementing procedures to measure, manage and control foreign exchange risk within these policies.

A Board of Directors needs to have a means of ensuring compliance with the foreign exchange risk management programme. A Board of Directors generally ensures compliance through periodic reporting by management and independent inspectors/auditors. The reports must provide sufficient information to satisfy the Board of Directors that the institution is complying with its foreign exchange risk management programme.
At a minimum, a Board of Directors should:

- review and approve foreign exchange risk management policies based on recommendations by the institution's management;
- review periodically, but at least once a year, the foreign exchange risk management programme;
- ensure that an independent inspection/audit function reviews the foreign exchange operations to ensure that the institution's foreign exchange risk management policies and procedures are appropriate and are being adhered to;
- ensure the selection and appointment of qualified and competent management to administer the foreign exchange function; and
- outline the content and frequency of foreign exchange risk reports to the board.

D. ROLE OF MANAGEMENT

The management of each institution is responsible for managing and controlling the institution's exposure to foreign exchange risk in accordance with the foreign exchange risk management programme.

Although specific foreign exchange risk management responsibilities will vary from one institution to another, management is responsible for:

- developing and recommending foreign exchange risk management policies for approval by the Board of Directors;
- implementing the foreign exchange risk management policies;

- ensuring that foreign exchange risk is managed and controlled within the foreign exchange risk management programme;
- ensuring the development and implementing of an appropriate management reporting system with respect to the content, format and frequency of information concerning the institution's foreign exchange risk position, in order to permit the effective analysis and sound and prudent management and control of existing and potential foreign exchange exposure;
- establishing and utilizing a method for accurately measuring the institution's foreign exchange risk;
- establishing procedures for accurately measuring realised and unrealised foreign exchange trading gains and losses;
- ensuring that an independent inspection/audit function reviews and assesses the foreign exchange risk management programme;
- establishing and implementing procedures governing the conduct and practices of foreign exchange traders;
- developing lines of communication to ensure the timely dissemination of the foreign exchange policies and procedures to all individuals involved in foreign exchange activities and the foreign exchange risk management process;
- reporting comprehensively on foreign exchange risk activities to the Board of Directors at least once a year.
- recommending counterparty limits.

GLOSSARY

Asset / Liability Management

The management and control, within set parameters, of the impact of changes in the volume, mix, maturity, quality, and interest and exchange rate sensitivity of assets and liabilities on an institution.

Credit Risk

The risk of financial loss resulting from the failure of a debtor, for any reason, to fully honour financial or contractual obligations to an institution.

Foreign Currency Translation Gain / Loss

The unrealised gain or loss that is recorded when assets and liabilities, both on- and off-balance sheet, denominated in foreign currencies, are translated into Jamaican dollars on a reporting date and the exchange rates on that date differ from the corresponding rates on the previous reporting date.

Foreign Exchange Contract

A commitment to buy or sell a specified amount of foreign currency at a set time and rate of exchange.

Foreign Exchange Forward Position

The extent to which forward or future purchases and inflows or a currency exceed future sales and outflows. That is, the net foreign exchange position of the institution's future foreign exchange transactions.

Foreign Exchange Overnight Position

The net foreign exchange position (i.e. holdings of any commitments in foreign currencies) of the institution at the close of each business day.

Foreign Exchange Risk

The exposure of the institution to the potential impact of movements in foreign exchange rates. The risk is that adverse fluctuations in exchange rates may result in a loss in Jamaican dollar terms to the institution.

Foreign Exchange Transactional Position

Foreign exchange exposures that arise from daily foreign currency dealing or trading activities.

Foreign Exchange Translational or Structural Position

Foreign exchange exposures that arise from an institution’s overall asset/liability infrastructure, both on- and off-balance sheet.

Hedging

A risk management technique to reduce or eliminate price, interest rate or foreign exchange risk exposures. The elimination or reduction of such exposures is accomplished by entering into transactions that create offsetting risk positions. The concept is that when an institution has an open position which entails a risk that it wishes to avoid or minimise, the institution can undertake a further transaction which compensates for the risk and acts as a hedge. If the hedge is effective, any gain or loss on the hedged risk position will be offset by a loss or gain on the hedge itself.

Interest Rate Risk

The potential impact of movements in interest rates on the institution.

Liquidity

Liquidity is the availability of funds, or assurance that funds will be available, to honour all cash outflow commitments (both on- or off-balance sheet) as they fall due. These commitments are generally met through cash inflows, supplemented by assets readily convertible to cash or through an institution’s capacity to borrow. The risk of illiquidity may increase if principal and interest cash flows related to assets, liabilities and off-balance sheet items are mismatched.

Position Risk

The exposure of the institution to the effect of price changes on the market value of the institution’s portfolio of securities, both on- and off-balance sheet. Price changes may occur because of several factors, such as those solely related to the specific security (e.g. a change in the credit status of an issuer of a security) or those unrelated to any specific attribute of an individual security (e.g., investor preferences/demand, political and economic developments, and broad market price movements). The effect of the price change is a function of the size of the securities position, and the degree of price movement between the purchase date and the date of valuation or sale, as the case may be.

Risk Management

The process of controlling the impact of risk related events on an institution.

Risk Philosophy

A statement of principles and objectives that outlines an institution's willingness to assume risk. An institution's risk philosophy will vary with the nature and complexity of its business, the extent of other risks assumed, its ability to absorb losses and the minimum expected return acceptable for a specific level of risk.

Risk Position

The amount of the institution's exposure to a particular risk.