

# **E-Book**

## **Foreign Exchange**



**The Institute of Chartered Accountants of India**

(Set up by an Act of Parliament)

**Southern India Regional Council**

**Chennai**

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This e-book has been authored by  
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**Chennai**

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**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA**  
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**Southern India Regional Council**



**FOREWORD**

Banking Circle has access to a deep liquidity pool, with rates sourced from the world's market-makers. These highly-competitive rates are provided at a pre-agreed margin through our Real-Time Foreign Exchange trading platform, the Banking Circle web platform and the Banking Circle Foreign Exchange Application Programming Interface (API). Foreign Exchange deals can be booked across pairs within our 25 currencies as treasury movements or as outgoing payments via any of the account options available, including multi-currency International Bank Account Number (IBAN) accounts.

It is a pleasure to share my happiness amongst the members and other stakeholders in bringing out an informative e-book on **Foreign Exchange**.

This e-book provides detailed education on the topic of Foreign Exchange right from the basics of what is foreign exchange, types of foreign exchange, etc. To complicate aspects and its impact on corporates and ways to mitigate the risk involved on fluctuations. The e-book covers various issues which are important for corporates to understand and execute with minimum risk. As we all understand foreign exchange is a very critical link between the business and its treasury department, hence it has an impact on any business decision which is made.

This e-book clearly outlines the role of the treasury in the Foreign Exchange risk and the various types of treasuries which are possible in an organization. It also lays down the execution framework for corporates to minimize their Foreign Exchange risk by planning and executing the risk well and limiting the same.

On behalf of SIRC, I wish to place our sincere gratitude and appreciation to CA. Maulik Shah and CA. Pratik Gadhia, for sharing their rich experience and expertise on the Foreign Exchange amongst our members through this e-book. I also acknowledge the contribution of CA. M K Sridhar who have reviewed the basic draft of this e-book with his touch of experience and professional excellence.

Comments and suggestions on the e-book are welcome at [sirc@icai.in](mailto:sirc@icai.in)

**CA.K. JALAPATHI**  
Chairman, SIRC of ICAI

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## Glossary of terms

<b>Term</b>	<b>Particulars</b>
FX	Foreign Exchange
INR	Indian Rupee
USD	United States Dollar
LIBOR	London Inter-bank Rate
OTC	Over the Counter
IRS	Interest Rate Swaps

## I. Basics of Foreign Exchange

### 1. What is a currency?

Currency is a medium of exchange for goods and services. In other words, it is money, in the form of paper or coins, usually issued by a government and generally accepted at its face value as a method of payment.

### 2. What is an exchange rate?

An exchange rate is the rate at which one currency will be exchanged for another currency. The exchange rate is also regarded as the value of one country's currency in relation to another currency. For example, an interbank exchange rate of 74 Indian Rupees (INR) to the United States dollar means that INR 74 will be exchanged for USD 1 or that USD 1 will be exchanged for INR 74.

### 3. What is foreign exchange market?

The foreign exchange market is the market where one buys or sells the currency of country A with the currency of country B. This market determines foreign exchange rates for every currency. It includes all aspects of buying, selling and exchanging currencies at current or determined prices. In terms of trading volume, it is by far the largest market in the world, followed by the credit market.

### 4. What is a foreign exchange transaction?

A foreign exchange transaction is a contract to buy or sell one currency in exchange for another for a specified period and at a specified price (exchange rate).

### 5. What are the types of Foreign Exchange Transactions?

5.1. Cash Transactions - In cases where the transaction to buy and sell the foreign exchange takes place and actual settlement is completed on that day itself, it is called cash transaction.

Eg: 31<sup>st</sup> October 2021 Sell USD 1000 at 74 & receive equivalent INR same day

5.2. Tom Transactions - A tom transaction as the word suggests, this means that the transaction done will be completed the next working day.

Eg: 31<sup>st</sup> March 2021 Sell USD 1000 at 74 & receive equivalent INR on T + 1 day i.e. 1<sup>st</sup> April 2021

5.3. Spot Transactions - A spot transaction in the foreign exchange market, where in the settlement for foreign exchange is done on 2<sup>nd</sup> business day. The quoted exchange rate in FX markets is by default the spot transaction.

Eg: 31<sup>st</sup> March 2021 Sell USD 1000 at 74 & receive equivalent INR after T + 2 days i.e. 2<sup>nd</sup> April 2021

6. What are the types of Foreign Exchange Instruments?

6.1. Forwards -The most prominent and widely used are Over The Counter (OTC) “Forward Contracts” wherein buyer and seller agree to exchange a predetermined sum of one currency against another at an agreed rate at a future date, irrespective of what rate would be on that future date. In a trade transaction, one of the parties to the contract would invariably be a bank.

Eg: Participant enters into a forward contract on 31<sup>st</sup> March 2021 to Buy USD 1000 on 30<sup>th</sup> June 2021 at a fixed rate of 73 irrespective of rate on 30<sup>th</sup> June 2021

- They are OTC contracts.
- Both the buyer and seller are committed to the contract.
- Forwards are price fixing in nature. Both the buyer and seller of a forward contract are fixed to the price decided upfront.

6.2. Futures - Futures are derivative instruments of standard size (Lot) issued for a definitive period and price and are traded in an Exchange. While the price is based on an underlying asset, no delivery is taken on the maturity date. The position is simply closed out any day up to the maturity date at the ruling market rate and the difference between the contracted price and the current ruling price is exchanged. Currency Exchanges provides good liquidity to manage the foreign exchange risk and hence, it is also available as a risk management tool. It would also facilitate easy to hedge, un-hedge with transparent pricing. However, there is a margin element and one needs to set aside some funds to operate in futures exchange.

The future transactions are also forward transactions and deals with the contracts in the same manner as that of normal forward transactions. However, the forward contracts are customized whereas future transactions are standardized. Future contracts can be traded on the organized exchanges only whereas forward contacts are private agreements. Also an initial margin is required for the participants to enter into a future contract which is not required for forward contracts.



Eg: Participant enters into a fixed date future contract on 31<sup>st</sup> March 2021 to buy of 1 lot (i.e. USD1000) on 30<sup>th</sup> June 2021 on the exchange at 71. On 30<sup>th</sup> June 2021, this transaction is cash settled i.e. if the USDINR is at 72, participant will gain Rs 1000 (USD1000 \* 1 (72-71)) and receive cash. If USDINR is at 70, participant will have to pay Rs 1000 (USD1000 \* 1 (70-71)) and settle the transaction.

#### Distinction between Futures and Forwards

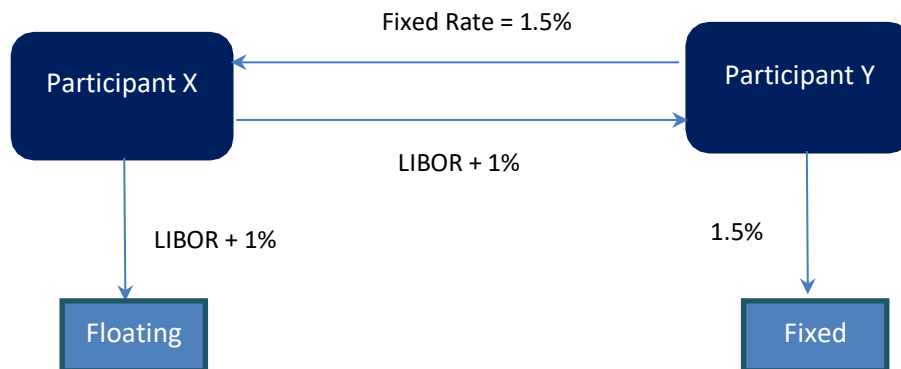
Particulars	Futures	Forward
Location	Future exchange	No fixed location
Size of contract	Fixed (standard)	Depends on terms of contract
Maturity/ Payment	Fixed (standard)	Depends on terms of contract
Counter party	Clearing house	Known bank or client
Market place	Central exchange floor with worldwide network	Over the telephone with worldwide network/ or anywhere
Valuation	Mark-to-market everyday	No unique method of valuation
Variation margins	Daily	None

- 6.3. Interest Rate Swaps - An interest rate swaps (IRS's) effective description is a derivative contract, agreed between two counterparties, which specifies the nature of an exchange of payments benchmarked against an interest rate index. The most common IRS is a fixed for floating swap, whereby one party will make payments to the other based on an initially agreed fixed rate of interest, to receive back payments based on a floating interest rate index. Each of these series of payments is termed a "leg", so a typical IRS has both a fixed and a floating leg. The floating index is commonly an interbank offered rate (IBOR) of specific tenor in the appropriate currency of the IRS, for example LIBOR in GBP, EURIBOR in EUR.

To completely determine any IRS a number of parameters must be specified for each leg:

- the notional principal amount (or varying notional schedule);
- the start and end dates, value-, trade- and settlement dates, and date scheduling (date rolling);
- the chosen floating interest rate index tenor;
- the day count conventions for interest calculations.

### Example of Interest Rate Swap



Let's say Mr. X owns a USD 10,000 investment that pays him LIBOR + 1% every month. LIBOR stands for London interbank offered rate and is one of the most used reference rates in the case of floating securities. The payment for Mr. X keeps changing as the LIBOR keeps changing in the market. Now assume there is another guy Mr. Y who also owns a USD 10,000 investment that pays him a fixed return of 1.5% every month. The payment received by him never changes as the interest rate assumed in the transaction is fixed in nature.

Now Mr. X decides that he doesn't like this volatility and would rather have fixed interest payment, while Mr. Y decides to explore floating rate so that he has a chance of higher payments. This is when both of them enter into an interest rate swap contract. The terms of the contract state that Mr. X agrees to pay Mr. Y LIBOR + 1% every month for the notional principal amount of USD 10,000. In lieu of this payment, Mr. Y agrees to pay Mr. X 1.5% interest rate on the same principle notional amount. Now let us see how the transactions unfold under different scenarios.

#### Scenario 1: LIBOR standing at 0.25%

Mr. X receives USD 125 from his investment at 1.25% (LIBOR standing at 0.25% and plus 1%). Mr. Y receives the fixed monthly payment of USD 150 at a 1.5% fixed interest rate. Now, under the swap agreement, Mr. X owes USD 125 to Mr. Y, and Mr. Y owes USD 150 to Mr. X. The two transactions partially offset each other. The net transaction would lead Mr. Y to pay USD 25 to Mr. X.

#### Scenario 2: LIBOR standing at 1.00%

Mr. X receives USD 200 from his investment at 2.00% (LIBOR standing at 1.00% and plus 1%). Mr. Y receives the fixed monthly payment of USD 150 at a 1.5% fixed interest rate.

Now, under the swap agreement, Mr. X owes USD200 to Mr. Y, and Mr. Y owes USD150 to Mr. X. The two transactions partially offset each other. The net transaction would lead Mr. X to pay USD50 to Mr. Y.

In the above transaction of interest rate swap, the swap has allowed Mr. X a guaranteed payment of USD 150 every month. If LIBOR is low, Mr. Y will owe him under the swap. However, if the LIBOR is high, he will owe Mr. X. Either way, he will have a fixed monthly return of 1.5% during the tenure of the contract. It is very important to understand that under the interest rate swap arrangement, parties entering into the contract never exchange the principal amount. The principal amount is just notional here.

- 6.4. Options - The foreign exchange option gives an investor the right, but not the obligation to exchange the currency in one denomination to another at an agreed exchange rate on a pre-defined date. An option to buy the currency is called a Call Option, while the option to sell the currency is called a Put Option.

Options are instruments of exchange very similar to a forward contract in its form as it can be for any fixed amount at a price (strike price) even different from the ruling market price and maturing on a future date. However, it differs from forward contract in that the buyer carries the right to exercise the option but no obligation to honour. It also entails payment of a premium upfront by the buyer for this right. The buyer pays the premium and the seller of the option (also called writer) receives the premium. Buying an Option means a limited risk quantified as expense by way of premium paid upfront for an unlimited opportunity to make money should the underlying exposure (exchange rate, interest rate, commodity/stock price) moves in the direction anticipated. However, selling or writing an Option gives immediate income by way of premium received but entails bearing an unlimited risk of underlying exposure should it go the other way.

Options are mainly two types - Put and Call. A buyer of 'Put' has a right to sell the underlying asset at the contracted rate. Conversely, a buyer of 'Call' has a right to buy the underlying asset. A single contract of either a put or call option is also called vanilla option, as it is a simple transaction. However, more complex types of Option contracts (covered) are traded in the market with a combination of both put and call options. These are called Collars, Spreads, Straddles, Strangles, Knock-out, Knock-in, etc. and each one is distinguished by the strategy adopted. Of late, complicated structures are available in the market, which present a different but mega event risk scenario.

## 7. Who are the participants of Foreign Exchange Market?

- 7.1. Corporates - A Corporate is an organization, usually a group of people or a company authorized by the state to act as a single entity (a legal entity recognized by private and public law) and recognized in law for certain purposes. Corporates with international business are susceptible to the exchange rate risk and are a major player in the foreign exchange market.
- 7.2. Commercial Banks - A commercial bank is a financial institution which accepts deposits from the public and gives loans for the purposes of consumption and investment to make profit. It can also refer to a bank, or a division of a large bank, which deals with corporations or large/middle-sized business to differentiate it from a retail bank and an investment bank. Commercial banks include private sector banks and public sector banks.
- 7.3. Exchange Brokers - A foreign exchange broker, also known as an FX broker or a forex broker, buys and sells currencies on behalf of clients while charging a commission for the service. Foreign exchange brokers are 'middlemen' who match the currency buy and sell orders from their clients to other client's orders.
- 7.4. Central Banks - A central bank is an institution that manages the currency and monetary policy of a state or formal monetary union and oversees their commercial banking system. In contrast to a commercial bank, a central bank possesses a monopoly on increasing the monetary base. Most central banks also have supervisory and regulatory powers to ensure the stability of member institutions, to prevent bank runs, and to discourage reckless or fraudulent behaviour by member banks.

There are two primary tools central banks have to influence the economy: interest rates and liquidity. These tools affect the way the country's domestic currency is placed against the foreign currencies. The central bank's modification of these two elements indirectly affect the exchange rate. The more direct method of influence of exchange rate is by the direct intervention by the central bank.

- 7.5. Borrowers - These are Corporates or Individuals borrowing in foreign currency and exposed to the exchange rate movement. These borrowers might or might not have direct foreign exchange trade transactions, but such borrowings will trigger a foreign exchange risk which needs to be managed.
- 7.6. Individuals - Individuals might be speculators acting to take advantage of price movements or general participation which takes place due to travel to different countries.

The above mentioned information gives an idea/ perspective on the foreign exchange market and terminology. In the next chapter, we will mention on how foreign exchange movement impacts the Corporates and how this risk can be mitigated.

## II. Implementation of Foreign Exchange Risk Management on the Corporates

Impact of Foreign exchange on the business and how to manage this risk is imperative in this ever changing world. It is important to understand the business nuances and how does foreign exchange fluctuation impact the business. It is also important to evaluate the impact of foreign exchange movement on the profit margin. The objective of each Company is to minimize foreign currency risk and use market opportunities for improve the exchange price on transactions. A Risk Management Framework will be drafted in accordance with this policy to ensure safety and continuity of core business activity.

## III. Risk Management Policy

The foundation for the effective, efficient and secure management of foreign exchange risk is an appropriate and clearly defined policy and organizational framework.

*"A company's currency risk management policy is the foundation upon which its currency risk management programme is built. Developing and implementing it is the single most important thing a company must do in managing FX risk."*

*It defines what the company expects to achieve, how risks are defined, controls over processes and risks, risk tolerances, accountabilities and performance measurement. Without a comprehensive and well thought out policy, there is potential for chaos"*

### Basic content of a risk policy

Sr No	Particulars	Content
1	Background	Includes background and major business risk linked to FX
2	Risk Objective	It includes the risk philosophy, appetite and risk principles
3	Role of Treasury	Based on the risk objective, type of treasury will be identified: <ul style="list-style-type: none"><li>● Cost Center</li><li>● Value Added</li><li>● Profit Center</li></ul>
4	Exposure Identification	Exposure identification includes understanding the detailed business processes and supply chain. This is required for identifying and quantification of risk, scenario and stress testing analysis
5	Exposure Management Policy & Guideline	Exposure Management includes: <ul style="list-style-type: none"><li>● Instruments to handle</li><li>● Agencies for execution of hedges</li><li>● Decision matrix of how much, what products, timing, tenor and which counterparties</li></ul>
6	Execution framework	Execution framework includes: <ul style="list-style-type: none"><li>● Board delegated authority for execution and monitoring</li></ul>

		<ul style="list-style-type: none"> <li>● Board approved risk limits and capital</li> <li>● Concept and Role of Front office, Mid office and Back office</li> <li>● Processes of Internal Control</li> <li>● Format of Reporting to Management</li> <li>● Reporting in Exception Scenario</li> </ul>
7	Risk Tolerance & Measurement	Risk Tolerance quantifies the risk the Company can take on account of currency fluctuations. It is derived based on the analytical exercise and needs to be monitored periodically
8	Reporting to Senior Management	Reporting to Senior Management includes: <ul style="list-style-type: none"> <li>● Types of reports to be shared by Treasury with the management</li> <li>● Timeline of the reports</li> <li>● Content of the reports</li> </ul>
9	Role of Board	It is a Board approved note that the content of the policy is well read, approved and signed off by the Board.
10	Annexures	Any detailed explanation which does not form part of the policy is shared in Annexure

Foreign exchange risk management is a critical link in the relay race between the business team and the treasury team. Once the business decision is made, the baton is passed on to the treasury team to manage the FX risk. Given below are a few highlights of FX risk management:

- FX risk management provides protection only during the interim period till business adopts to the new conditions.
- Risk management is a balancing act between real loss and opportunity loss.
- There is always a competitive pressure, the policy adopted will have a direct bearing on profitability as compared to the competitors.
- There is a need for firms to devise a strategy and policy and follow it consistently no matter the fluctuation in the market.

Within the context of the policy objectives, Treasury's role is to:

1. Keep track of the Company's exposure;
2. To provide regular market updates and view on currency and interest rate environment to the management on periodic basis
3. Manage the exposure in such a way, the business risk is protected and improve the effective rate.

The Company recognizes treasury risks and wants to align risk management for business with its overall business strategy. The prime objective is to support business operations and manage its risks effectively.

#### **IV. Role of Treasurer and types of Treasury**

**The treasurer** is clearly the manager most directly charged with the responsibility for the actions of treasury. Treasury will be expected to contribute materially to the development of policies and strategies; once they are approved at the appropriate level, Treasury will then have the responsibility for carrying them through to implementation. At the same time Treasurer is, depending of course on the size of the organization, managing a team of people that are expected to deliver results against objectives and to comply at all times with the controls (and particularly the limits) set for them by the board.

##### Types of Treasury

##### **Cost Centre Treasury**

A cost centre treasury is usually found in an extremely risk averse organisation. Its role will be to eliminate exposure as soon as it is identified. Where the cost centre treasury deals on behalf of subsidiary companies it normally provides a simple deal execution service, arranging the transaction without delay and passing the rate obtained from the bank directly to the subsidiary. It does not seek to make a turn on the transaction or 'play the market' to obtain an advantageous rate.

##### **Value Added Treasury**

In this method, each transaction (export or import) is looked at on the basis of current market trend and hedged accordingly. To ensure that the effective rate is better than benchmark rate used for pricing the order, a leeway is also given to keep certain exposure open but within the pre-defined limits (percentages) to wait for better opportunities should market expectations justify this move.

##### **Profit Centre Treasury**

The role of this type of treasury will be determined by the organisation's attitude to risk. If the appetite for risk is strong, the treasury may well operate as a profit centre. The characteristics of a profit centre treasury are that it is allowed to trade and to take positions, which need not be related to the underlying business of the organisation, with the objective of making profit. A profit centre treasury might, for example, sell a currency forward in the expectation that the currency will weaken and a profit can be made when the maturing forward sale is closed out with a spot purchase of the currency.



## **V. Types of Exposure**

### **Transaction Exposure**

Transaction exposure is defined as the risk that the base currency value of a foreign currency denominated trading transaction will vary as a result of changes in exchange rate during the life of the trading transaction. Eg: A transaction exposure is an Indian company with base currency as INR sells goods to a customer in another country and receives the sales proceeds in foreign currency. Below mentioned are the two types of transaction exposures Committed Exposure and Forecast Exposure:

#### **a. Committed Exposure**

Committed Exposures are typically when a customer orders goods/ services with a clear commitment to pay at a future date. In addition to this any firm commitment in foreign currency needs to be considered as a committed exposure.

#### **b. Forecast Exposure**

Forecast exposures are 'uncommitted' exposures that are projections based on reasonable assumptions about continuing business patterns. There are various methods to arrive at forecast exposures that will, or are expected to, crystallize at some future date.

Based on the reasonable estimates of imports and exports past business trends, forecast exposure can be estimated.

### **Translation Exposure**

Translation Exposure (Or "Balance sheet") can be defined as the risk that, when translated at the foreign exchange rates at a future balance sheet date will alter the base currency value of assets and liabilities in the balance sheet, resulting in a reported gain or loss. Eg of translation exposure is Indian company with the base currency as INR borrows long term foreign currency loan. Exposure for Long term foreign currency loan gets created on following events:

- Principal & Interest amount at the time of availing loan

## **Economic Exposure**

*Economic exposure* or operational exposure moves outside of the accounting context and has to do with the strategic evaluation of foreign transactions and relationships. A firm has *economic exposure* (also known as *forecast risk*) to the degree that its market value is influenced by unexpected exchange rate fluctuations. Such exchange rate adjustments can severely affect the firm's market share position with regards to its competitors, the firm's future cash flows, and ultimately the firm's value. Economic exposure can affect the present value of future cash flows. Any transaction that exposes the firm to foreign exchange risk also exposes the firm economically, but economic exposure can be caused by other business activities and investments which may not be mere international transactions, such as future cash flows from fixed assets. A shift in exchange rates that influence the demand for a good in some country would also be an economic exposure for a firm that sells that good. Economic Exposures cannot be hedged as well due to limited data, and it is costly and time consuming. Economic Exposures can be managed by, product differentiation, pricing, branding, outsourcing, etc.

Economic Exposure is a long term foreign exchange risk and is therefore difficult to quantify. Company should keep itself abreast of economic cycles in the countries of the currencies it is exposed to and make product/price adjustments to overcome this problem.

## **VI. Execution Framework**

### **Absolute and quantified ceilings**

The best way to deal with market risk is by fixing limits for each type of risk in such a way that the overall down side risk of loss in the event of market going against Treasury is limited to a tolerable level. The volume of company's business, the leverage of balance sheet size, exclusive capital outlay (Risk Capital) available to Treasury and the risk appetite of the company's Board are taken into account in formulating these limits. Treasury is expected to work at all times within these limits.

### **Stop Loss Limits**

Hedging Deals done at Exchange Rates are deemed to be better than Benchmark Rates used for pricing the underlying commodity. However, should the USD/INR Rate move adversely (Current market rates become better than forward committed rates) and the new trend appears to be continuing, then those hedges may be unwound and keep the exposure risk open for hedging at better rates. This shall be subject to a stop loss limit (in relation to current market rate) within approved risk capital.

### **Risk Capital**

Board acknowledges that any open position (Unhedged Exposure) will create risk and any contracts booked for forecasted exposure also carries risk. Therefore it is prudent to have a risk capital allocated for the open position. Risk capital can be based on following criteria.

### **Maximum limit & open position**

Once costing rate is arrived at, the risk capital is defined as permissible adverse movement. For eg, if the export exposure is 1m USD and benchmark rate is 76 (76 spot + 2 forward premium), then maximum permissible movement should not be more than 2.7% which means Rs 2. So if treasury has kept exposure open, then treasury will have to hedge on stop loss basis when forward USDINR for remaining maturity is at 74 or below. Risk capital is also required for hedging against forecasted exposure. Since the exposure is not benchmarked against rate, forward contract so booked will be market to market everyday loss, if any on such contract should be measured against allocated risk capital. If the MTM loss exceeds allocated risk capital, forward contract so booked will be cancelled.

### **Performance measurement**

The performance measurement is key to efficient risk management and treasury management. Performance Measurement is the process to look at what has worked & what

has not worked while executing hedge operation for risk management. One of the expected outcome of Performance Measurement is to come up with the strategy for the future.

While comparison of Effective Rate with Benchmark Rate continues to be the key criteria for performance measurement, there are other criteria that are equally relevant and important. Management Information system (MIS) Reports can be generated by risk technology software, which provides important tool of verification and communication to the management of the following:

- Extent of actual exposure taken vis-à-vis limits granted;
- Impact of the exposure based on mark to market valuation;
- Scenario analysis of exposure to changes in market variables;
- Performance v/s Benchmarked Rates

The frequency of producing each report and its communication to the management may vary in importance based on its significance in its risk parameters. Reports in addition to providing information as above would also help review hedging strategy adopted, to confirm that Treasury is going in the right direction or to see whether any change in plan is needed to reduce possibilities of loss and take a new look at the market.

Management shall call for a performance review and audit of treasury activity at regular frequency, preferably once in quarter, with a view to ascertain:

- Transactions are carried out in the way these should have been done;
- There are no unreported violations;
- There are no operating errors; and
- Performance of treasury operations in line with expectations.

A broader policy review may also be conducted at less frequency to review current standing of treasury policy in view of changed market conditions, adequacy of limits for trading and review of risk management strategy.

### **Risk Scenario Planning**

An important tool of any risk management strategy is the ability to assess risk beforehand, during the risk cycle and after. Doing a scenario planning best does this. Scenario planning is simply taking the risk through a simulation route to different possibilities and tries to visualize the down side effect of the risk in the worst-case scenario. This would help in knowing the potential cost of keeping the risk (exposure) open vis-à-vis reward and help decide whether to take on the risk or avoid it altogether. In some cases, scenario-planning need to be carried out on risks already hedged may be due to changed circumstances in the market place for any

remedial action required. Scenario planning on risk holdings helps in dynamically assessing the impact of risk on a continuous basis and chalk out measures to limit such adverse impact.

Scenario Planning shall be made whenever hedges are taken against forecast exposure.

### **Need for a suitable Treasury Management System**

Information and the ability to use it in a meaningful and timely way is critical to all areas of management and treasury is no exception. Treasury management system allows the treasurers to gather information and correctly interpret by processing it faster. Execution and decision making becomes easier with a system that is able to identify and classify the relevant data on both sides of Balance sheet and assess the gap in exposure hedging. Current view of the risk positions can be maintained and monitored by the top management. This will enable the treasury and the management to act swiftly in volatile market conditions.

Treasury reports are a key tool for the treasury and top management to take necessary actions and decisions. Treasury management system is capable of revaluing the exposure related items in the balance sheet to reflect the performance of the Company in this field.

### **Segregation of Duties (Front, Back Office & Mid Office)**

It is essential for the Company to differentiate Treasury as a separate finance function, to exercise strong control. This in turn helps, the management define the underlying role of treasury and thus define responsibilities and accountabilities for those associated with it.

#### **Front Office**

Front office is responsible for execution of hedge deals. The people under this function are given dealing mandates. Dealing mandates give treasury personnel the authority to deal on behalf of the Company. Rates quotes by the banks are recorded on the deal ticket. This acts a documentation that the transaction was dealt on a competitive basis and records the opportunities given to relationship banks to quote for Company's business. Deal tickets should be sequentially numbered and signed by the dealer.

#### **Back Office**

Back Office (Finance) is responsible for accounting and settlement purposes to ensure correctness of the transaction and proper retention and settlement of funds on the appointed date. It is the control function that provides the management with a regular and frequent review of treasury activities and demonstrates that the treasury is complying with approved policies, procedures and strategy.

Merging these functions in one office or handling by the same person leads to errors or omissions and can create vulnerabilities to fraud causing irreparable damage to the Company.

Hence, the need for supervision of these two functions by different authorities in the Company.

### **Independent Exposure (Risk) Monitoring (Mid Office)**

Monitoring and Reporting constitute the verification and communication stage of the risk management process. Its intention is to make the information available, support decision making process and confirm that the treasury is following the set processes and policies.

**Monitoring**, involves internal scrutiny and tracking of exposures in relation to limits/policies and **Reporting**, aims to provide management and senior levels of Treasury with up-to-date positions and performance of the treasury.

Availability of a Risk Management Software will be a crucial aid in monitoring and reporting of risk status.

### **Audit of Treasury Function**

Audit of Treasury activities is very much necessary to give comfort to the management that the activity is being conducted as per management guidelines; all risks taken are reported and managed; profits reported are real; and no hidden risks were carried during the reporting period. This audit can be done with the help of external agency/ consultant. The frequency of the audit shall depend on the activity of Treasury and shall be decided by the management.

### **Use of Derivatives**

As market expands and new innovations in technology are brought into practice, the available instruments for hedging any risk are growing in number. Likewise, in exchange markets too, there are a lot of instruments through which exchange risk exposure can be hedged.

As the name suggests, Derivatives are derived from the Secondary market instruments often involving no delivery of the underlying asset. It also offers flexibility to ignore certain commitment, for a "price". One of the ways to hedge an exposure is by means of using derivative instruments. Derivatives if not used properly and carefully, can carry unlimited risk and jeopardize the viability of the Company. Hence, derivatives are to be used only after ensuring that the risk parameters are at any stage not violated. There are mainly two types of derivatives market.

### **Recording & Confirmation**

The Back Office person, on receipt of Deal Ticket shall retrieve the information from the system to input by the front office or enter the details afresh. The details of the transaction is then sent to the counterparty bank for confirmation of deal and to certify correctness of all

the fields like, rate, date of maturity, amount, etc. On receipt of the confirmation, it is stored as record to be retrieved at the time of settlement.

### **Settlement**

Business commitments (Exports and Imports) as and when they mature are settled through the hedge contracts booked against them. The contract value is proportionately reduced by the amount of the bill tendered for purchase or bill sent for collection now realized. Any residual portion of contract not expecting further tender of bills shall be cancelled at the market rate.

However, if bill amount exceeds contract value, then spot market rate has to be obtained for the balance portion of the bill after adjusting first the contract rate for the amount contracted.

### **Reconciliation**

On a daily basis, all entries made to the bank accounts shall be reconciled with that of statement of accounts received from banks to confirm that entries relating to Treasury are all reflected in the bank statements. Like-wise, all outstanding contracts shall also be reconciled by listing them counter party-wise and confirmed with the respective counter party banks.

*Almus Risk Consulting LLP is a Consulting firm. This does not represent the views of Almus Risk Consulting LLP and is purely for knowledge purposes. This book has been co-authored by:*



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