

## MANAGEMENT OF RISK IN INDIAN FOREIGN EXCHANGE

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### Background

In India, exchange rates were deregulated and were allowed to be determined by markets in 1993. The economic liberalization of the early nineties facilitated the introduction of derivatives based on interest rates and foreign exchange. However derivative use is still a highly regulated area due to the partial convertibility of the rupee. Currently forwards, swaps and options are available in India and the use of foreign currency derivatives is permitted for hedging purposes only. The foreign exchange (FX or FOREX) market encompasses the conversion of purchasing power from one currency into another, bank deposits of foreign currency, the extension of credit denominated in a foreign currency, foreign trade financing, trading in foreign currency options and futures contracts, and currency swaps. A foreign exchange market is a market where a convertible currency is exchanged for another convertible currency or other convertible currencies. In the transaction or execution of conversion, one currency is considered domestic and the other is regarded as foreign, from a certain geographical or sovereign point of view, so is the term foreign exchange derived.

Foreign exchange transactions involve buying and selling of one currency in exchange for another currency under various circumstances. There are inter-bank activities for foreign exchange, or the wholesale Forex business, and the retail Forex business for the clients of the banks. International commercial banks communicate with each other through, e.g., SWIFT, the Society for Worldwide Inter-bank Financial Telecommunications, to settle

their Forex transactions. Transaction costs arise inevitably, regardless of wholesale or retail business, though the costs for the latter are usually higher than the former.

### Foreign Exchange Risk Management: Process & Necessity

Firms dealing in multiple currencies face a risk (an unanticipated gain/loss) on account of sudden/unanticipated changes in exchange rates, quantified in terms of exposures. Exposure is defined as a contracted, projected or contingent cash flow whose magnitude is not certain at the moment and depends on the value of the foreign exchange rates. The process of identifying risks faced by the firm and implementing the process of protection from these risks by financial or operational hedging is defined as foreign exchange risk management. There are several factors that could be ascertained as responsible for movement in exchange rates.

### Factors affecting movement of rate of exchange

Following are the factors, which affects movement of rate of exchange

1. Demand and supply: the currency in demand will be strong while the currency, which is in excess supply, will be weak.
2. Interest rate: the currency of the country, having higher rates, will be in great demand and hence will be strong.

3. Inflation: it has been seen that exchange rates move in direction required to compensate for relative inflation rates.
4. Gross Domestic Product (GDP): the currency of the country, having higher GDP, will be strong.
5. Balance of Trade and Balance of Payment: the currency of the country, having surplus balance of trade and balance of payment will be strong and vice versa.
6. Unemployment: the currency of the country, having higher unemployment will be low and vice versa.
7. WAR: Internal or external: the currency of the country facing either internal or external war will be weak.
8. Speculation: in developed markets speculators play important role in determining the trend of the currency.
9. Sentiments: as in the case of stock market, sentiments play vital role in determining the trend of the currency.
10. Capital movements: higher the capital inflow, stronger will be the currency and vice versa.
11. Exchange controls: the purpose of exchange control is to manage the demand and supply of home currency by the government by using controls basically to protect it. Currency control is the restriction or availing foreign currency at home/abroad.
12. Political stability: the currency of the country, which is political stable, will be more and vice versa.

13. Intervention by the central bank of the country: The central bank of the country, at times, intervenes in the forex markets to ensure that the objectives are met

Exchange rates are dynamic and constantly changing. These changes occur due to various factors stated above. Several of these are normally short term but can extend to the medium or long term. Some of these factors at a given point of time may have a large impact as compared to the remaining. Exchange rate management is a delicate skill and hence has to be undertaken carefully as it affects the profitability of the company engaged in international trade. Market psychology is a key ingredient in currency trading, and a dealer can often infer another's trading intention from the currency position being accumulated.

### Necessity of managing foreign exchange risk

A key assumption in the concept of foreign exchange risk is that exchange rate changes are not predictable and that this is determined by how efficient the markets for foreign exchange are. Research in the area of efficiency of foreign exchange markets has thus far been able to establish only a weak form of the efficient market hypothesis conclusively which implies that successive changes in exchange rates cannot be predicted by analysing the historical sequence of exchange rates. (Soenen, 1979). However, when the efficient markets theory is applied to the foreign exchange market under floating exchange rates there is some evidence to suggest that the present prices properly reflect all available information. (Giddy and Dufey, 1992). This implies that exchange rates react to new information in an immediate and unbiased fashion, so that no one party can make a profit by this information and in any case, information on direction of the rates arrives randomly so exchange rates also fluctuate randomly. It implies that foreign exchange risk management cannot be done away with by

employing resources to predict exchange rate changes.

## Different risks involved in foreign exchange transactions

### ***What gives rise to foreign exchange transactions?***

Basically, there are four important factors which give rise to foreign exchange deals or transactions:

- (a) Trade (exports/imports);
- (b) Transfer (remittances);
- (c) Investment (say, FCNR transactions); and
- (d) Speculation.

If one were to ask what is the proportion of speculation to the first three in the global foreign exchange market, one would be shocked to know that speculation accounts for nearly 96 per cent of the foreign exchange turnover of about US\$ 700 billion per day in the international foreign exchange market. As we are aware, banks have established huge dealing rooms, and foreign exchange dealers are consistently buying and selling foreign currencies to make profits for their own institutions. Although speculation or pure dealing, as opposed to a merchant transaction, is anathema to banking, it is not "uncontrolled" speculation, as most senior managements of banks have imposed stringent controls to contain exposures and, therefore, the expression used in the dealing rooms is normally that dealers are taking a view of the market based on their educated judgments.

A corporate treasurer is puzzled by the concept of speculation by banks and questions whether the speculation of this magnitude is good for him. However, one cannot deny that without a number of participating banks, and the sizable volume of business transacted, foreign exchange markets would be very patchy, and the exchange rates would

move in an erratic manner. It is, therefore, clear that a merchant customer is able to get competitive exchange

rates which move very smoothly except in times of extraordinary situations. We can, therefore, conclude that speculation is in the interest of a corporate treasurer rather than against him. A corporate treasurer is able to talk to a number of banks to get the best possible rate for his merchant transaction and end up striking a good bargain with a competitive bank.

## Risks

The identified risks in the foreign exchange market are: (a) rates; (b) credit; (c) mismatched maturities; (d) country; and (e) business.

## Rate Risk

Rate risk is normally assumed when a dealer quotes a price against another currency and does not cover it immediately. He is running the risk of the currency going against him. The rate risk is assumed by corporate treasurer who has invoiced his exports or imports in foreign currency at a predetermined Indian rupee rate and does not cover his foreign exchange by entering into a forward contract with a bank. For example, if an exporter invoices his goods in US dollar US \$ 1 = INR 17.50, and exports the goods and when he receives the payment if the exchange rate has moved against him he may receive only INR 17.25 resulting in a loss of 25 paise per dollar. Although in the present scenario of depreciating rupee this is unlikely to happen, one can imagine the risk to which an exporter will be exposed to in conditions of an appreciating rupee.

## Credit Risk

Credit risk is assumed on counter parties with whom an exchange transaction is concluded. If a spot contract is concluded between a bank and a customer, the bank is taking a risk on the customer,

in the sense that if the bank delivers the foreign currency, let us say in Tokyo, in an important transaction, because of the time zone differences, the bank will be able to debit the customer's account only after an interval of 4-5 hours and is, therefore, exposed to full amount of the contract concluded. However, with regard to forward contracts which can be liquidated in the market, the risk assumed is between 10 per cent and 20 per cent of the contracted amount.

### Risk of Mismatched Maturities

The risk of mismatched maturities arises due to the mismatch of inflows and outflows of foreign currencies. Technical, if one were to receive US\$ 1 million and also remit US\$ 1 million today, one does not carry any exchange risk except the loss of the spread to the bank. However, in real life, situations are not so ideal and, therefore, corporate treasurers are exposed to risks of mismatched maturities ' that is, a time lag between receipt and payment of foreign currency, even if they are both exporters and importers.

### Country Risk

Country risk has assumed serious proportions in view of the economic and political instability prevailing in many countries, such as in Latin America, and Africa. It is advisable for a corporate treasurer to check the country risk aspect before he concludes a deal with problem countries, as he may not receive the foreign exchange against his goods due to exchange control restrictions. The recent Middle-East war has ravaged the economies of Iraq and Iran and, therefore, all transactions with these countries must be carefully handled to ensure that goods or funds are not blocked.

### Business Risk

Business risk is common to all types of businesses, such as hearing a wrong rate, communicating the

wrong amount, etc; however, in the foreign exchange business, it can be disastrous as exchange rates move very quickly and errors could be difficult to rectify without a loss. The corporate treasurers are, therefore, advised to communicate all the details in writing with the banks to avoid any misunderstandings.

### Management of Exchange Risk

Generally, the corporate treasurers fall into one of the three categories:

- (a) Those who cover every exposure;
- (b) Those who do not cover all; and
- (c) Those who cover judiciously.

The first category belongs to corporate which are extremely conservative and, therefore, cover every exposure immediately by entering into a forward exchange contract with a bank their contention is that they should best concentrate on the line of their business rather than dabble in the speculative world of foreign exchange. If the corporate cover every exposure, obviously they eliminate the foreign exchange risk altogether.

The second category belongs to corporate which believe in the "do nothing" approach and cover their exposure on a spot basis at whatever rate is offered on the date of remittance. This category of corporate, therefore, believes in keeping exposures open and, pays for the risk they assume. Although in some cases they might benefit by favorable movements of exchange rates, they do not crystallize their liabilities and will never know their rupee liabilities until the date of remittance.

The third category belongs to corporate which cover their exposure judiciously by talking to corporate dealers of the respective banks and deciding whether to book exposure or not, depending upon short - term / long-term trends of currencies, the rate of depreciation of the rupee against foreign currency, and the level of premium and discounts

prevailing in the inter-bank market.

It is, therefore, obvious that a corporate treasurer may belong to any one of the three categories and depending upon circumstances, decide his policy on foreign exchange objective may be stated to curtail losses on account of exchange risk fluctuations to the extent of 1 per cent of the cost of goods or projected cost during the period 1 January to 31 December 1990. Within these broad objectives, the operative staff can be given authority to book exposure within 1/4 per cent or 1/2 per cent of costs involved so that they do not have to revert to the senior management every time an exposure decision needs to be taken. The operating staff could then work in close co-ordination with the corporate dealers of banks and efficiently cover the exchange risk on an on-going basis.

## Suggestions

Here are a few practical suggestions for corporate treasurers to manage their exchange risk,

### (a) Quotes from more than one bank:

It is imperative that a corporate treasurer takes advantage of rates quoted by different banks. The corporate treasurers must take quotes from at least two banks before concluding business with any one of them. Exchange rates will not be the same with banks depending upon currency position of each bank, the nature of operation - whether cover operation or trading operation, quality of dealers, and currency traded. Although it may not be possible for a corporate treasurer to take away business from one bank to another due to funded facilities, which may be made available, it at least improves his bargaining power with the bank, and in some cases he may be able to get an improved rate quoted to him. Banks normally quote indicative rates in the morning, which are subject to variation, and a firm rate is quoted only if a corporate treasurer wishes to do business at that point of time.

### (b) Indicate Your Interest:

It is very important that a corporate treasurer establishes a close rapport with the corporate dealer in his bank and absolute confidence should exist between the two of them. It is desirable that a corporate treasurer confides in the corporate dealer and discloses his position, which he wishes to cover so that the corporate dealer can keep this in mind and revert to him whenever an opportunity arises to cover the position profitably. For instance, a corporate treasurer can inform the dealer that he wishes to cover his three months export exposure at US\$ 5.56. A corporate dealer will call the client whenever the spot rate appreciates and the premiums are higher to give the benefit of the desired rate to the customer.

### (c) Standing Instruction:

If the corporate treasurer is not likely to be available in the office, for some reason, it is expedient to leave a standing instruction with a corporate dealer to cover his exposure, let us say, at US\$ 5.56 so that the corporate treasurer does not lose out on an opportunity presented in the market

### (d) Stop Loss Order:

Stop loss orders are also a kind of standing instruction to stop loss in a deteriorating market. For instance, if an importer does not want to cover his exposure at a rate worse than US\$ 5.60, he should leave such instructions with a corporate dealer to stop loss at US \$ 5.60, a limit up to which he can sustain loss.

### (e) Quick Decision:

In a volatile foreign exchange market, quick decisions are of paramount importance and, therefore, a corporate treasurer should not keep dealers holding to give decisions. Once a rate is quoted, a dealer is also running the risk and if the market changes, the rate may not hold well.

It is, therefore, important that the senior management in a company delegate's authority within certain parameters to the operating staff so that they are able to quickly respond to the dealers

on telephone.

**(f) Partial Hedge:**

When in doubt, partial hedge is the answer. There is no auspicious day for booking foreign exchange exposure and if one feels that the rate offered is reasonable, one should at least book a part of the exposure rather than leaving the entire exposure to be covered on a single day in the future. What matters are the average rate for a series of transactions rather than a good rate for one transaction?

**(g) Forward Period:**

There are spot rates and forward rates in the foreign exchange market. Forward rates are quoted at either premium or discount depending upon whether the currency is at premium or discount and it is, therefore, important that a corporate treasurer informs the appropriate period to the corporate dealer to enable him to quote an accurate rate. For example, if an exporter wants to ship his goods after a period of three months, he should ask for a three-month forward rate rather than the spot rate.

## Choice of Bank

A corporate treasurer cannot efficiently manage his foreign exchange risk unless he is helped by a bank which has a well equipped dealing room with the necessary infrastructure facilities and trained dealers who have the support of over-seas dealing centers. The choice of a bank will also depend upon the individual currency requirement. Many banks have consultancy services, and publish newsletters, to keep their clients advised about the happenings in the international markets. The corporate treasurers should take advantage of

such services and keep in close touch with trends of the currencies, and endeavor to manage their exposure in a professional manner.

In the last few years, many corporate treasurers have come to grief for not appreciating exchange risks involved in foreign trade, resulting in the escalation of project costs, working capital, and cash flow problems. Although RBI has not allowed the introduction of sophisticated products, such as options or swaps in the local market, exchange risk can be managed more effectively by following the approaches discussed in this paper.

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