NOTE ON THE CHANGE IN METHODOLOGY IN MONETARY STATISTICS

The Bank of Mauritius has been compiling a Depository Corporations Survey (DCS) based on the framework laid down in the IMF's Monetary and Financial Statistics Manual (MFSM) since June 2003. The MFSM, which provides the conceptual framework for presenting monetary and financial statistics, includes all depository corporations in Mauritius, notably the Bank of Mauritius, banks and non-bank deposit-taking institutions. The MFSM considers broad money a very important concept in its methodology and considers the DCS, which presents data on broad money, to be the "major focus of monetary statistics" and "to constitute a core set of data for macroeconomic analysis". Besides assisting in monetary policy formulation and monitoring, the statistics covered form a basis for the development of a statistical framework for assessing financial sector stability.

The MFSM provides a set of tools for identifying, classifying, and recording stocks and flows of financial assets and liabilities; describes standard, analytically oriented frameworks in which the statistics may be presented and identifies a set of analytically useful aggregates within those frameworks. The statistics cover all financial assets and liabilities of all institutional units within an economy, with a particular focus on the financial corporations sector. Most financial assets are creditor claims that give rise to corresponding obligations, or liabilities, of debtors. A financial claim is an asset that entitles the creditor to receive a payment, or series of payments, from the debtor in the circumstances specified in the contract between them. Other financial instruments of a contingent nature, such as loan guarantees, are not financial assets and therefore are not included in the monetary and financial statistics.

The set of principles and concepts underlying the monetary and financial statistics as recommended by the framework of the MFSM are:

1. *Economic Territory, Residence, and Center of Economic Interest.* The delineation between resident and nonresident entities is a key feature of all macro-statistical systems, including the monetary and financial statistics. The separate identification of stocks and flows associated with claims on and liabilities to nonresidents is necessary for the measurement of a country's international reserves and its external debt. The definition of residence is based on the concepts of economic territory and center of economic interest rather than on nationality or legal criteria. An institutional unit has a center of economic interest and is a resident of a country when, from some location (dwelling, place of production, or other premises) within the economic territory of the country, the unit engages and intends to continue engaging (indefinitely or for a finite period) in economic activities and transactions on a significant scale. Entities that do not satisfy the above requirements are referred to as nonresidents.

2. *Sectorization.* In defining monetary and credit aggregates, it is necessary to identify the money (credit) issuing and holding sectors. Institutional units differ with respect to their economic objectives, functions, and behavior and are grouped into sectors that include units with similar

characteristics. The resident units of the economy are grouped into the following mutually exclusive institutional sectors: financial corporations, central government, nonfinancial corporations and other resident sectors. The financial corporations sector contains these subsectors (a) the central bank (b) other depository corporations (c) other financial corporations which comprise other financial intermediaries, insurance corporations, pension funds and financial auxiliaries and (d) public financial corporations. The nonfinancial corporations sector contains three subsectors: (a) public nonfinancial corporations and (b) other nonfinancial corporations.

3. *Classification.* The assets and liabilities of the depository corporations sector are classified in the following broad categories: (i) Monetary gold and SDRs, (ii) Currency and deposits, (iii) Securities other than shares, (iv) Loans, (v) Shares and other equity, (vi) Insurance technical reserves, (vii) Financial derivatives, (viii) Other accounts receivable/payable and (ix) Nonfinancial assets. The secondary level of classification disaggregates currency and deposits into separate categories for currency, transferable deposits, savings and time deposits. Shares and other equity on the liability side of the balance sheets of depository corporations are disaggregated into the following categories (1) funds contributed by owners; (2) retained earnings; (3) general and special reserves; (4) SDR allocations (applicable to the central bank); (5) valuation adjustments and (6) Current Year Results. Other accounts receivable/payable are classified as (1) trade credit and advances and (2) other.

4. *Valuation.* Market price is used as the primary concept of valuation of transactions, other financial flows, and stocks. Recognizing that market price quotations are not available for financial assets that are not traded in secondary markets or that are traded on an infrequent basis, the market-equivalent values for such financial assets have to be estimated, which are referred to as fair values. Shares and other equity on both sides of the balance sheet need to be valued at market prices. For the monetary statistics, it is recommended that, while shares and other equity on the asset side of the balance sheet be valued at market prices, some components of shares and other equity on the liability side be valued at historical, or book values. The valuation of loans is an exception to the valuation principle based on market price or fair value. In particular, loan values should be based on creditors' outstanding claims without adjustment for expected loan losses. The standard unit of account for the monetary and financial statistics is the national currency unit. Foreign-currency-denominated assets and liabilities must be converted to national currency units using the market exchange rate prevailing on the transaction date, specifically the midpoint between the buying and selling rates.

5. *Time of Recording.* Transactions must be recorded on an accrual, rather than cash, basis, thus coinciding with the change in ownership of the asset rather than with the time of payment.

6. *Aggregation, Consolidation and Netting.* Aggregation refers to the summing of stock and flow data across all institutional units within a sector or subsector, or of all assets or liabilities within a

particular category. Consolidation refers to the elimination of stocks and flows that occur between institutional units that are grouped together. Individual units or sectors may have the same kind of transaction both as a use and as a resource and the same kind of financial instrument as an asset and as a liability. Combinations whereby the values of some elementary items are offset against items on the other side of the account or that have the opposite sign are called net recordings.

The organization and presentation of monetary statistics follow a hierarchical approach based on two general data frameworks—sectoral balance sheets and surveys. The first and most basic framework is the sectoral balance sheet, which contains the highly disaggregated stock and flow data for all categories of assets and liabilities of an individual subsector within the financial corporations sector. The second framework is the survey, in which the data from the sectoral balance sheets of one or more of the financial corporations subsectors are combined into more aggregated asset and liability categories that are particularly useful for analytical purposes. The surveys comprise the Central Bank Survey (CBS) and the Other Depository Corporations Survey (ODCS). The Depository Corporations Survey (DCS) consolidates the CBS and the ODCS.

For monetary policy purposes, the focus is on the data for the depository corporations sector, presented in the CBS, the ODCS, and the DCS. The CBS contains data on all components of the monetary base, which comprises the central bank liabilities underlying the monetary aggregates of the economy. The DCS covers the accounts of the depository corporations and is a consolidation of the CBS and the ODCS. The DCS is a consolidated statement of stocks and flows for the accounts of all financial sector corporations that incur liabilities included in the national definition of broad money. The framework of the DCS is designed to facilitate analysis of broad money and its components, credit aggregates and their components, and depository corporations' foreign assets and liabilities and other assets and liabilities. By maintaining the balance-sheet identity in the DCS, the broad money liabilities of depository corporations are linked to their claims on (i.e., credit to) nonresidents and sectors of the domestic economy, and to their other assets and liabilities. The balance sheet presentation of the DCS links depository corporations' broad money liabilities to their foreign assets and liabilities and to their claims on and liabilities to central government, thereby linking the monetary statistics to the balance of payments and government finance statistics, respectively.

The DCS can be rearranged to show that broad-money liabilities (BML) equal the sum of net foreign assets (NFA), domestic credit (DC), and other items (net) (OIN). That is, BML = NFA + DC – OIN. DC comprises net claims on central government and claims on other sectors. OIN denotes a residual category for other liabilities less other assets, when other liabilities include all liabilities not included in broad money. The components of DC are shown as DC = NCG + COS where NCG and COS denote net claims on central government and claims on other sectors (claims on the private sector), respectively. The components of NCG in the DCS are directly linked to the government finance statistics. Data on the transaction flows for the underlying components of net claims on central government can be used to analyze the expansionary or contractionary effects on broad money that can arise from financial transactions between the depository corporations and the central government. Growth in net claims on central government—through a rise in depository corporations' holdings of government securities, direct lending to government, and/or reduction in government deposit holdings—will exert an expansionary influence on the broad-money liabilities of depository corporations. The change in COS shows the total flows arising from changes in depository corporations' claims on resident sectors other than the central government. An increase in these claims has an expansionary effect on broad money liabilities, whereas a decrease in these claims has a contractionary effect. Data on the sectoral components of the change in COS can be used to analyze the sources of expansionary or contractionary effects on broad money, arising from growth or decline in depository corporations' claims on the various sectors of the economy.

From the DCS, the following measures of money can be derived:

Narrow Money Liabilities	=	Currency outside Depository Corporations	+
		Rupee Transferable Deposits	
Broad Money Liabilities	=	Narrow Money Liabilities	+
		Rupee Savings Deposits	+
		Rupee Time Deposits	+
		Foreign Currency Deposits	+
		Securities other than Shares	

The BML thus derived for Mauritius excludes deposits of Global Business License Holders held with banks, as it is postulated that such deposits do not have any bearing on the domestic economic developments. Similarly, the claims on Global Business License Holders are excluded from the Claims on Other Sectors for similar reasons.