CAIIB – Risk Management – Module C
TREASURY MANAGEMENT

It is necessary to understand and appreciate the three distinct roles Treasury is expected to play:

a. Liquidity Management: Treasury is responsible for managing short-term funds across currencies, and also for complying with reserve requirements (CRR and SLR)

b. Proprietary Positions: Treasury may trade in currencies, securities and other financial instruments, including derivatives, in order to contribute to Bank's profits

c. Risk Management: Treasury will aid Management on one hand and Bank's clients on the other hand, in managing market risk, using derivative instruments

The multiple roles necessitate Treasury to manage an **ALM Book** for internal risk management, a **Merchant Book** for client-related currency and derivative transactions, and a **Trading Book** for managing its proprietary positions. ALM Book also includes traditional role of Treasury in liquidity management.

Though India has a managed exchange rate regime, Rupee exchange rate is effectively a free-float, with minimum intervention by the central bank. In an open economy, exchange rates are further influenced by macro-economic factors like *relative* inflation, GDP growth rate, stock markets and commodity markets.

More recently, currency futures have been introduced under the combined stewardship of RBI and SEBI. Currency futures are being traded in two major exchanges, with fairly good liquidity in 1 to 3 month contracts. Interest rate futures market is also being activated. Regulators are seriously discussing introduction of new products such as credit derivatives, exchange traded options and cross currency futures.

RBI has permitted banks to borrow and invest through their overseas correspondents, in foreign currency subject to a ceiling of 50% of their tier-1 capital, or USD 10 million, whichever amount is higher.

Treasury operates in markets which are almost free of credit risk, and hence requires very little capital allocation. Secondly, the treasury activity is highly *leveraged* – the risk capital allocated to Treasury may range between 2% to 5% of the size of transactions handled, hence the return on capital is quite high.

Treasury may do transactions similar to the ones done for the customers in forward market – buy forward and sell forward – without investing funds in actual purchase / sale of currency.

Interest arbitrage exists only when one of the currencies exchanged is not fully convertible. There is no interest arbitrage between free currencies, as the forward premium / discount is equal to the interest rate differentials. The swap is otherwise used to eliminate currency and interest rate mismatches. The swap route is used extensively to convert cash flows arising from principal and interest payments of loans from one currency to another currency, with or without involving actual exchange of funds. Such products fall under the scope of derivatives.

Inter-bank markets are at the forefront of financial markets and are the first to signal any changes in money supply and the resultant liquidity in the system. On any particular.

Currently the CRR is 5% of bank’s demand and term liabilities w.e.f.17.01.2009.

An amendment to the ACT in 2006 removed the floor and ceiling limits w e f April 2007, enabling RBI to stipulate the CRR at its discretion.

An amendment to the Act has removed the minimum requirement of SLR w e f January 2007, allowing greater flexibility to RBI.

CRR is an important monetary policy instrument of RBI to influence liquidity in the market. The RBI does not pay interest on CRR balances held by banks.

Secondary market for CPs is fairly active and the indexed return on CP is used as a benchmark rate for short term advances.

Repo and reverse rates thus become policy rates of RBI at which banks may borrow from or lend to RBI, respectively, based on their liquidity position. Under the annual policy review announced by the Governor of RBI in April 2009, RBI has fixed Repo and Reverse Repo rates at 4.75% and 3.25% respectively.

Overnight inter-bank rates should normally move within the bandwidth of 150 bp, set by RBI. RBI generally conducts Repo auctions for overnight period, twice daily – but RBI has full discretion to change frequency of the auctions, period of Repo and to accept or reject banks’ bids for Repo / Reverse Repo, either in full or in part. In view of recent liquidity crisis in global markets, RBI has also conducted 3-month repo actions to provide term money to banks

Collateralised Borrowing and Lending Obligation (CBLO)

CBLO is a money market instrument launched by Clearing Corporation of India Ltd. (CCIL). CBLO is essentially a Repo instrument, which is used not only by banks and primary dealers, but also by all other players like financial institutions, insurance companies, mutual funds and corporates who can not access call money market. A borrower can deposit government securities with CCIL and borrow against such securities (sell securities) from others who have surplus liquidity, subject to repayment (repurchase of securities) after a fixed term ranging from 1 day to 1 year. CCIL acts as an intermediary for the Repo trade, so that the lenders and borrowers do not have any default risk.

CBLO is actively traded in secondary market, hence the lender in case of need, readily sell and encash the CBLO without waiting till due date. The borrower can also prepay any time by purchasing the CBLO in the market. All settlements take place through CCIL.

There are proposals to permit Repo / CBLO in corporate securities (non-SLR) also, agreed in principle by RBI and SEBI, but are yet to be implemented.

The Government of India borrows from public by issue of securities, to finance its deficit – which is the difference between Government's income and expenses. RBI uses government securities to control liquidity in the market in order to influence the interest rates. RBI may absorb liquidity by selling the securities in the market and may infuse liquidity by buying back the securities from the public. These are known as open market operations (OMO) of the central bank.

Banks invest in government securities not only for meeting with SLR requirement, but also to profit from price changes of the securities. Bank's investments are classified in to Held till Maturity (HTM) – consisting of securities mainly for investment purpose, Available for Sale (AFS) and Held for Trading (HFT) which consist of tradable securities. Securities under HFT are actively traded and are marked-to-market (MTM) regularly for accounting purpose.

Overseas Direct Investment (ODI) RBI allows corporates to invest in joint ventures / subsidiary units overseas, from their Rupee resources subject to a cap based on their networth (currently 3 times their net worth). This has allowed leading Indian business groups to expand globally by establishing companies near their markets or by acquiring other companies.

Free remittance Individuals are now permitted to remit overseas freely, without RBI approval, up to USD 200000 a year, for any purpose (with a few exceptions like gambling and margin trading). The may choose to invest the funds in global debt . equity or simply spend the money for consumption purposes.

RBI, as lender of last resort, provides liquidity to the banks through Repo auction, where RBI purchases securities from banks with an agreement to sell back the securities after a fixed period. The difference in sale and purchase prices constitutes interest received by RBI. In case of excess liquidity, banks lend funds to RBI under Reverse Repo in similar manner and receive interest by way of price differentials. All the securities are held in the SGL account of the bank with RBI, hence no physical transfer of securities takes place either way.

RBI conducts Repo / reverse Repo auctions daily for overnight funds. Currently RBI is conducting Repo actions thrice daily, as the banks need to maintain their liquidity (adequate funds to meet payment obligations) under RTGS system. In order to help banks wade through the recent crisis in global liquidity, RBI has also conducted fixed rate term repo auctions for 90 days, and extended stand-by liquidity facilities. The additional facilities are also extended at repo rate. RBI has full discretion to change the term of repo and also to accept or reject the bids received from banks in the Repo / Reverse Repo auctions.

It is the objective of RBI policy that the money market rates should normally move within the *corridor* of the policy rates (currently within the band of 3.25% and 4.75%). The Reverse Repo rate would lay the floor, which is the minimum rate of interest banks can earn on excess funds, and the Repo rate would lay the upper side of the corridor as the maximum rate of interest at which banks can borrow overnight funds from RBI (when funds are not available in inter-bank market). By restricting the movement of overnight interest rates within the corridor, RBI is able to reduce fluctuations in the short-term interest rates. At the same time, by moving either side of the corridor, RBI achieves flexibility to increase or decrease interest rates, without directly regulating the rates. In other words, RBI uses Repo as a market based instrument to carry-out its policy objectives.

In order to further consolidate its control over the inter-bank market, with effect from first quarter of 2003, RBI has imposed ceiling over call money lending and borrowing by banks. Banks can borrow and lend overnight up to a maximum of 100% and 25% respectively of their capital funds. The limits apply to fortnightly average balances of call and notice money – maximum borrowing on any day is limited to 125% of capital, and maximum lending is limited to 50% of capital, within the overall limits. The measure has curbed wild fluctuations in call money market and helped development of term money and repo markets.

Negotiated Dealing System is an electronic platform for facilitating dealing in government securities and money market instruments. The NDS membership is open to banks, primary dealers, mutual fu8nds, financial institutions and insurance companies, who maintain SGL account with RBI, and also those who have constituent SGL accounts through banks / depository institutions.,

All security dealings now take place on NDS through screen based trading, with anonymous order matching. The securities clearing against assured payment is handled by Clearing Corporation of India Ltd. (CCIL) a specialized institution promoted by major banks. Physical delivery of cheques and written confirmations are no longer necessary for settlement. All inter-bank money market deals are to be necessarily done through the NDS and reported to CCIL. Negotiated security transactions may also be reported on NDS.

☐ *FX Clear* is a forex dealing system developed by CCIL for foreign exchange transactions (USD/INR as well as cross currencies). Currently CCIL is providing straight through processing (STP) for USD/INR, and CCIL as an intermediary settles inter-bank USD/Rupee deals on net basis, so that individual banks need not exchange payments for each transaction.

☐ *Real Time Gross Settlement System (RTGS)* has been fully activated by RBI from October 2004. All inter-bank payments and customer remittances are settled instantly under the RTGS. Banks' accounts with all the branch offices of RBI are also integrated. Most of the urban centres of p-ublic and private sector banks are already partyicipating in the RTGS.

Since RTGS involves instant payments, banks need to maintain adequate funds with RBI throughout the day. To meet any shortfall in funds, RBI has put in place systems to provide intra-day liquidity through automatic repo against securities lodged by respective banks.

The Institute for Banking Research and Development of Technology (IBRDT) has developed the Indian Financial Net Work (INFINET) as a secure communication backbone for the banking and financial sectors. The INFINET has helped introduction of Structured Financial Messaging System (SFMS) which facilitates domestic transfer of funds and authenticated messages, similar to the SWIFT used by banks for international messaging.

Depository Institutions like NSDL (National Security Depository Ltd.) and CSDL (Central Security Depository Ltd.) provide delivery vs. payment (DVP) for secondary market deals in equity and debt paper. Since the funds transfer and securities transfer takes place between the buyer and seller on the electronic platform simultaneously, the settlement risk is eliminated.

NEFT and on-line Payments All inter-bank and intra-bank remittances can now be effected on the same day by electronic funds transfer using the National Electronic Funds transfer system introduced by RBI. RBI has developed Structured Financial Messaging System (SFMS) – similar to SWIFT adopted banks for international funds transfer etc. – where interbank transfers are sorted out and cleared by National Clearing Cell of RBI. Banks which are fully computerized can access any account at any branch on line and demit / credit funds, instantly for inter-bank transfers, without using paper.

In view of the growing complexities in payment systems, the RBI has constituted Board for Regulation and Supervision of Payment and Settlement Systems at the highest level, as a sub-committee of Central Board.
India today has sophisticated payment and settlement systems on par with developed markets.

We also learnt lessons from the recent banking crisis which originated in US and Europe, but soon got translated in to global recession, that globalization is not an unmixed blessing and we need to continue to have minimum capital regulations in order to minimize systemic risks.

NEW KEY WORDS:

Marking to market (MTM) is the process of valuing any financial asset or liability at current market rates – MTM value is current market value of a tradable instrument.
D-mat or dematerialization refers to debt and equity instruments which are held in electronic form in the accounts maintained by depository institutions, resulting in paperless trade and instant settlements.
Systemic risk – is the risk of any financial crisis spreading across markets globally, due to interlinking of markets.