BANK OF MAURITIUS

Guideline on the Fair Valuation of Financial Instruments

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INTRODUCTION

Fair value accounting is increasingly being applied to a wider range of financial instruments. While the valuation of some instruments is indisputably facilitated by the availability of active markets, the ascertainment of appropriate and reliable values for more complex and less liquid instruments through valuation techniques may represent a real challenge.

Fair value measurement is crucial for an institution's internal risk management system as it is for market participants relying on that institution's accounts for decision-making.

Sound fair valuation can contribute to the enhancement of institutional resilience in a financial environment. Additionally, transparency in valuation practices and methodologies plays a critical role in the promotion of sound financial reporting.

PURPOSE

The purpose of this guideline is to require banks and non-bank deposit-taking institutions (hereinafter referred to as financial institutions) licensed and regulated by the Bank to establish strong governance and control processes around the fair valuation of financial instruments. It emphasizes, *inter alia*, the need for reliable inputs and information sources, allocation of sufficient resources to the valuation process, independent verification, validation processes and consistency in valuation practices for risk management and reporting purposes.

AUTHORITY

This guideline is issued under the authority of section 100 of the Banking Act 2004 and section 50 of the Bank of Mauritius Act 2004.

SCOPE OF APPLICATION

The guideline applies to financial institutions, as defined earlier. It addresses all financial instruments that are measured at fair value, both in normal market conditions and during periods of stress, and regardless of the financial reporting designation within a fair value hierarchy.

EFFECTIVE DATE

The guideline shall take effect as from 1 November 2010.

STRUCTURE OF THE GUIDELINE

There are three sections in this guideline:

Section I:	Board and Senior Management Responsibilities
Section II:	Control Framework for Fair Valuation
Section III:	Reporting and Disclosures

SECTION I: BOARD AND SENIOR MANAGEMENT RESPONSIBILITIES

1. The board of directors (hereinafter referred to as the board) has the prime responsibility for ensuring that adequate governance structures and control processes are put in place for financial instruments that are measured at fair value.

2. The responsibilities for governance structures applicable to all financial instruments so measured shall, in particular, include:
   (i) Establishing written policies and procedures relating to fair valuations;
   (ii) Reviewing valuation model performance especially for issues escalated to the board for decision-making and changes to valuation policies;
   (iii) Ensuring that the financial institution has the resources and capabilities to estimate appropriately the inherent risks and the value of financial instruments, including complex and illiquid instruments;
   (iv) Defining the financial institution's tolerance for exposures subject to valuation uncertainty;
   (v) Ensuring independence in the valuation process between risk taking unit (the unit providing the initial fair valuation estimates) and control unit (the unit ensuring the validity of models at all times);
   (vi) Ensuring the appropriate internal and external audit coverage of fair valuations and related processes and controls;
   (vii) Ensuring the consistent application of accounting and disclosure requirements in line with the applicable accounting framework; and
   (viii) Ensuring the identification of differences, if any, between accounting and risk management measurements and that these are well documented and monitored.

3. The board has also the responsibility for ascertaining that controls and procedures are designed to ensure that fair value estimates are correctly produced and verified and are reliable. The controls and procedures shall, *inter alia*:

   - include well documented policies for all valuation methodologies;
   - detail the range of acceptable practices for the initial pricing, marking to market/model, valuation adjustments, observability[1] and reliability of inputs, and periodic independent

revaluation depending on the nature of the financial instruments and sources of independent prices; and

- Establish the information feeds and thresholds for determining when there is a presumptive case for challenging the valuation model. The valuation model may, for instance, be challenged when valuations or valuation inputs are materially different from available market information.

4. While the approval of strategies and policies respecting fair value practices shall rest with the board, the formulation of same may be delegated, with the necessary written authority, to sub-committees or appropriate risk management platforms. By and large, any other responsibility delegated by the board to sub-committees shall subsequently be monitored and evaluated for effectiveness on a regular basis.

5. Senior Management has the responsibility for:
   - ensuring that the established control policies and practices are implemented with regard to the classification and any subsequent reclassification of financial instruments allowable under relevant accounting rules. Moreover, it shall ensure that these internal policies are applied consistently over time. Documentation supporting the initial classification and any subsequent transfers between asset categories shall be maintained;

   - ensuring that classification and reclassification practices are not used with a view to circumvent accounting requirements in order to achieve a particular result. Of particular importance is the specific information related to reclassifications (e.g. reasons and impacts) that shall be disclosed in accordance with accounting rules;

   - ensuring that when financial instruments are transferred into another portfolio, the accounting and regulatory capital requirements of that portfolio are strictly applied; and
   - handling such responsibilities, as may be delegated to it by the board for the effective control of the fair valuation processes.

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[1] *"Observable inputs" are inputs that reflect the assumptions market participants would use in pricing the asset or liability based on market data obtained from sources independent of the reporting entity. "Unobservable inputs" are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances.*

OUTSOURCING

6. The use of a third-party pricing service for the fair valuation of financial instruments shall not relieve the board of its oversight responsibility or the senior management of its responsibility to ensure appropriate fair valuations and provide supervision, monitoring and management of risks.

7. Senior Management shall have a due diligence process which caters for full understanding and assessment of the third party pricing services. It shall be capable of determining the appropriateness of techniques used, the underlying assumptions and the selection of inputs and consistency of application.

8. The fair valuation of financial instruments shall, in the context of outsourcing, be considered as a non-material activity and financial institutions having recourse to a third-party for this activity shall stand guided by the "Guideline on outsourcing by Financial Institutions" issued by the Bank.

9. The requirements set out at paragraphs 6 to 8 above would not be applicable for transactions which would not entail any residual risk or net fair value adjustments in the books of the financial institution.

SECTION II: CONTROL FRAMEWORK FOR FAIR VALUATION

EVALUATION OF MARKET INFORMATION

10. The relevance and reliability of valuations rest upon the quality and reliability of the input data. A financial institution shall, while selecting appropriate inputs for the valuation process, apply relevant accounting guidance to determine market information and other factors likely to have a material effect on an instrument's fair value. Assessing data sources and input factors is a judgmental process in which all facts and circumstances have to be taken into consideration.

ACTIVE AND INACTIVE MARKETS

11. Where values are determined from an active market, a financial institution shall maximize the use of relevant observable inputs. On the other hand, when estimating fair value using a valuation technique, it shall minimize the use of unobservable inputs.

12. Where a market is deemed inactive leading to the non-availability of observable inputs or transactions, a financial institution shall assess the relevance and reliability of market data based, at a minimum, on the following factors:

    - The frequency and availability of the prices/quotes and whether those prices represent actual or regularly occurring transactions on an arm's length basis;
    - Whether the available prices are relatively consistent with available corroborating market information;
    - Whether prices are transparent and generally available to market participants;
    - The timeliness of the pricing data relative to the frequency of valuations, such that the pricing data can be relied upon;
    - The number of independent sources that produce the quotes/prices. It is also important to consider the dispersion of prices/quotes available. This will assist market participants in assessing the quality of the pricing data;

- The maturity of the market;
- The similarity between the financial instrument sold in a transaction and the instrument held by the institution; and
- The nature of a transaction, and whether it reflects a forced or distressed sale (which will not be relevant) or otherwise involves a seller that needs to sell and one or very few buyers (situation which may require consideration of other information and management judgement in determining the implications for fair value estimate).

13. A financial institution, using a valuation technique to fair value its financial instruments, shall ensure that the chosen technique reflects current market conditions. Therefore, a transaction price in the same or a similar instrument shall be considered, in the assessment of fair value, as a current transaction price is likely to reflect current market conditions. By and large, the financial institution shall consider transaction prices, but shall not conclude automatically that any transaction price is determinative of fair value. If such transaction prices are used, they might require significant adjustment based on unobservable data.

14. A financial institution shall be able to identify when active markets become inactive as this will affect the quality, transparency and reliability of inputs in a valuation exercise. It shall have in place appropriate procedures for valuing financial instruments when markets become inactive and these procedures shall be well documented and approved.

VALUATION METHODOLOGIES

15. The key characteristics of sound processes for valuation methodology design and validation shall include:

(i) Independence of model validation

A valuation model, including any material changes to it, must be validated by an independent, suitably qualified group prior to usage, with periodic reviews to ensure that the model remains suitable for its intended use at all times.

The validation group shall have reporting lines that are independent of the risk taking unit.

(ii) Rigorous validation

Model validation processes shall be systematically applied for both internally-generated models and, to the extent possible, vendor-provided models. Validation includes evaluations of:

- the model's theoretical soundness and mathematical integrity;
- the appropriateness of model assumptions, including consistency with market practices and with relevant contractual terms of transactions;
- sensitivity analyses performed to assess the impact of variations in model parameters on fair value, including under stress conditions; and
- benchmarking of the valuation result with the observed market price at the time of valuation or independent benchmark model.

A financial institution shall understand and document the limitations to the performance of the model so as to understand the conditions under which valuations would not reasonably reflect a market price. Appropriate action shall be taken when performance of the model is not acceptable. This action could include valuation adjustments for model limitations or model risk, or if necessary, changes to the model.

(iii) Integrated control processes

A financial institution shall have in place policies defining a regular cycle for valuation model review that reflects the vulnerabilities of individual models. Policies shall also identify specific triggers (e.g. indications of deterioration in model performance or quality) that will cause the review cycle for a valuation model to be accelerated.

(iv) Internal Audit Programme

Sound internal audit programmes play an important role in the financial institution's validation process. Internal auditors shall *inter alia*:

(i) review the control environment, the availability and reliability of information or evidence used in the valuation process, and the reliability of estimated fair values. This includes the price verification processes and testing valuations of significant transactions;

(ii) ascertain the appropriateness of gains and losses on fair valuation, especially those taken to the Income Statement; and

(iii) evaluate whether the disclosures about fair values made by the financial institution are in accordance with applicable accounting standards and regulatory requirements.

(v) Stress-testing

Stressed market conditions, market discontinuity or illiquidity can make valuation of many instruments particularly challenging. In this context, a financial institution shall test and revisit the performance of its valuation models under possible stressed conditions, so that it may understand the limitations of the models under such conditions.

The financial institution's valuation methodologies are expected not to place undue reliance on a single information source especially when valuing complex or illiquid products but to use a diversity of approaches and a range of mechanisms, put in place, to cross-check valuations.

16. The requirements of paragraph 15 would not be applicable for transactions which would not entail any residual risk or net fair value adjustments in the books of the financial institution.

VALUATION ADJUSTMENTS

17. While a fair value estimate shall be made in accordance with applicable standards and guidance, if, in the opinion of management, the fair value is lower than that determined by the fair valuation process, the lower value shall be applied to the instrument.

18. For financial reporting purposes, a financial institution shall include appropriate risk factors that market participants would consider in determining fair value. Risk factors may include risk related to model uncertainty and limitations, liquidity or counterparty. To the extent that risks are not incorporated in the valuation estimate or valuation model, the financial institution

shall make adjustments to estimates of fair value to ensure the valuation properly reflects all appropriate risks, consistent with a market participant's view and, in accordance with applicable standards and guidance.

FAIR VALUE GAINS AND LOSSES

19. While Fair value gains and losses shall, in accordance with and as far as permissible by accounting standards, be taken to the Income Statement, fair value gains, given their unrealized nature, shall not, from a prudential perspective, count towards distributable profits or earnings for the payment of dividends either in cash or in kind.

SECTION III: REPORTING AND DISCLOSURES

MANAGEMENT INFORMATION SYSTEM

20. Financial institutions shall have a reporting system for proper communication of the entire fair valuation process and valuation estimates. To this effect, the availability of an effective management information system shall be imperative.

FAIR VALUATION DISCLOSURES

21. While fair valuation disclosures shall be made in accordance with applicable accounting framework and regulatory disclosure requirements, disclosures that provide explanations on the assumptions and valuation techniques used in the fair value exercise are of particular interest to market participants.

22. Disclosure of the financial institution's valuation governance and control processes may also lead to a better understanding of the quality of its fair valuations and the robustness of its related risk management processes. These disclosures are especially important in times of market stress and uncertainty.

23. A financial institution shall regularly review its disclosure policies to ensure that the information disclosed continues to be relevant to its business model and products and to current market conditions.