HEDGING INSTRUMENTS FOR FOREIGN CURRENCY RISK

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ABSTRACT

With increasing globalization, domestic companies have started trading with a variety of businesses in other countries. The increase in the depth of global economy presents the corporations with a major issue regarding the management of their operations i.e. the management of risk associated with foreign currency exposure.

In particular, many companies implement a risk management structure to insulate themselves against foreign currency exposure utilizing a concept known as Hedging. The process of hedging foreign currency risks involves protecting the business from various losses due to a change in the exchange rate.

This paper aims at explaining various types of foreign currency risk, its measurement, various hedging techniques and rules regarding the effect of change in foreign exchange rate and use of forward contract as hedging instrument as per Accounting Standard 11.

KEYWORDS: transaction risk exposure, hedging, forward contract, options, swaps, accounting standard 11.

INTRODUCTION

“The increased globalization of trades and services and volatility in financial market requires to be aware of the risk associated with currency fluctuations. The significant changes in the international and political scenario results in uncertainty regarding the direction of foreign exchange rate that in turn leads to the emergence of an effective vehicle to hedge foreign currency risk”.

Risk is the possibility of actual outcome being different from the expected outcome it includes both downside potential i.e. the possibility of actual result being adverse compared to expected result and upside potential i.e. the possibility of actual result being better than the expected result.

Foreign currency exchange risk is the change in the domestic currency value of asset and liabilities to the change in the exchange rate. Currency exchange risk or transaction risk is the
economic consequences of the fluctuations of the exchange rates. It is a form of risk that arises from the change in price of one currency against another. Foreign exchange rate risk exposure is common to virtually all who conduct international business. Buying and selling of goods or services in terms foreign currencies can immediately expose a person to foreign exchange rate risk.

Simply, Exchange risk is a potential gain or loss that occurs as a result of an exchange rate change. Foreign exchange risk can be measured by the variance of the domestic currency value of asset, liability or an operating income which can be related to unexpected change in the exchange rate. Currency exchange rates are affected by politics, inflation, the state of import and export markets, capital flow, consumer confidence, and many other economic and social factors. These factors result in exposure to three main types of risk for a Financial Risk manager:-

- Translation exposure
- Transaction exposure
- Economic exposure

Translation exposure is the balance sheet exchange rate risk that is related to the exchange rate movement to the valuation of a foreign subsidiary and, in turn, to the consolidation of a foreign subsidiary to the parent company’s balance sheet. Translation risk for a foreign subsidiary is usually measured by the exposure of net assets to potential exchange rate moves. It is the risk that exchange rate changes will diminish a company’s income, assets, equity or liabilities. It is the change in accounting income and balance sheet statement.

Transaction exposure is cash flow risk that deals with the effect of exchange rate movements on transactional account exposure related to receivables, payables and repatriation of dividends. It is the gain or loss that might occur during settlement of foreign exchange transaction. Such a transaction could be the sale or purchase of product or services lending or borrowing of money or any other transaction involving mergers and acquisitions etc.

Economic exposure is the risk which reflects the firm’s present value of future operating cash flows from exchange rate movements. Basically, economic risk is concerned with the effect of exchange rate changes on revenues both earned from domestic sales and exports and operating expenses that is the cost of domestic inputs as well as imports. It can be said that it is the change in value of a company due to unanticipated change in the exchange rates. The unanticipated comes as an unforeseen risk.

**MEASUREMENT OF FOREIGN CURRENCY RISK**

After defining the types of exchange rate risk that a firm is exposed to the next step is to decide about the crucial aspect of a firm’s exchange rate risk i.e. measurement of foreign currency exchange rate risks. Identification of the various types of currency risk along with their measurement is essential to develop a strategy for managing currency risk. For this, a firm needs to decide whether or not to hedge these risks. Hedging is a risk management technique primarily
done to protect the foreign exchange exposure against the volatility of exchange rate by taking off setting position against the underlying asset by using various hedging techniques.

Hedging process involves the following:

- Identification of foreign exchange exposures and its value
- Creation of off setting position through derivatives
- Measurement of hedging ratio and degree of risk acceptable to management
- Expectation regarding future movement of exchange rates

Simply, Hedging means making an investment to reduce the risk of adverse price movement in an asset. Normally it consists of taking an offsetting position in a related security. Generally corporates used various currency risk management strategies depending upon the prevalence of a certain type of risk and the size of the firm.

Translation risk often referred as accounting risk is the risk occurs because each business is required to keep its accounting records in its functional currency and that currency may be different from the reporting currency. This risk is hedged very infrequently and non-systematically to avoid the impact of possible abrupt currency shocks on net assets. This risk involves mainly long-term foreign exposures, such as the firm’s valuation of subsidiaries, its debt structure and international investments.

It is standard practice to hedge the net balance sheet exposures that is the net assets i.e. gross assets less liabilities of the subsidiary that might be affected by an adverse exchange rate movement. To reduce the impact of exchange rates on the volatility of earnings, the firm may use an optimization model to devise an optimal set of hedging strategies to manage its currency risk. A firm may use tactical hedging, in addition to optimization, to reduce the residual currency risk. Moreover, if exchange rates do not move in the anticipated direction, translation risk hedging may cause either cash flow or earnings volatility. Therefore, hedging translation risk often involves careful weighing of the costs of hedging against the potential cost of not hedging.

Transaction risk is often hedged tactically by companies to hedge their transaction currency risk relating to short-term receivable and payable transactions and also hedged strategically for longer-period transactions depending on the firm’s view on the future movements of the currencies involved. Also some firms use passive hedging which involves the maintenance of the same hedging structure and execution over regular hedging periods irrespective of currency.

Economic risk is difficult to measure as it reflects the potential impact of exchange rate movement on the present value of future cash flows. This may require measuring the potential impact of an exchange rate deviation from the benchmark rate used to forecast a firm’s revenue and cost for a given period of time. The firm could best hedge its economic exposure by creating payables in the currency in which the firm’s subsidiary experiences the higher cost of inflation. Also some corporates are developing efficient frontiers of hedging strategies as a more integrated approach to hedge currency risk than buying strategy hedge to cover certain foreign exchange In
effect, an efficient frontier measures the cost of the hedge against the degree of risk hedged. Thus, an efficient frontier determines the most efficient hedging strategy as that which is the cheapest for the most risk hedged.

HEDGING TECHNIQUES FOR FOREIGN CURRENCY RISK

A foreign currency hedge is placed when a trader enters the foreign currency market with the specific intent of protecting anticipated or unanticipated physical market exposure from an adverse movement in foreign currency rate. Both speculators and foreign currency hedgers can get benefit by knowing way to properly utilize foreign currency hedge. While retail forex traders typically use foreign currency options as a hedging vehicle, Banks and commercials are more likely to use options, swaps, swaptions and other more complex derivatives to meet their specific hedging needs. On this basis a variety of hedging instruments are available at varying costs to the company that wants to eliminate foreign currency risk exposure. The following are some of the most common types of foreign currency hedging vehicles used in today's markets as a foreign currency hedge:

- Spot Contracts
- Forward Contracts
- Future contract
- Foreign Currency Options contract
- Foreign Currency Swaps contract
- Interest Rate Options contract
- Interest Rate Swaps contract

SPOT CONTRACTS: Spot contract is a foreign currency contract to buy or sell at the current foreign currency rate having settlement period of two days. Foreign currency spot contracts are more commonly used in combination with other types of foreign currency hedging vehicles as it is very risky to use it alone due to having shorter settlement period. The spot contract is more often a part of the reason to hedge foreign currency risk exposure rather than the foreign currency hedging solution.

FORWARD CONTRACTS: A foreign currency contract is a contract to buy or sell a foreign currency at a fixed rate for delivery on a specified future date or period. In forward contract the depreciation of the receivable currency is hedged against by selling a currency forward. If the risk is that of a currency appreciation it can hedge by buying the currency forward. Foreign currency forward contracts are used as a foreign currency hedge when an investor has an obligation to either make or take a foreign currency payment at some point in the future. If the date of the foreign currency payment and the last trading date of the foreign currency forwards contract are matched up, the investor has in effect "locked in" the exchange rate payment amount. The main advantage of a forward is that it can be tailored to the specific needs of the
firm and an exact hedge can be obtained. On the downside, these contracts are not marketable, they can’t be sold to another party when they are no longer required.

FOREIGN CURRENCY FUTURE CONTRACT: Currency futures are exchange-traded contracts specifying a standard volume of a particular currency to be exchanged on a specific settlement date. They are similar to forward contracts in a manner that they allow a firm to fix the price to be paid for a given currency at a future point in time. As opposed to currency forward the size of the contract and the delivery date to currency futures contracts are standardized and guaranteed by some organized exchange. The price of a futures contract changes over time to reflect the market’s anticipation of the future spot rate. If a firm holding a currency futures contract decides before the settlement date that it no longer wants to maintain such a position, it can close out its position by selling an identical futures contract.

FOREIGN CURRENCY OPTIONS: A foreign currency option is same as stock option except that in foreign currency option the underlying asset is foreign exchange. The basic premises remain the same that the buyer of option has the right but no obligation to enter into a contract for purchase and sale a specific foreign currency at a specific price on or before a specific date with the seller. Therefore the buyer of a currency option has the right, to his advantage, to enter into the specified contract. A foreign currency option can be used as a foreign currency hedge for an open position in the foreign currency spot market. Foreign currency options can also be used in combination with other foreign currency spot and options contracts to create more complex foreign currency hedging strategies. There are many different foreign currency option strategies available to both commercial and retail investors.

FOREIGN CURRENCY SWAPS: A swap is an agreement in which two parties repay each other’s original loan amounts that swapped. After a certain specified period of time. In its simplest form currency swap involve exchanging repayment of two fixed interest rate loan denominated by different currency. The important thing in foreign currency swap is that the buyer and seller exchange fixed or floating rate interest payments in there respective swapped currencies over the term of the contract. At the time of maturity the principal amount is effectively re-swapped at a predetermined exchange rate so that the parties end up with their original currencies. Foreign currency swaps are mostly used by retail forex traders as a foreign currency hedging vehicle.

INTEREST RATE OPTIONS: Interest rate option markets are amongst the largest and most liquid option markets which are widely used both for hedging as well as speculation against changes in interest rates. Financial interest rate contract are those contract which gives the buyer the right, but not the obligation, to purchase or sell a specific interest rate contract at the strike price on or before a specific date i.e. the expiration date. The amount the interest rate option buyer pays to the interest rate option seller for the foreign currency option contract rights is called the option "premium". Interest rate option contracts are more often used by interest rate speculators, commercials and banks as a foreign currency-hedging vehicle.

INTEREST RATE SWAPS: Interest rate swaps are the financial interest rate contracts whereby the buyer and seller swap interest rate exposure over the term of the contract. The most common swap contract is the fixed-to-float swap whereby the swap buyer receives a floating rate from the
 swap seller, and the swap seller receives a fixed rate from the swap buyer. Other types of swap include fixed-to-fixed and float-to-float. Interest rate swaps are more often utilized by commercials as a hedging mechanism to re-allocate interest rate risk exposure.

REGULATORY GUIDELINES RELATING TO FOREIGN CURRENCY EXCHANGE RISK

The Effects of Changes in Foreign Exchange Rates is given in Accounting Standard (AS) 11 which is issued by the Council of the Institute of Chartered Accountants of India (ICAI). It came into effect from and after 1-4-2004 and is mandatory in nature. It was originally issued in the year 1989 and revised in 1994 and again revised in the year 2003.

The principal issues in accounting for foreign currency transactions and foreign operations are to decide which exchange rate to use and how to recognize in the financial statements the financial effect of changes in exchange rates. This Statement also deals with accounting for foreign currency transactions in the nature of forward exchange contracts.

This Standard does not specify the currency in which an enterprise presents its financial statements. However, an enterprise normally uses the currency of the country in which it is domiciled. If it uses a different currency, it requires disclosure of the reason for using that currency. This Statement also does not deal with exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

As per the accounting standard 11, an enterprise may enter into a forward exchange contract or another financial instrument to establish the amount of the reporting currency required or available at the settlement date of a transaction. Exchange differences on such a contract should be recognized in the statement of profit and loss in the reporting period in which the exchange rates change. Any profit or loss arising on cancellation or renewal of such a forward exchange contract should be recognized as income or as expense for the period.

The risks associated with changes in exchange rates may be mitigated by entering into forward exchange contracts. Exchange difference on a forward exchange contract is the difference between the foreign currency amount of the contract translated at the exchange rate at the reporting date, or the settlement date where the transaction is settled during the reporting period.

On the basis of a decision of the Council at its meeting held on June 24-26, 2004, an Announcement titled ‘Applicability of Accounting Standard (AS) 11 (revised 2003), The Effects of Changes in Foreign Exchange Rates in respect of exchange differences arising on a forward exchange contract entered into to hedge the foreign currency risk of a firm commitment or a highly probable forecast transaction’ has been issued. The Announcement clarifies that AS 11 (revised 2003) does not deal with the accounting of exchange differences arising on a forward exchange contract entered into to hedge the foreign currency risk of a firm commitment or a highly probable forecast transaction.
CONCLUSION

Hedging involves structuring business transactions and activities to reduce any associated risks. While dealing with foreign currency risks a business is always faced with the prospect of being adversely affected by currency exchange rates. Measuring and managing currency risk exposure are important functions as it saves a firm from major exchange rate movements. These vulnerabilities mainly arise from a firm’s involvement in international operations and investments.

In managing currency risk, different firm either big or small uses different hedging strategies depending on the specific type of currency risk as greater demand for hedging protection against these risks has emerged. These strategies have become increasingly complicated as they try to address simultaneously transaction, translation and economic risks.

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