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Western India Regional Council

# Foreign Exchange Fundamentals:

CA's Handbook for Risk Mitigation



WIRC Publication



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# Foreword



I am delighted to introduce this remarkable book on foreign exchange which will illuminate this complex and vital subject. In a world characterized by global interconnectivity and economic dynamism, understanding the intricacies of foreign exchange is essential for businesses, investors, and individuals alike.

Foreign exchange, often referred to as Forex or FX, is the bedrock of international trade, influencing the very fabric of our global economy. This book offers an insightful journey into the world of currencies, exchange rates, and the multifaceted forces that shape this dynamic arena.

This book shall be an invaluable resource for both newcomers seeking to grasp the fundamentals and seasoned practitioners looking to expand their horizons. It provides a comprehensive exploration of the principles that underlie foreign exchange, along with practical strategies to navigate the challenges and opportunities that arise.

As Chairman of Western India Regional Council, I would like to express my gratitude to CA Maulik R Shah, CA Pratik Gadhia, CA. Manoj Shah, CA. Pankaj Rathi & CA. Moksh Bandi's effort in bringing this knowledge to a wider audience. This book is a testament to their commitment to education and the dissemination of invaluable insights. It serves as a bridge between the complexities of foreign exchange and the broader community of individuals and organizations that rely on it.

I encourage you to embark on this enlightening journey through the world of foreign exchange, and I am certain that the knowledge you gain will serve you well in your financial endeavors.

Warm Regards,

**CA. Arpit Kabra**

Chairman - WIRC of ICAI

# Preface



In an era of unprecedented global interconnectivity, understanding foreign exchange has never been much more crucial. The world's financial markets are intricately linked, and foreign exchange is at the heart of this interconnected web. It impacts governments, businesses, investors, and individuals in ways that reverberate across borders and time zones.

In the dynamic world of global finance, understanding the intricacies of foreign exchange is paramount. This book serves as a comprehensive guide, navigating the complexities of foreign exchange with clarity and insight. Whether you are a seasoned trader, a financial enthusiast, or a novice exploring the realm of foreign exchange, this preface sets the stage for a journey into the fascinating and ever-evolving landscape of international currencies. Join us, as we delve into the mechanisms, strategies, and the broader implications of the foreign exchange market, offering a valuable resource for those seeking to navigate and thrive in the interconnected world of global finance."

This book on foreign exchange aims to be your comprehensive guide to this multifaceted realm. It is a product of extensive research, practical insights, and a dedication to demystify the complexities that often shroud the world of currency trading. Whether you are a seasoned financial professional, a student eager to learn, or an individual with a growing interest in foreign exchange, this book is designed to provide valuable insights and knowledge to meet your needs.

I would like to express my gratitude to CA Maulik R Shah, CA Pratik Gadhia, CA. Manoj Shah, CA. Pankaj Rathi & CA. Moksh Bandi who has contributed to the development of this book and pushed the boundaries of knowledge in the field of foreign exchange. Their collective wisdom and experience have enriched the content you are about to explore.

In conclusion, I invite you to delve into the pages that follow, to engage with the material, and to embark on a journey of discovery through the fascinating world of foreign exchange.

"In a dynamic global economy, change is the only constant. As business guardians, we must be agile and always adapt to stay competitive "

**CA. Sourabh Ajmera**

Secretary - WIRC of ICAI



# E-book on Foreign Exchange

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## Glossary of terms

Term	Particulars
FX	Foreign Exchange
INR	Indian Rupee
USD	United States Dollar
SOFR	Secured Overnight Financing 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. In economic parlance it is known as 'Fiat Currency'.

### 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 83 Indian Rupees (INR) to the United States dollar means that INR 83 will be exchanged for USD 1 or that USD 1 will be exchanged for INR 83. The exchange rate gets derived from relationship between supply and demand and the stability of the issuing Government rather than the worth of a commodity backing it.

### 3. What is the 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 a cash transaction.

Eg: 31st October 2023 Sell USD 1000 at USDINR 83 & receive the equivalent INR the same day.

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

Eg: 31st March 2023 Sell USD 1000 at USDINR 83 & receive equivalent INR on T + 1 day

5.3. Spot Transactions - A spot transaction in the foreign exchange market, wherein the settlement for foreign exchange is done on the 2nd business day. The quoted exchange rate in FX markets is by default the spot transaction. i.e., 1st April 2023  
Eg: 31st March 2023 Sell USD 1000 at USDINR 83 & receive equivalent INR after T + 2 days i.e. 2nd April 2023

## 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: The participant enters into a forward contract on 31st March 2023 to Buy USD 1000 on 30th June 2023 at a fixed rate of USDINR 84 irrespective of the rate on 30th June 2023

- 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 on 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 provide 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, and un-hedge with transparent pricing. However, there is a margin element and one needs to set aside some funds to operate in futures exchange.

A futures transaction is dealt with in the same manner as a normal forward transaction. However, forward contracts are customized whereas futures are standardized. Future contracts can be traded on organized exchanges only whereas forward contracts 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: The participant enters into a fixed date future contract on 31st March 2023 to buy 1 lot (i.e. USD1000) on 30th June 2023 on the exchange at USDINR 83.50. On 30th June 2023, this transaction is cash settled i.e. if the USDINR is at 84, the participant will gain Rs 500 ( $USD1000 * (84 - 83.50)$ ) and receive cash. If USDINR is at 82.50, the participant will have to pay Rs 1000 ( $USD1000 * (82.50 - 83.50)$ ) and settle the transaction.

### Distinction between Futures and Forwards

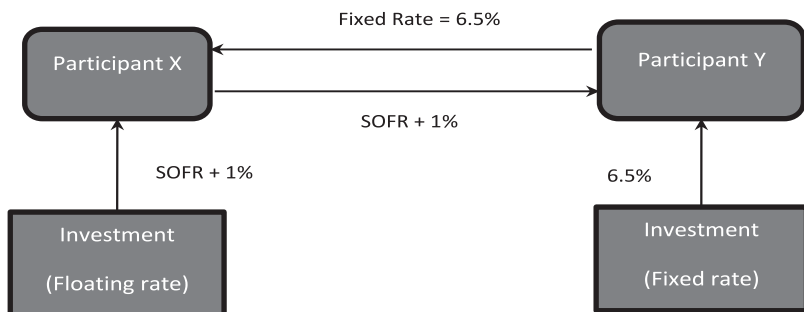
Particulars	Futures	Forward
Location	Future exchange	No fixed location
Size of contract	Fixed (standard)	Depends on the terms of contract
Maturity/ Payment	Fixed (standard)	Depends on the terms of contract
Counterparty	Clearinghouse	Known bank or client
Market place	Central exchange floor with a worldwide network	Over the telephone with a 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 swap (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 a specific tenor in the appropriate currency of the IRS, for example, SOFR in USD, or SONIA in GBP.

To completely determine any IRS several 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 Daily SOFR + 1% every month. SOFR stands for Secured Overnight Financing 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 Daily SOFR 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 6.5% every month. The payment received by him never changes as the interest rate assumed in the transaction is fixed in nature.

Now let's assume that Mr. X decides that he doesn't like this volatility and would rather have fixed interest payment, while Mr. Y decides to explore floating rates 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 Daily SOFR + 1% every month for the notional principal amount of USD 10,000. In exchange for this payment, Mr. Y agrees to pay Mr. X a 6.5% interest rate on the same principal notional amount. Now let us see how the transactions unfold under different scenarios.

#### Scenario 1: SOFR standing at 5%

Mr X receives USD 600 from his investment at 6.00% (SOFR standing at 5% plus 1%). Mr. Y receives a fixed monthly payment of USD650 at a 6.5% fixed interest rate. Now, under the swap agreement, Mr X owes USD600 to Mr Y, and Mr Y owes USD650 to Mr X. The two transactions partially offset each other. The net transaction would lead Mr. Y to pay USD50 to Mr. X.

#### Scenario 2: SOFR standing at 6.00%

Mr. X receives USD700 from his investment at 7.00% (SOFR standing at 6.00% plus 1%). Mr. Y receives a fixed monthly payment of USD 650 at a 6.5% fixed interest rate. Now, under the swap agreement, Mr X owes USD700 to Mr Y, and Mr Y owes USD650 to Mr X. The two transactions partially offset each other. The net transaction would lead Mr. X to pay USD 50 to Mr. Y.

In the above transaction of interest rate swap, the swap has allowed Mr X a guaranteed payment of USD650 every month. If SOFR is low, Mr Y will owe him under the swap. However, if the SOFR is high, he will owe Mr Y. Either way, he will have a fixed monthly return of 6.5% 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.

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. For example- if an importer purchases a USDINR call option of strike price of Rs 83.00 for one month

tenor paying Rs 10 paise per USD, the importer has the right but not the obligation to purchase USD against INR at Rs 83.00 per USD

Options are similar to forwards as they give the buyer the right to buy or sell a pre-determined amount on a specified date and rate however they differ as an option has the 'optionality' component, i.e. the buyer has the right but not the obligation to exercise the option, but for this 'optionality' the buyer of the options pays a premium to the seller.

The maximum loss the buyer has to bear is limited to the premium paid upfront. The seller however bears theoretically an unlimited risk in case the market remains favourable for the buyer.

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 a 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 the Foreign Exchange Market?

- 7.1. Corporates-A corporation 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 exchange rate risk and are major players 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 consumption and investment to make a profit. It can also refer to a bank, or a division of a large bank, which deals with corporations or large/middle-sized businesses 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 its 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 foreign currencies. The central bank's modification of these two elements indirectly affects the exchange rate. The more direct method of influencing of exchange rate is by the direct intervention by the central bank.

- 7.5. Borrowers - These are Corporations 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 how the foreign exchange movement impacts corporations and how this risk can be mitigated.

### **Implementation of Foreign Exchange Risk Management on the Corporates**

The 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 foreign exchange fluctuation impacts 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 to improve the exchange price of transactions. A Risk Management Framework will be drafted per this policy to ensure the safety and continuity of core business activity.

## **II. 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.



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”

### **The basic content of a risk policy**

<b>Sr No</b>	<b>Particulars</b>	<b>Content</b>
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, the 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 the execution of hedges</li> <li>● Decision matrix of how much, what products, timing, tenor and which counterparties</li> </ul>
6	Execution framework	The execution framework includes: <ul style="list-style-type: none"> <li>● The board delegated authority for execution and monitoring</li> <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 the 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 the business adapts to the new conditions.
- Risk management is a balancing act between real loss and opportunity loss.
- There is always 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 periodically
3. Manage the exposure in such a way, that 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.

### III. **Role of Treasurer and Types of Treasuries**

**The treasurer** is the manager most directly charged with the responsibility for the actions of the treasury. The Treasury will be expected to contribute materially to the development of policies and strategies; once they are approved at the appropriate level, the 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 Treasuries

##### **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 based on current market trends and hedged accordingly. To ensure that the effective rate is better than

## **Profit Centre Treasury**

The role of this type of treasury will be determined by the organisation's attitude to risk. If the risk appetite 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 take positions, which need not relate to the organisation's underlying business, to make a 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.

## IV **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 the exchange rate during the life of the trading transaction. Eg: A transaction exposure is an Indian company with a base currency of INR that sells goods to a customer in another country and receives the sales proceeds in foreign currency. Below 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 to 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 an Indian company with the base currency as INR borrows long-term foreign currency loans. Exposure for Long-term foreign currency loans gets created on the following events:

- Principal and interest amount at the time of availing of 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 as compared 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 influences the demand for a good in some countries 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. The 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.

## **V 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 downside risk of loss in the event of the market going against the treasury is limited to a tolerable level. The volume of the 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 continue, 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 the current market rate) within approved risk capital.

## **Risk Capital**

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

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

Once the costing rate is arrived at, the risk capital is defined as permissible adverse movement. For eg, if the export exposure is USD 1 million and the benchmark rate is USDINR82.5 (USDINR 82 spot +USDINR0.5 forward premium), then the maximum permissible movement should not be more than 0.6% which means Rs 0.5. So, if the treasury has kept exposure open, then the treasury will have to hedge on a stop-loss basis when the forward USDINR for the remaining maturity is at 82 or below. Risk capital is also required for hedging against forecasted exposure. Since the exposure is not benchmarked against rate, the forward contract so booked will be marked to market everyday loss, if any on such contract should be measured against allocated risk capital. If the MTM loss exceeds the allocated risk capital, the forward contract so booked will be cancelled.

### **Performance measurement**

Performance measurement is key to efficient risk management and treasury management. Performance Measurement is the process of looking at what has worked & what has not worked while executing hedge operations for risk management. One of the expected outcomes of Performance Measurement is to come up with a strategy for the future.

While the comparison of Effective Rate with Benchmark Rate continues to be the key criteria for performance measurement, other criteria are equally relevant and important. Management Information System (MIS) Reports can be generated by risk technology software, which provides important tools 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 the 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 a regular frequency, preferably once a quarter, 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 the current standing of treasury policy given 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. Scenario planning best does this. Scenario planning is simply taking the risk through a simulation route to different possibilities and trying to visualize the downside 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 needs to be carried out on risks already hedged may be due to changed circumstances in the marketplace for any remedial action required. Scenario planning on risk holdings helps dynamically assess the impact of risk continuously and chalk out measures to limit such adverse impacts.

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. The treasury management system allows the treasurers to gather information and correctly interpret it by processing it faster. Execution and decision-making become easier with a system that can identify and classify the relevant data on both sides of the Balance sheet and assess the gap in exposure hedging. The 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. The 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)**

The Company needs 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**

The front office is responsible for the 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 as documentation that the transaction was dealt with on a competitive basis and records the opportunities given to relationship banks to quote for the 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 the 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. It intends to make the information available, support the decision-making process and confirm that the treasury is following the set processes and policies.

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

The availability of Risk Management Software will be a crucial aid in monitoring and reporting 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 an external agency/ consultant. The frequency of the audit shall depend on the activity of the Treasury and shall be decided by the management.

## **Use of Derivatives**

As the market expands and innovations in technology are brought into practice, the available instruments for hedging any risk are growing in number. Likewise, in exchange markets, 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 the flexibility to ignore certain commitments, for a "price". One of the ways to hedge an exposure is by 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 the 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 are then sent to the counterparty bank for confirmation of the deal and to certify the correctness of all the fields like rate, date of maturity, amount, etc. On receipt of the confirmation, it is stored as a 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 the bill sent for collection now realized. Any residual portion of the contract not expecting further tender of bills shall be cancelled at the market rate.

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

**Reconciliation**

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

# How to manage Foreign Exchange (FX) risk

## OUR SERVICES



### TRANSACTION MANAGEMENT

To act as 'FX Strategic Advisor'. Manage FX transactions with Banks



### EXPOSURE MANAGEMENT

To take consultative decisions along with the company on exposure management.  
To help/guide book forward contracts/ other hedging instruments against the exposure.



### PERFORMANCE MANAGEMENT

To submit a performance measurement report to the management against the pre-agreed benchmark rates.

## Benefits of hiring us :

Focus on core business | Cost reduction | Cash flow certainty | Performance Measurement | Technology - Dashboard and Online tracking of exposure and performance.

## OUR ADDRESS

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Embracing Innovation, Creating Opportunities



**Western India Regional Council of  
The Institute of Chartered Accountants of India**  
(Set up by an Act of Parliament)

