Bank Treasury – Nuances for Statutory Audit

It is imperative that an auditor obtains a complete overview of the treasury operations of a bank before statutory audit. After conducting a risk assessment of the treasury processes, the audit programme needs to be designed in a manner that it dovetails into not just the control assessments of the treasury process but there is an assurance that the figures appearing in the financial statements as well as the disclosures are true and reflect fairly the affairs of the bank treasury. This article provides an overview of Bank Treasury in context of statutory audit.

As AS17 – Segment Reporting became applicable to banks, Reserve Bank of India (RBI) prescribed the segments as "Treasury Operations" and "Banking Operations". Financial Statements of Banks were then required to disclose the data separately. Suddenly, the focus came upon the profits of the Treasury Operations and their contribution to the overall profitability of a bank. Amongst auditors too the focus shifted to learning of these operations as markets kept on evolving and newer treasury products developed. This was also necessary as computer systems developed and enterprise-wide solutions were implemented in the treasuries with an interface into the main banking application.

Essentially, the treasury operations can be broadly divided into: -

- **Fixed Income:** It includes management of investments in the domestic market in the local currency and/or investment in the foreign securities in the foreign currency.
- **Foreign Exchange:** It involves management of foreign exchange assets, liabilities and reserves.
- **Derivatives:** These are undertaken to hedge against various risks arising from various facets of assets and liabilities such as interest rate risks, foreign exchange rate risks, credit risks, etc.

– CA. Ashutosh Pednekar
(The author is a member of the Institute. He can be reached at ashu01@mpchitale.com)

In addition to the above a bank can execute certain transactions on behalf of its constituents. These are also handled by the treasury operations.

It is imperative that an auditor obtains a complete overview of the treasury operations. The following needs to be focused upon while conducting a risk assessment of the treasury processes: -

A. The bank's overall management structure

B. The bank's treasury structure

C. The deal execution process

D. The deal settlement process

E. The deal monitoring process

F. The flow of information and data to and from the treasury

G. The accounting and valuation systems and procedures

H. The computer system that helps in all the above processes and the reliance that an auditor can place on the effective and efficient working of the same

Each of the above processes and systems coagulate to create the treasury operations of a bank. And each of them has its own role to play in the overall control systems of a bank functioning.

A. Bank's Overall Management Structure

The Board of Directors of a bank has the overall responsibility of guiding the treasury operations. The Board specifies its thinking through

the Investment Policy. This policy lays down the guiding principles of the treasury activity. RBI requires that this policy be reviewed at least once every year. This is on the premise that the banking business as also the business of its constituents is dynamic and ever changing. Hence, there is a need to review this policy on an annual basis. All the internal procedures and systems flow from this policy. An Investment Committee of the senior management, including one or more whole time directors, is constituted to ensure that the investment policy is properly implemented. An auditor needs to understand the intentions of the management by perusing and reviewing the investment policy.

B. Bank's Treasury Structure

International best practices have divided the treasury into three sections – the front office, the middle office (also the mid-office) and the back office. These three offices complement each other in conduct of the treasury operations within the framework laid down by the bank management in the investment policy as well as the control expectations of the management and the regulator. The audit process should review the treasury structure and be satisfied that inherent controls exist in the treasury structure such that there is no overlap of roles and responsibilities as also the intentions of the best practices of segregation of duties are in place and working effectively. The auditor should discuss these matters with the head of the treasury. These discussions should document the treasurer's own understanding of the structure and his expectations of the control systems.

C. Deal Execution Process

The front office is responsible for the deal execution. There are different dealers for different desks of a treasury. There would be dealers for each of the three components of the treasury—fixed income, forex and derivatives. And within each component there can be dealers for each type of activity. The auditor could discuss with these dealers and understand the mechanism and processes followed by them while executing a deal and care taken by them in adhering to the overall framework of the investment policy.

D. Deal Settlement Process

The back office is responsible for settling the deal executed by the front office. Once a deal is executed by the dealers, the back office of both the counterparties confirms the transactions to each other. On the settlement day the transaction is settled by exchange of funds or securities. In India the domestic fixed income segment is executed on various trading platforms, some are anonymous such as the NDS-OM, NEAT, BOLT; some are non-anonymous and includes deals done telephonically (with or without brokers), through the auctions of RBI etc. There are different roles for the back office to play in each of these trading platforms/mechanisms. The auditor is required to understand the manner in which the back office executes its role in the bank; the control systems that they have implemented and the manner in which issues or disputes are resolved with counterparties.

E. Deal Monitoring Process

The mid-office can be considered to be the conscience keeper of the treasury. The mid-office is responsible for ensuring adherence to the various tolerance limits specified by the bank management. These limits include NOP, AGL, VaR, stop loss limits, currency limits, broker limits, company/group/industry exposure limits etc. Normally, the mid-office is responsible for proper valuation of the entire portfolio. Performance monitoring of the treasury is also done by the mid-office. Concepts such as VaR (Value at Risk) are used for this purpose. Considering its role, the mid-office does not report to the treasurer but to the chief of risk management. As our banks move towards the regime of implementation of the recommendations of the Basel Committee, the mid-office will need to play a greater role in treasury operations. As the risk monitoring torchbearers, this function needs to be closely understood by the auditor. The more effective the role of the mid-office the greater the reliance

an auditor can place on the internal checks and controls of the bank. The auditor should discuss with the mid-office their concerns of the bank's treasury operations and the strategies adopted by them to ensure that controls function within the risk tolerance levels.

F. Flow of Information from and to the Treasury

All these functions can collapse unless there is a robust mechanism of flow of information within the bank. A bank's investment committee needs data of its assets and liabilities and the maturity pattern too. This asset-liability management is the first cornerstone while determining the directions that the bank wants a treasury to undertake. It is essential that the information is available to the front office in a clear, lucid and unambiguous manner so that the deals executed by them are in harmony with the overall long and short-term business objectives of the bank. Likewise, the information flow from the treasury is critical to ensure that banking operations move in an unhindered manner. The auditor should acquaint himself with this flow of information and the inherent checks and controls that the bank would have designed in it. This aid significantly in the risk assessment of the treasury operations and audit procedures can be designed suitably. The MIS that is generated by the treasury needs to be understood by the auditor to comprehend the treasury's performance and be satisfied that there is an overall managerial performance review of the same within the bank.

G. Accounting and Valuation Systems and Procedures

As mentioned above, the accounting functions of a treasury are handled by the back office and the function of valuation is handled by the mid-office. The auditor should gain a complete understanding of these functions. Apart from applying the Auditing and Assurance Standards (AASs) the auditor needs to use the techniques and procedures mentioned in the Guidance Note on Audit of Banks. The back-office is responsible for developing proper accounting procedures and ensuring adherence to the applicable accounting standards as well as prescriptions of RBI. Similarly the valuation methodologies adopted by the mid-office should be in complete sync with the regulatory requirements and accounting principles. The classification and categorisation of investments should harmonise with the applicable requirements including income recognition and asset classification and provisioning norms. The auditor needs to evaluate whether all these are diligently followed in compiling the financial statements of the bank.

H. Computer Systems

In applying all these various roles, responsibilities and requirements, the banks depend on computer systems which may range from stand-alone systems to multifarious applications to core treasury systems. An auditor needs to get a complete overview of various computer systems. In today's environment it is extremely difficult (or almost impossible) for a treasury to function without a system support. From the complex calculations required for understanding a derivative transaction to simple interest accruals; from VaR computations to identification of non-performing investments; from portfolio valuation to deal capturing and settlement—all these processes are computer-based system. The auditor has to be satisfied that controls are adequately deployed such that the computer systems are performing as desired and the outputs generated are free from material error. The auditor should also focus on the various interfaces from and to the application systems. These interfaces are linkages into another application system. If the performance is not satisfactory then the integrity of the data available for audit becomes suspect. The critical interface between the treasury software and the core accounting software is to be tested for efficient performance. If necessary, an auditor could take the help of a duly-qualified systems auditor in this process.

Statutory audit objectives require an auditor to formulate an opinion on the truth and fairness of the financial statements. The above understanding will enable an auditor to achieve the same. Apart from the above the following sources of information will help in these objectives:

- **Concurrent Audit Reports:** Treasury operations are required to be audited concurrently. RBI has specified the areas that need to be covered in the concurrent audit process. There are a number of assertions that a concurrent auditor is required to make and also there is a responsibility of reporting the exceptions. The bank has to place its compliance with the concurrent audit reports to the Audit Committee and significant and persistent observations have to be discussed by them.
- **Internal Audit Reports:** Banks are also required to conduct an internal audit of the treasury. As in the case of concurrent audit the requirements of internal audit are well laid down by RBI. The Audit Committee is required to oversee the efficacy of this function.
- **System Audit Reports:** Due to the significant dependence on computer systems, it is necessary for a bank to demonstrate good IT governance practices. One way of achieving it is through the conduct of regular system audits covering the entire gamut of IT infrastructure, policies, procedures and practices. RBI has also mentioned about the need and frequency of system audit in its Internal Control Guidelines for Dealing Room Operations.
- **RBI Inspection Report:** These along with their compliance provide an insight into the manner in which the regulator has perceived the operations of the treasury. The assurances given by the bank in closing out an inspection issue needs to be reviewed for implementation.
- **LFAR:** The previous reporting period's long form audit report (LFAR) is another vital source of information. The LFAR questionnaire is designed in a manner that vital performance parameters of treasury operations are commented upon by the auditor.
- **Internal Reports:** The auditor needs to peruse various internal management reports. These provide an insight into the treasury activities and performance. Some of these include the minutes of the meetings as well as the agenda papers of not just the Board of Directors but also the Investment Committee and the ALCO (Asset-Liability Management Committee) and the MIS reports that are placed before them from time to time.

The statutory auditor in his attest function must remember to be continuously updated of the developments in the treasury arena. Prior to commencing an audit, he should be aware of at least the following:

a. RBI Master Circular on Investments

b. RBI Master Circular on Risk Management

c. RBI's Income Recognition and Asset Classification Norms

d. Accounting guidelines given by RBI

e. Disclosure guidelines of RBI

f. Applicable accounting standards of the ICAI

g. New developments in the treasury market space, e.g. the recent permission to deal in "when issued" securities or conditions under which "short sale" is permitted

h. An overall understanding of the various derivative products available, the manner in which they are dealt with and the valuation aspects thereof including the mathematical principles applied

i. Newer settlement mechanisms such as the RTGS, CCIL procedures etc

j. Exposure drafts of the RBI on various products e.g. the Draft Comprehensive

Guidelines on Derivatives

k. Exposure drafts of the ICAI on the accounting treatment of financial instruments

This literature keeps the auditor abreast of not only the latest developments but also the path that the regulator and professional bodies are intending to follow. If the auditor is well aware of the above then the entire audit exercise becomes seamless and the auditee develops a healthy respect for the entire audit process.

Audit Programming and Procedures

In framing the audit programme an auditor will need to take into consideration his findings of the adequacy of controls within the above processes. Based on the above-narrated process/ flow of the treasury activities, the statutory audit can be as under:

i. Selection of sample of transactions to be verified. In India RBI prescriptions on concurrent audit require a 100% verification of transactions by the concurrent auditors. Hence, the selection of sample can be influenced by the quality of the concurrent audit function including the compliance mechanism.

ii. Having selected a sample, the auditor needs to verify the deal. Basic deal verification can *inter-alia* be on the following lines

- Deal Ticket with internal supportings and authorisations, term sheets, third party evidence like Reuters' Conversation, Term Sheets, Counterparty Confirmations, CCIL Confirmations, if applicable
- Deal Register – applicable to manual as well as systematised Treasuries
- Reconciliations of RBI A/cs, Nostro A/cs, SGL and DP A/cs

iii. Once this substantive testing is complete the auditor needs to verify the closing statements. These include the valuation statements as on the date of the financial statements. The following table indicates the areas to be covered in the valuation process:

Type of Instrument	Sub-category	Evidence of valuation rate
FI	GOI Securities (CG, State, etc)	FIMMDA declared rates
	Non-SLR Bonds and Securities	FIMMDA declared rates
	Equities	Exchange Price available on the Last day of the year
	Debentures	FIMMDA declared rates
	Repos	FIMMDA declared rates as well as there is RBI Guideline for REPO securities valuation
Fx	Open Positions	FEDAI declared rates for each currency and maturity. If not available, then the rates available on any Trading Platform, like Reuters', Bloomberg
	Nostro Positions	FEDAI – Spot rates of each currency
Derivatives	Options	Black Scholes' Method
	Swaps	Discounted cash flows using the applicable Interest Curves (ROI can be taken from FIMMDA / NSE / Reuters' site based on the nature and currency of the product)
	Forward Rate Agreements	Same as above

iv. The above valuations need to be matched with the general ledger balances. This will make evident the completeness of the

valuation process *vis-a-vis* the financial books of account.

v. Many banks treat the treasury as a separate specialised branch subject to audit. Hence the treasury is required to prepare its own balance sheet and profit and loss account all the related schedules in the format prescribed by the Third Schedule to the Banking Regulation Act, 1949 viz. Form A and B.

vi. The following disclosures are required to be made by a Bank in so far as its treasury operations are concerned. The auditor has to verify the accuracy of the same and ensure that the data disclosed is in sync with the financial ledgers. The disclosures include:

- Accounting policies w.r.t Investments recognition, classification and valuation.
- Accounting policies w.r.t Foreign Exchange translations.
- Charge for the year in respect of depreciation in value of investments.
- Maturity pattern of investments (as part of the ALM disclosures).
- Exposure to capital markets covering inter-alia the Investments made in equity shares, Investments in bonds/convertible debentures and Investments in units of equity oriented mutual funds.
- Details of repo and reverse repo deals during the year in the following format:

	Minimum outstanding during the year	Maximum outstanding during the year	Daily Average outstanding during the year	As on March 31, 2007
Securities sold under Repo				
Securities purchased under reverse Repo				

- Value of Investments giving break-up between Gross Value of Investments in India and outside India
- Provisions for Depreciation in India and outside India
- Net Value of Investments in India and outside India
- Movement of provisions held towards depreciation on investments giving the opening balance, provisions made during the year, write-off/write-back of excess provisions during the year and the closing balance.
- The issuer composition of Non-SLR Investment portfolio as given in the table on the next page.
- Movement of non-performing Non-SLR investments and the provision held for the same at the year-end.
- In respect of Derivatives the notional principal of agreements, losses which would be incurred if counterparties failed to fulfil their obligations under the agreements, collateral required by the bank upon entering into these transactions, concentration of credit risk arising from the transactions and the fair value of the derivative book. This disclosure is required to be given separately for various types of derivatives such as Currency swaps, FRAs, IRS etc.
- In case of Exchange Traded Derivatives instrument-wise the Notional principal amount of exchange traded interest rate derivatives undertaken during the year, Notional principal amount of exchange traded interest rate derivatives outstanding as on 31st March 2007, Notional principal amount of exchange traded interest rate derivatives outstanding and not "highly

Issuer	Amount	Extent of Private placement	Extent of 'below investment grade' securities	Extent of unrated securities	Extent of 'un-listed'
Securities					
PSUs					
FIs					
Banks					
Private Corporates					
Subsidiaries/					
Joint Ventures					
Others					
Total					
Less: Provisions held towards Depreciation					
NET					

effective", Mark-to-market value of exchange traded interest rate derivatives outstanding and not "highly effective".

- A bank is also required to give a write-up on the risk exposures in derivatives. The write-up has to mention the qualitative aspect wherein the bank's policy, intention, alignment with the risk management policies and procedures needs to be brought out. The quantitative disclosures are generally done in the following pattern:

Please refer the guidelines contained in RBI circular DBOD No. BO.BC.72/21.04.018/2004-05 dt. 3.3.2005 for the disclosures on derivatives.

vii. As part of the statutory audit process the auditor needs to be aware of the methodology adopted by a bank to compile the above information. The data may flow

Particulars	Currency Derivatives		Interest Rate Derivatives (INR)	
Derivatives (Notional Principal Amount) a) For Hedging b) For Trading				
Mark to Market Positions a) Asset (+) b) Liability (-)				
Credit Exposure				
Likely impact of one percentage change in interest rate (100*PV01) a) On Hedging Derivatives b) On Trading Derivatives				
Maximum and Minimum of 100*PV01 observed during the year	Max.	Min.	Max.	Min.
a) On Hedging b) On Trading				

from single or disparate software solutions. There would be spreadsheet workarounds adopted by a bank to calculate some of the figures to be disclosed. The auditor should ensure that always this data matches completely with the financial books of account. He could also as part of mid-year audit procedure review the procedure adopted by the bank. This would give a comfort when the year-end data is being tabulated.

All in all the audit programme needs to be designed in a manner that it dovetails into not just the control assessments of the treasury process but there is an assurance that the figures appearing in the financial statements as well as the disclosures are true and reflect fairly the affairs of the bank treasury.

Treasury Dynamism – some examples

As mentioned above treasury operations are dynamic. The marketplace is ever evolving and newer techniques keep emerging. The auditor has to be proactive in this entire process.

One such example is in the method of amortisation of the securities classified as Held to Maturity (HTM).

- The norms require that these securities have to be carried at acquisition cost with the premium paid being amortised over the residual period to maturity. Conventionally banks used to amortise this on a straight-line basis. For example, if a security maturing in the year 2020 is purchased in the year 2006-07 for Rs.114, then the premium of Rs.14 would be amortised equally every year over the next 14 years i.e. Re.1 every year.
- Some banks felt that by adopting straight-line method of amortisation, the yield on the security amortised did not reflect the correct yield at which the security was purchased thereby distorting the yield on the HTM portfolio when compared periodically. These banks have changed

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from the straight line to what is called the "constant yield method".

- In this method the yield of the security/ portfolio remains constant even after amortisation at every stage. The typical effect is of a lower amortisation in the initial stages, which gets stepped up gradually. This is also called as a "pull to par" effect. In this method this Rs.14 will be amortised in the proportion of the yield that is available on the balance sheet date by the bank. Since the bank has intention of holding this security up to maturity (and that's the reason for classifying it as HTM) the overall yield to the bank up to 2020 is known. The premium of Rs.14 is compared with this yield and the amortisation amount determined every year.

The auditor should ensure that always this data matches completely with the financial books of account. He could also as part of mid-year audit procedure review the procedure adopted by the bank.

Another example would be of the audit of Structured Derivative Products. The following indicates the various nuances involved in their recognition and measurement principles: -

- RBI requires that these structures which are generally at zero cost should not result into an exposure to the counterparty/corporate and no premium should be paid to them. Software solutions are still evolving to capture these products. Hence banks are required to break up these products and recognise them as parts of a whole. In the deal verification process the auditor has to develop his knowledge skills to assure himself that these structures are indeed at zero cost, without resulting into an exposure and no premium is paid. It is imperative for the auditor to be satisfied that the sum of the parts recognised in the software systems should be equal to the whole of the structured product.
- In so far as the valuation of these structures is concerned for want of system support for advanced valuation techniques banks seek rates from counterparties. The auditor should understand the structure's composition and then the valuation methodology as narrated above for Swaps (Interest as well as Currency), Options, FRA are to be applied. One must also remember that currently, banks are not allowed to run a position for any structured products and so deals are entered on back-to-back basis. Hence for valuation purposes each of these deals are not valued per-se but the "Knock Off" effect is considered i.e. the impact if both the legs are knocked off on the balance sheet date is determined and recognised in the financial statements.
- The auditor would need to learn to comprehend and interpret the term-sheet of these products as well as the mathematics involved in bifurcating these deals for recognition in books of account as also for period-end valuations. All this can be achieved by doing a research on various developments in derivatives. A mid-year audit of these transactions would enable the auditor to discuss and deliberate these issues with the treasury officials. This would make the year-end audit a far smoother and precise exercise.

The above are just two examples of the fascinating world of treasury with its ever-changing facets. There can be and are many more such issues that require the auditor and the auditee to do an in-depth analysis of the situation and the recognition and measurement principles. It's a challenge for all of us to hone our skill sets and achieve the audit objectives. ❐