

AN INVESTIGATION OF FOREIGN EXCHANGE AND ITS RISK MANAGEMENT

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ABSTRACT

In this paper the investigation of Foreign exchange and its risk management pertaining to an IT industry has been proposed. To understand the study HCL technologies has considered for analysis. The company has to hammer out its approach to risk management taking into account its specific circumstances. A brief description of company in India have fashioned with its strategy towards foreign exchange risk management. HCL Technologies as one of India's leading global IT Services companies, providing software-led IT solutions, remote infrastructure management services and BPO. HCL having made a foray into the global IT landscape in 1999 after its IPO, HCL Technologies focuses on Transformational Outsourcing, working with clients in areas that impact and re-define the core of their business. The company leverages an extensive global offshore infrastructure and its global network of offices in 18 countries to deliver solutions across select verticals including Financial Services, Retail & Consumer, Life Sciences & Healthcare, Hi-Tech & Manufacturing, Telecom and Media & Entertainment (M&E). For the quarter ended 31st March 2014, HCL Technologies, along with its subsidiaries had last twelve months (LTM) revenue of US \$ 1.5 billion (Rs. 6363 crores) and employed 45,622 professionals. As its operations in many countries, the company is exposed to currency risk. They transact a major portion of their business in USD and the lesser extent other currencies and is thus exposed to currency risk, The company manages risk on account of foreign currency fluctuations through treasury operations using several techniques to mitigate the risk has presented in detail.

Keyword: - Foreign exchange, Risk management, income statement, HCL Technologies, International trade

1. Introduction

Risk is the possibility that the actual result from an action will deviate from the expected levels of result. The greater the magnitude of deviation and greater the probability of its occurrence, the greater is the risk. A business has to take step to minimize the risk by adopting appropriate technique or policies. Risk management focuses on identifying and implementing these technique or policies, lest the business should be left exposed to uncertain outcomes.

Risk management is a process to identify loss exposure faced by an organization and to select the most appropriate technique such exposures. Risk management tools measure potential loss and potential gain. It enables us to stay with varying degree of certainty and confidence levels, that our potential loss will not exceed a certain amount if we adopt a particular strategy. Risk management enables us to confront uncertainty head on, acknowledge its existence, try to measure its extent and finally control it. Risk management makes sense for two reasons. One, a business entity generally wishes to reduce risks to acceptable levels. Two, a business entity is generally keen on avoiding particularly kind of risks, for it may be too great for the business to bear. For each situation where one wishes to avoid a risk- a loss by fire, for example- there is, perhaps, a counter party who may be willing such risk. For risk reduction, a business entity can adopt the following methods.

Hedging is a technique that enables one party to minimize the effect of adverse outcomes, in a given situation. Parties come together to minimize the effect of which risk of one party gets cancelled by the risk of another. IT is not that risk minimization is the only strategy. An entity may even choose to remain exposed, in anticipation of reaping profits from its risk taking positions.

Foreign exchange exposure

Exposure is defined as the possibility of a change in the assets or liabilities or both of a company as a result in the exchange rate. Foreign exchange exposure thus refers to the possibility of loss or gain to a company that arises due

to exchange rate fluctuations. The value of a firm's assets, liabilities and operating income vary continually in response to changes in a myriad economic and financial variable such as exchange rates, interest rates, inflation rates, relative price and so forth. We can these uncertainties as macroeconomic environment risks. These risks affect all firms in the economy. However, the extent and nature of impact of even macroeconomic risks crucially depend upon the nature of firm's business. For instance, fluctuations of exchange rate will affect net importers and exporters quite differently. The impact of interest rate fluctuations will be very different from that on a manufacturing firm.

The nature of macroeconomic uncertainty can be illustrated by a number of commonly encountered situations. An appreciation of value of a foreign currency(or equivalently, a depreciation of the domestic currency), increase the domestic currency value of a firm's assets and liabilities denominated in the foreign currency-foreign currency receivables and payables, banks deposits and loans, etc. It ill also change domestic currency cash flows from exports and imports. An increase in interest rates reduces the market value of a portfolio of fixed-rate in the rate of inflation may increase value of unsold stocks, the revenue from future sales as well as the future costs of production. Thus the firms exposed to uncertain changes in a numbers of variable in its environment. These variables are sometimes called Risk Factors.

The nature of Exposure and Risk

Exposure are a measure of the sensitivity of the value of a financial items (assets, liabilities or cash flow) to changes in the relevant risk factor while risk is a measurable of the variability of the item attributable to the risk factor. Corporate treasurers have become increasingly concerned about exchange rate and interest rate exposure and risk during the last ten to fifteen years or so. In the case of exchange rate risk, The increased awareness is firstly due to tremendous increase in the volume of cross border financial transactions (which create exposure) and secondly due to the significant increase in the degree of volatility in exchange rates(which, given the exposure, creates risk)

Classification of foreign exchange exposure and risk

Since the advent of floating exchange rates in 1973, firms around the world have become acutely aware of the fact that fluctuations in exchange rates expose their revenues, costs, operating cash flows and thence their market value to substantial fluctuations. Firms which have cross-border transactions-exports and imports of goods and services, foreign borrowings and lending, foreign portfolio and direct investment etc, are directly exposed: but even purely domestic firms which have absolutely no cross border transactions are also exposed because their customers, suppliers and competition are exposed. Considerably effort has since been devoted to identifying and categorizing currency exposure and developing more and more sophisticated methods to quantify it.

Foreign exchange exposure can be classified into three broad categories

- Transaction exposure
- Translation exposure
- Operating exposure

Of these, the first and third together are sometimes called "Cash Flow Exposure" while the second is referred to as "Accounting Exposure" or Balance sheet Exposure".

Transaction exposure

When a firm has a payable or receivable denominated in a foreign currency, a change in the exchange rate will alter the amount of local currency receivable or paid. Such a risk or exposure is referred to as transaction exposure. For example , if an Indian exporter has a receivable of \$100,100 due three months hence and if in the meanwhile the dollar depreciates relative to the rupee a cash loss occurs. Conversely, if the dollar appreciates relative to the rupee, a cash gain occurs. In the case of payable, the outcome is of an opposite kind: a depreciation of the dollar relative to the rupee results in a gain, where as an appreciation of the dollar relative to the rupee result in a loss.

Translation exposure

Many multinational companies require that their accounts of foreign subsidiaries and branches get consolidated with those of it. For such consolidation, assets and liabilities expressed in foreign currencies have to be translated into domestic currencies at the exchange rate prevailing on the consolidation dates. If the values of foreign currencies change between a two or successive consolidation dates, translation exposure will arise.

Operating exposure

Operating exposure, like translation exposure involve an actual or potential gain or loss. While the former is specific to the transaction, the latter relates to entire investment. The essence of this operating exposure is that exchange rate

changes significantly and alter the cost of firm's inputs along with price of its output and thereby influence its competitive position substantially.

Eg: Volkswagen had a highly successful export market for its 'beetle' model in the US before 1970. With the breakdown of Bretton-woods of fixed exchanged rates, the Deutschmark appreciated significantly against the dollar. This created a problem for Volkswagen as its expenses were mainly in Deutschmark but its revenue in dollars. However, in a highly price-sensitive US market, such an action caused a sharp decrease in sales volume from 600,000 vehicles in 1968 to 200,000 in 1976. (Incidentally, Volkswagen's 1973 losses were the highest, as of that year, suffered by any company anywhere in the world.)

International trade refers to trade between the residents of two different countries. Each country functions as a sovereign state with its own set of regulations and currency. The difference in the nationality of the export and the importer presents certain peculiar problems in the conduct of international trade and settlement of the transactions arising therefrom.

Important among such problems are:

1. Different countries have different monetary units;
2. Restrictions imposed by countries on import and export of goods;
3. Restrictions imposed by nations on payments from and into their countries;
4. Different legal practices in different countries.

The existence of national monetary units poses a problem in the settlement of international transactions. The exporter would like to get the payment in the currency of own country. For instance, if an American exporter of New York exports machinery to India, rupee will not serve their purpose because Indian rupee cannot be used as currency in the US. Thus the exporter requires payment in the importer's country. A need, therefore, arises for conversion of the currency of the importer's country into that of the exporter's country.

Foreign exchange: Foreign exchange is the mechanism by which the currency of one country gets converted into the currency of another country. The conversion is done by banks who deal in foreign exchange. These banks maintain stocks of foreign currencies in the form of balances with banks abroad. For instance, Indian Bank may maintain an account with Bank of America, New York, in which dollars are held. In the earlier example, if Indian importers pay the equivalent rupee to Indian bank, it would arrange to pay American export at New York in dollars from the dollar balances held by it with Bank of America.

Exchange rate: The rate at which one currency is converted into another currency is the rate of exchange between the currencies concerned. The rate of exchange for a currency is known from the quotation in the foreign exchange market. In the illustration, if Indian bank exchanged US for Indian rupee at Rs.40 a dollar, the exchange rate between rupee and dollar can be expressed as

$$\text{USD } 1 = \text{Rs. } 40.$$

The banks operating at a financial center, and dealing in foreign exchange, constitute the foreign exchange market. As in any commodity market, the rates in the foreign exchange market are determined by the interaction of the forces of demand and supply of the commodity dealt, viz., foreign exchange. Since the demand and supply are affected by a number of factors, both fundamental and transitory, the rates keep on changing frequently, and violently too.

Some of the important factors which affect exchange rates are:

- Balance of payments
- Inflation
- Interest rates
- Money Supply
- National Income
- Resource Discoveries
- Capital Movements
- Political Factors
- Psychological Factors and Speculation
- Technical and Market Factors

Balance of payment: It represents the demand for and supply of foreign exchange which ultimately determine the value of the currency. Exporters from the country demand for the currency of the country in the forex market. The exporters would offer to the market the foreign currencies they have acquired and demand in exchange the local

currency. Conversely, imports into the country will increase the supply of currency of the country in the forex market. When the BOP of a country is continuously at deficit, it implies that demand for the currency of the country is lesser than the supply. Therefore, its value in the market declines. If the BOP is surplus, continuously, it shows the demand for the currency is higher than its supply and therefore the currency gains in value.

Inflation: Inflation in the country would increase the domestic prices of the commodities. With increase in prices exports may dwindle because the price may not be competitive. With the decrease in export the demand for the currency would also decline; this in turn would result in the decline of external value of the currency. It should be noted that it is the relative rate of inflation in the two countries that cause changes in the exchange rates.

Interest rates: The interest rate has a great influence on the short-term movement of capital. When the interest rate at a center rises, it attracts short term funds from other centers. This would increase the demand for the currency at the center and hence its value. Rising of interest rate may be adopted by a country due to money conditions or as a deliberate attempt to attract foreign investment.

Money supply: An increase in money supply in the country will affect the exchange rates through causing inflation in the country. It can also affect the exchange rate directly.

National income: An increase in national income reflects increase in the income of the residents of the country. The increase in the income increases the demand for goods in the country. If there is underutilized production capacity in the country, this would lead to increase in production. There is a change for growth in exports too. Where the production does not increase in sympathy with income rises, it leads to increased imports and increased supply of the currency of the country in the foreign exchange market. The result is similar to that of inflation viz., and decline in the value of the currency. Thus an increase in national income will lead to an increase in investment or in the consumption, and accordingly, its effect on the exchange rate will change.

Resource discoveries: When the country is able to discover key resources, its currency gains in value.

Capital Movements: There are many factors that influence movement of capital from one country to another. Short term movement of capital may be influenced by the offer of higher interest in a country. If interest rate in a country rises due to increase in bank rate or otherwise, there will be a flow of short-term funds into the country and the exchange rate of the country will rise. Reserves will happen in case of fall in interest rates. Bright investment climate and political stability may encourage portfolio investment in the country. This leads to higher demand for the currency and upward trend in its rate. Poor economic outlook may mean repatriation of the investments leading to decreased demand and lower exchange value for the currency of the country. Movement of capital is also caused by external borrowings and assistance. Large-scale external borrowings will increase the supply of foreign exchange in the market. This will have a favorable effect on the exchange rate of the currency of the country. When a repatriation of principal and interest starts the rate may be adversely affected. Other factors include political factors, Psychological factors and Speculation, Technical and Market factors.

ADMINISTRATION FRAME WORK FOR FOREIGN EXCHANGE IN INDIA

The Central Government has been empowered under Section 46 of the Foreign Exchange Management Act to make rules to carry out the provisions of the Act. Similarly, Section 47 empowers the Reserve Bank to make regulations to carry out the provisions of the Act and the rules made there under. The Foreign Contribution (Regulation) Act, 1976 is to regulate the acceptance and utilization of foreign contribution/ donation or foreign hospitality by certain persons or associations, with a view to ensuring that Parliamentary institutions, political associations and academic and other voluntary organizations as well as individuals working in the important areas of national life may function in a manner consistent with the values of a sovereign democratic republic.

It is basically an act to ensure that the integrity of Indian institutions and persons is maintained and that they are not unduly influenced by foreign donations to the prejudice of India's interests.

The Foreign Exchange Management Act (FEMA) is a law to replace the draconian Foreign Exchange Regulation Act, 1973. Any offense under FERA was a criminal offense liable to imprisonment, Whereas FEMA seeks to make offenses relating to foreign exchange civil offenses. Unlike other laws where everything is permitted unless specifically prohibited, under FERA nothing was permitted unless specifically permitted. Hence the tenor and tone of the Act was very drastic. It provided for imprisonment of even a very minor offense. Under FERA, a person is presumed innocent unless he is proven guilty. With liberalization, a need was felt to remove the drastic measure of

FERA and replace them by a set of liberal foreign exchange management regulations. Therefore FEMA was enacted to replace FERA.

FEMA extends to the whole of India. It applies to all Branches, offences and agencies outside India owned or controlled by a person resident in India and also to any contravention there under committed outside India by any person to whom this Act applies. FEMA contains definitions of certain terms which have been used throughout the Act. The meaning of these terms may differ under other laws or common language. But for the purpose of FEMA, the terms will signify the meaning as defined there under.

Authorized persons

With the Reserve Bank has the authority to administer foreign exchange in India, it is recognized that it cannot do so by itself. Foreign exchange is received or required by a large number of exports and imports in the country spread over a vast geographical area. It would be impossible for the reserve Bank to deal with them individually. Therefore, provisions has been made in the Act, enabling the Reserve Bank to authority any person to be known as authority person to deal in the foreign exchange or foreign securities, as an authorized dealer, money changer or off- shore banking unit or any other manner as it deems fit.

Authorized dealers

A major portion of actual dealing in foreign exchange from the customers (importers, exporters and others receiving or making personal remittance) is dealt with by such of the banks in India which have been authorized by Reserve Bank to deal in foreign exchange. Such of the banks and selected financial institutions who have been authorized Dealer.

FOREIGN EXCHANGE DEALER'S ASSOCIATION OF INDIA (FEDAI)

FEDAI was establishing in 1958 as an association of all authorized dealers in India. The principal functions of FEDAI are: To frame rules for the conduct of foreign exchange business in India. These rules cover various aspects like hours of business, charges for foreign exchange transactions, quotation of rates to customer, interbank dealings, etc. All authorized dealers have given undertaking to the Reserve Bank to abide these rules. To coordinate with Reserve Bank of India in Proper administration of exchange control. To control information likely to be of interest to its members. Thus, FEDAI provides a vital link in the administrative set-up of foreign exchange in India.

AUTHORIZED MONEY CHANGERS

To provide facilities for encashment of foreign currency for tourists, etc., Reserve Bank has granted limited licenses to certain established firms, hotels and other organizations permitting them to deal in foreign currency notes, coins and travelers' cheques subject to directions issued to them from time to time. These firms and organizations are called 'Authorized Money Changers'. An authorized money changer may be a full fledged money changer or a restricted money changer. A full fledged money changer is authorized to undertake both purchase and sale transactions with the public. A restricted money changer is authorized only to purchase foreign currency notes, coins and travelers' cheques subject to the condition that all such collections are surrendered by him in turn to authorized dealer in foreign exchange. The current thinking of the Reserve Bank is to authorize more establishments as authorized money changers in order to facilitate easy conversion facilities.

THE FOREIGN EXCHANGE MARKET

The Foreign exchange market is the market where in which currencies are bought and sold against each other. It is the largest market in the world. It is to be distinguished from a financial market where currencies are borrowed and lent. Foreign exchange market facilitates the conversion of one currency to another for various purposes like trade, payment for services, development projects, speculation etc. Since the number of participants in the market s has increased over the years have become highly competitive and efficient. With improvement in trade between countries, there was a pressing need to have some mechanism to facilitate easy conversion of currencies. This has been made possible by the foreign exchange markets. Considering international trade, a country would prefer to import goods for which it does not have a competitive advantage, while exporting goods for which it has a competitive advantage over others. Thus trade between countries is important for common good but nations are separated by distance, which that there is a lot of time between placing an order and its actual delivery. No supplier would be willing to wait until actual delivery for receiving payments. Hence, credit is very important at every stage of the transaction. The much needed credit servicing and conversion of the currency is facilitated by the foreign exchange market. Also the exchange rates are subject to wide fluctuations. There is therefore, a constant risk

associated exchange markets cover the arising out of the fluctuations in exchange rates through “hedging”. Forex market is not exactly a place and that there is no physical meeting but meeting is affected by mail or over phone.

FOREIGN EXCHANGE TRANSACTIONS

Foreign exchange transactions taking place in foreign exchange markets can be broadly classified into interbank transactions and Merchant transactions. The foreign exchange transactions taking place among banks are known as interbank transactions and the rates quoted are known as interbank rates. The foreign exchange transactions that take place between a bank and its customer known as ‘Merchant transactions’ and the rates quoted are known as merchant rates. Merchant transactions take place when an exporter approaches his bank to convert his sale proceeds to home currency or when an importer approaches his banker to convert domestic currency into foreign currency to pay his dues on import or when a resident approaches his bank to convert foreign currency received by him into home currency or vice versa. When a bank buys foreign exchange from a customer it sells the same in the interbank market at a higher rate and books profit. Similarly, when a bank sells foreign exchange to a customer, it buys from the interbank market, loads its margin and thus makes a profit in the deal.

The modes of foreign exchange remittances

Foreign exchange transactions involve flow of foreign exchange into the country or out of the country depending upon the nature of transactions. A purchase transaction results in inflow of foreign exchange while a sale transaction results in outflow of foreign exchange. The former is known as inward remittance and the latter is known as outward remittance.

Remittance could take place through various modes. Some of them are:

- Demand draft
- Mail transfer
- Telegraphic transfer
- Personal cheques.

Types of buying rates:

- TT buying rate and
- Bill buying rate

TT buying rate is the rate applied when the transaction does not involve any delay in the realization of the foreign exchange by the bank. In other words, the Nostro account of the bank would already have been credited. This rate is calculated by deducting from the interbank buying rate the exchange margin as determined by the bank.

Bill buying rate: This is the rate to be applied when foreign bill is purchased. When a bill is purchased, the rupee equivalent of the bill values is paid to the exporter immediately.

However, the proceeds will be realized by the bank after the bill is presented at the overseas centre.

Types of selling rates

- TT selling rates
- Bill selling rates

TT Selling rate: All sale transactions which do not handling documents are put through at TT selling rates.

Bill Selling rates: This is the rate applied for all sale transactions with public which involve handling of documents by the bank.

Inter Bank transactions:

The exchange rates quoted by banks to their customer are based on the rates prevalent in the Inter Bank market. The big banks in the market are known as market makers, as they are willing to pay or sell foreign currencies at the rates quoted by them up to any extent. Depending upon its resources, a bank may be a market in one or few major currencies. When a banker approaches the market maker, it would not reveal its intention to buy or sell the currency. This is done in order to get a fair price from the market maker.

Two way quotations

Typically, then quotation in the Inter Bank market is a two- way quotation. It means, the rate quoted by the market maker will indicate two prices, one which it is willing to buy the foreign currency and the other at which it is willing to sell the foreign currency. For example, a Mumbai bank may quote its rate for US dollars as under.

USD 1= Rs.41.15255/1650

More often, the rate would be quoted as 1525/1650 since the players in the market are expected to know the 'big number' i.e., Rs.41. in the above quotation, once rate us Rs.41.1525 per dollar and the other rate is Rs.41.1650 per dollar.

Direct quotation

It will be obvious that the quotation bank will be to buy dollars at 41.1525 and sell dollars at Rs41.1650. if once dollar bought and sold, the bank makes a profit of 0.0125.

In a foreign exchange quotation, the foreign currency is the commodity that is being bought and sold. The exchange quotation which gives the price for the foreign v\currency in term of the domestic currency is known as direct quotation. In a direct quotation, the quoting bank will apply the rule: "buy low' sell high".

Indirect quotation

There is another way of quoting in the foreign exchange market. The Mumbai bank quote the rate for dollar as:

$$\text{Rs.100} = \text{USD } 2.4762/4767$$

This type of quotation which gives the quality of foreign currency per unit of domestic currency is known as indirect quotation. In this case, the quoting bank will receive USD 2.4767 per Rs.100 while buying dollars and give away USD 2.4762 per Rs.100 while selling dollars In other words, "Buy high, sell low" is applied. This buying rate is also known as the 'bid' rate and the selling rate as the 'offer' rate. The difference between these rates is the gross profit for the bank and known as the 'Spread'.

Spot and forward transactions

The transactions in the Inter Bank market May place for settlement-

- On the same day; or
- Two days later;
- Some day late; say after a month

Where the agreement to buy and sell is agreed upon and executed on the same date, the transaction is known as cash or ready transaction. It is also known as value today. The transaction where the exchange of currencies takes place after the date of contract is known as the Spot Transaction. For instance if the contract is made on Monday, the delivery should take place on Wednesday. If Wednesday is a holiday, the delivery will take place on the next day, i.e., Thursday. Rupee payment is also made on the same day the foreign exchange is received. The transaction in which the exchange of currencies takes place at a specified future date, subsequent to the spot rate, is known as a forward transaction. The forwards transaction can be for delivery one month or two months or three months, etc. A forward contract for delivery one month means the exchange of currencies will take place after one month from the date of contract. A forwards contract for delivery two months means the exchange of currencies will take place after two months and so on.

Spot and Forwards rates

Spot rate of exchange is the rate for immediate delivery of foreign exchange. It is prevailing at a particular point of time. In a forward rate, the quoted is for delivery at a future date, which is usually 30, 60, 90 or 180 days later. The forward rate may be at premium or discount to the spot rate, Premium rate, i.e., forward rate is higher than the spot rate, implies that the foreign currency is to appreciate its value in tae future. May be due to larger demand for goods and services of the country of that currency. The percentage of annualized discount or premium in a forward quote, in relation to the spot rate, is computed by the following.

$$\frac{\text{Forward Premium}}{\text{(Discount)}} = \frac{\text{Forward rate-spot rate}}{\text{Spot rate}} * \frac{12}{\text{No. of months forward}}$$

If the spot rate is higher than the forward rate, there is forward discount and if the forward rate higher than the spot rate there is forward premium rate.

Forward margin/Swap points

Forward rate may be the same as the spot rate for the currency. Then it is said to be 'at par' with the spot rate. But this rarely happens. More often the forward rate for a currency may be costlier or cheaper than its spot rate. The difference between the forward rate and the spot rate is known as the 'Forward margin' or 'Swap Points'. The forward margin may be at a premium or at discount. If the forward margin is at premium, the foreign currency will be costlier under forward rate than under the spot rate. If the forward margin is at discount, the foreign currency will be cheaper for forward delivery than for spot delivery.

Under direct quotation, premium is added to the spot rate to arrive at the forward rate. This is done for both purchase and sale transactions. Discount is deducted from spot rate to arrive at the forward rates.

Other rates

Buying rate and selling refers to the rate at which a dealer in forex is willing to buy the forex and sell the forex. In theory, there should not be difference in these rates. But in practices, the selling rate is higher than the buying rate. The forex dealer, while buying the forex pay less rupees, but gets more when he sells the forex. After adjusting for operating expenses, the dealer books a profit through the 'buy and sell' rates differences.

Transactions in exchange market consist of purchases and sales of currencies between dealers and customers and between dealers and dealers. The dealers buy forex in the form of bills, drafts and with foreign banks, from customer to enable them to receive payments from abroad.

The resulting accumulated currency balances with dealers are disposed of by selling instruments to customers who need forex to make payment to foreigners. The selling price for a currency quoted by the dealer (a bank) is slightly higher than the purchase price to give the bank small profit in the business. Each dealer gives a two-way quote in forex.

Single Rate refers to the practices of adopting just rate between the two currencies. A rate for exports, other for imports, other for transaction with preferred area, etc, if adopted by a country, that situation is known as multiple rates.

Fixed rate refers to that rate which is fixed in terms of gold or is pegged to another currency which has a fixed value in terms of gold. Flexible rate keeps the exchange rate fixed over a short period, but allows the same to vary in the long term in view of the changes and shifts in another as conditioned by the free of market forces. The rate is allowed to freely float at all times.

Current rate: Current rate of exchange between two currencies fluctuates from day to day or even minute to minute, due to changes in demand and supply. But these movements take place around a rate which may be called the 'normal rate' or the par of exchange or the true rate. International payments are made by different instruments, which differ in their time to maturity.

A Telegraphic Transfer (TT) is the quickest means of effecting payments. A T.T rate is therefore, higher than that of any other kind of bill. A sum can be transferred from a bank in one country to a bank in another part of the world by cable or telex. It is thus, the quickest method of transmitting funds from one center to another.

Slight rates applicable in the case of bill instrument with attending delay in maturity and possible loss of instrument in transit, are lower than most other rates.

Similarly, there are other clusters of rates, such as, one month's rate, 3month's rate. Longer the duration, lower the price (of the foreign currency in terms of domestic).

The exchange rate between two given currencies may be obtained from the rates of these two currencies in terms of a third currency. The resulting rate is called the Cross rate.

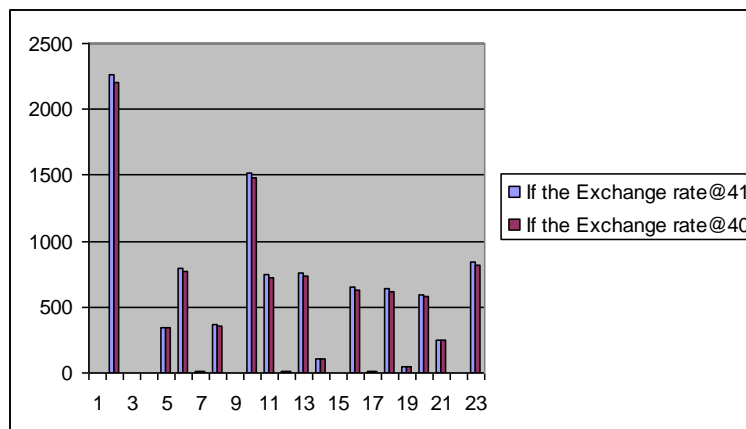
Arbitrage in the foreign exchange market refers to buying a foreign currency in a market where it is selling lower and selling the same in a market where it is bought higher. Arbitrage involves no risk as rates are known in advance. Further, there is no investment required, as the purchase of one currency is financed by the sale of other currency. Arbitrageurs gain in the process of arbitraging.

DATA ANALYSIS AND INTERPRETATION

HCL**DATA ANALYSIS**

Table:1 CURRENCY EXCHANGE BETWEEN TWO RATES				
PROFIT&LOSS A/C FOR THE YEAR ENDED JUNE 2007				
Particulars	(Rs.in crores)	Income and Expenses@ 60% from foreign		(In dollars)
		Average Exchange rate @Rs.41	If the Exchange rate@41	If the Exchange rate@40
INCOME				
Net operating Income	3768.62	2261.17	2261.17	2206.02
EXPENSES				
Material consumption	0	0.00	0.00	0.00
Manufacturing expenses	577.24	346.34	346.34	337.89
Personal expenses	1322.59	793.55	793.55	774.20
Selling Expenses	17.82	10.69	10.69	10.43
Administrative Expenses	913.89	365.55	365.55	356.63
Capitalized Expenses	0	0.00	0.00	0.00
Cost of Sales	2831.54	1516.14	1516.14	1479.16
Reported PBDIT	937.08	745.03	745.03	726.86
Other recurring income	16.07		9.64	9.40
Adjusted PBDIT	953.15		754.67	736.26
Depreciation	178.21		106.93	104.31
Other write offs	0		0.00	0.00
Adjusted PBIT	774.94		647.75	631.95
Financial expenses	20.6		12.36	12.06
Adjusted PBT	754.34		635.39	619.89
Tax Charges	75.87		45.52	44.41
Adjusted PAT	678.47		589.87	584.26
Non recurring-items	423.35		254.01	247.81
Other non cash Adjustments	0		0.00	0.00
Reported PAT	1101.82		843.88	823.30

GRAPH: 1



INTERPRETATION: This graph showing total revenues are alteration together, total revenues are decreased Rs.2261.17 crores to 2206.02, and gross profit also decreased Rs.745.03 to 726.86.simultaneously all these values are changing the net income. If the Exchange rate had fixed @ Rs.41, the revenues would have been same.

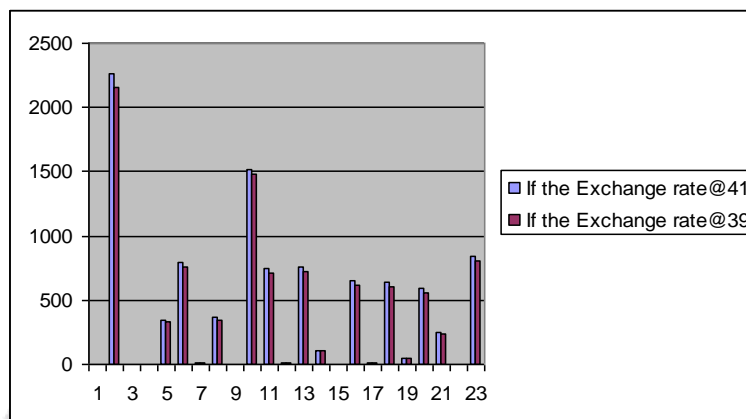
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DATA ANALYSIS

Table:2 CURRENCY EXCHANGE BETWEEN TWO RATES				
PROFIT&LOSS A/C FOR THE YEAR ENDED JUNE 2007				
Particulars	(Rs.in crores)	Income and Expenses@ 60% from foreign (In dollars)		
		Average Exchange rate @Rs.41	If the Exchange rate@41	If the Exchange rate@39
INCOME				
Net operating Income	3768.62	2261.17	2261.17	2150.87
EXPENSES				
Material consumption	0	0.00	0.00	0.00
Manufacturing expenses	577.24	346.34	346.34	329.45
Personal expenses	1322.59	793.55	793.55	754.84
Selling Expenses	17.82	10.69	10.69	10.17
Administrative Expenses	913.89	365.55	365.55	347.72
Capitalized Expenses	0	0.00	0.00	0.00
Cost of Sales	2831.54	1516.14	1516.14	1484.99
Reported PBDIT	937.08	745.03	745.03	708.69
Other recurring income	16.07		9.64	9.17
Adjusted PBDIT	953.15		754.67	717.86
Depreciation	178.21		106.93	101.71
Other write offs	0		0.00	0.00
Adjusted PBIT	774.94		647.75	616.15
Financial expenses	20.6		12.36	11.76
Adjusted PBT	754.34		635.39	604.40
Tax Charges	75.87		45.52	43.30
Adjusted PAT	678.47		589.87	561.10

Non recurring-items	423.35		254.01	241.62
Other non cash Adjustments	0		0.00	0.00
Reported PAT	1101.82		843.88	802.72

GRAPH: 2



INTERPRETATION: This graph showing total revenues are alteration together, total revenues are decreased Rs.2261.17 to 2150.87, and gross profit also decreased Rs.745.03 to 708.69.simultaneously all these values are changing the net income. If the Exchange rate had fixed @ Rs.41, the revenues would have been same.

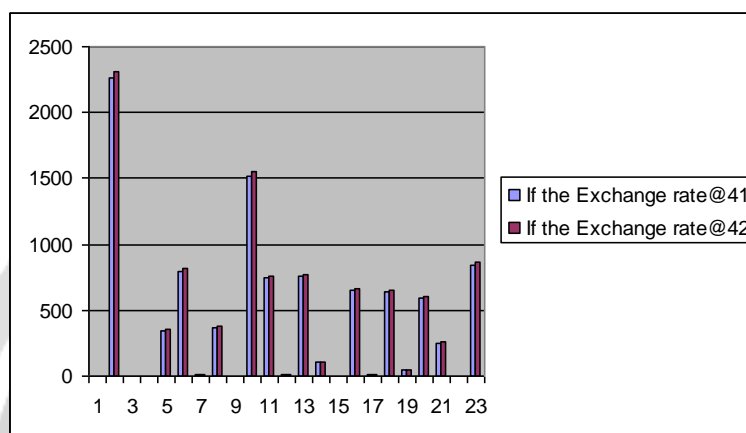
HCL

DATA ANALYSIS

Table:3 CURRENCY EXCHANGE BETWEEN TWO RATES				
PROFIT&LOSS A/C FOR THE YEAR ENDED JUNE 2007				
Particulars	(Rs.in crores)	Income and Expenses@ 60% from foreign		
		Average Exchange rate @Rs.41	If the Exchange rate@41	If the Exchange rate@42
INCOME				
Net operating Income	3768.62	2261.17	2261.17	2316.32
EXPENSES				
Material consumption	0	0.00	0.00	0.00
Manufacturing expenses	577.24	346.34	346.34	354.79
Personal expenses	1322.59	793.55	793.55	812.90
Selling Expenses	17.82	10.69	10.69	10.95
Administrative Expenses	913.89	365.55	365.55	374.47
Capitalized Expenses	0	0.00	0.00	0.00
Cost of Sales	2831.54	1516.14	1516.14	1553.12
Reported PBDIT	937.08	745.03	745.03	763.20
Other recurring income	16.07		9.64	9.88
Adjusted PBDIT	953.15		754.67	773.08
Depreciation	178.21		106.93	109.54
Other write offs	0		0.00	0.00
Adjusted PBIT	774.94		647.75	663.55
Financial expenses	20.6		12.36	12.66

Adjusted PBT	754.34		635.39	650.89
Tax Charges	75.87		45.52	46.63
Adjusted PAT	678.47		589.87	24774.71
Non recurring-items	423.35		254.01	260.21
Other non cash Adjustments	0		0.00	0.00
Reported PAT	1101.82		843.88	864.46

GRAPH: 3



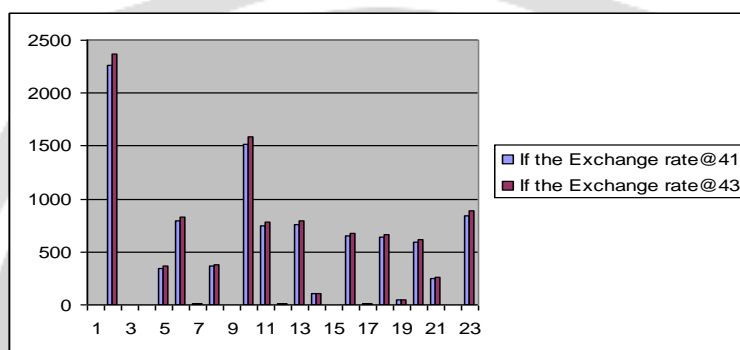
INTERPRETATION: This graph showing total revenues are alteration together, total revenues are increased Rs.2261.17 crores to 2316.3, and gross profit also decreased Rs.745.03 to 763.20.simultaneously all these values are changing the net income. If the Exchange rate had fixed @ Rs.41, the revenues would have been same.

HCL: DATA ANALYSIS

Table:4 CURRENCY EXCHANGE BETWEEN TWO RATES				
PROFIT&LOSS A/C FOR THE YEAR ENDED JUNE 2007				
Particulars	(Rs.in crores)	Income and Expenses@ 60% from foreign (In dollars)		
		Average Exchange rate @Rs.41	If the Exchange rate@41	If the Exchange rate@43
INCOME				
Net operating Income	3768.62	2261.17	2261.17	2371.47
EXPENSES				
Material consumption	0	0.00	0.00	0.00
Manufacturing expenses	577.24	346.34	346.34	363.23
Personal expenses	1322.59	793.55	793.55	832.26
Selling Expenses	17.82	10.69	10.69	11.21
Administrative Expenses	913.89	365.55	365.55	383.38
Capitalized Expenses	0	0.00	0.00	0.00
Cost of Sales	2831.54	1516.14	1516.14	1590.10
Reported PBDIT	937.08	745.03	745.03	781.37
Other recurring income	16.07		9.64	10.11
Adjusted PBDIT	953.15		754.67	791.48

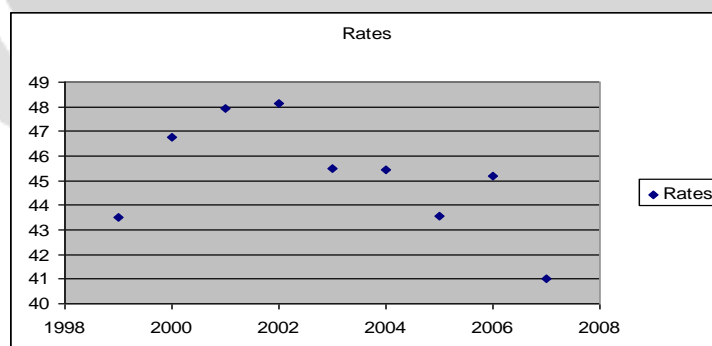
Depreciation	178.21		106.93	112.15
Other write offs	0		0.00	0.00
Adjusted PBIT	774.94		647.75	679.35
Financial expenses	20.6		12.36	12.96
Adjusted PBT	754.34		635.39	666.38
Tax Charges	75.87		45.52	47.74
Adjusted PAT	678.47		589.87	618.64
Non recurring-items	423.35		254.01	266.40
Other non cash Adjustments	0		0.00	0.00
Reported PAT	1101.82		843.88	885.04

GRAPH: 4



INTERPRETATION: This graph showing total revenues are alteration together, total revenues are increased Rs.2261.17 crores to 2371.47, and gross profit also decreased Rs.745.03 to 781.37.simultaneously all these values are changing the net income. If the Exchange rate had fixed @ Rs.41, the revenues would have been same.

The rupee-dollar Exchange rates over the last five years



TOOLS AND TECHNIQUES FOR THE MANAGEMENT OF FOREIGN EXCHANGE RISK

Hedging exposures, sometimes called risk management, is widely resorted to by financial directors, corporate treasurers and portfolio managers. The practice of covering exposure is designed to reduce the volatility of a firm's profits and/or cash management and it presumably follows that this will reduce the volatility of the value of the firm. There are a wide range of methods available to minimize foreign exchange risk which are classified as internal and external techniques of exposure management.

Internal techniques

Internal techniques of exposure management help to resolve exposure risks through regulating the firm's financial position. Thereby, they ensure that the firm is not endangered through exposures. The fundamental stress minimizing of not complete elimination of exchange losses that are likely to accrue as a result of exposure. They use methods of exposure management which are a part of a firm's regulatory financial management and do not resort to special contractual relationship outside the group of companies concerned. They aim at reducing exposed position or preventing them from arising. They embrace netting, matching, leading and lagging, pricing policies and asst/liability management. Internal techniques of exposure management do not rely on 3rd party contracts to manage exposed positions. Rather, it depends on internal financial management.

External techniques

These refer to the use of contractual relationship outside the group of companies so as to minimize the risk of foreign exchange losses. They insure against the possibility the exchange losses will result from an exposed position which internal measures have not been able to eliminate. They include forward contracts, borrowing short term, discounting bills receivable, factoring, and government exchange risk guarantees currency options. External techniques of foreign exchange exposure management use contractual relationships outside the group to reduce risk of exchange rate changes. Several external techniques are available for foreign exchange management. The firm can make a choice of that technique which is most suitable to it.

TOOLS FOR FOREIGN EXCHANGE RISK MANAGEMNT

Forward exchange contract

A forward exchange contract is a mechanism by which one can ensure the value of one currency against another by fixing the rate of exchange in advance for a transaction expected to take place at a future date. Forward exchange rate is a tool to protect the exporters and importers against exchange risk under foreign exchange contract, two parties' one being a banker compulsorily in India, enter into a contract to buy or sell a fixed amount of foreign currency on a specific future date or future period at a predetermined rate. The forward exchange contracts are entered into between a banker and a customer or between two bankers. Indian exporter, for instance instead of grouping in the dark or making a wild guess about what the future rate would be, enter into a contract with his banker immediately.

He agrees to sell foreign exchange of specified amount and currency at a specified future date. The banker on his part agrees to buy this at a specified rate of exchange is thus assured of his price in the local currency. For example, an exporter may enter into a forward contract with the bank for 3 months deliver at Rs.49.50. This rate, as on the date of contract, is known as 3 month forward rate. When the exporter submits his bill under the contract, the banker would purchase it at the rate of Rs.49.50 irrespective of the spot rate then prevailing. When rupee was devaluated by about 18% in July 1991, many importers found their liabilities had increased overnight. The devaluation of the rupee had effect of appreciation of foreign currency in terms of rupees. The importers who had booked forward contracts to cover their imports were a happy lot.

Date of delivery

According to Rule 7 of FEDAI, a forward contract is deliverable at a future date, duration of the contract being computed from the spot value date of the transaction. Thus, if a 3 months forward contract is booked on 12th February, the period of two months should commence from 14th February and contract will fall on 14th April.

Fixed and option forward contracts

The forward contract under which the delivery of foreign exchange should take place on a specified future date is known as 'Fixed Forward Contract'.

For instance, if on 5th March a customer enters into a three months forward contract with his bank to sell GBP 10,000, it means the customer would be presenting a bill or any other instrument on 7th June to the bank for GBP 10,000. He cannot deliver foreign exchange prior to or later than the determined date. Forward exchange is a device by which the customer tries to cover the exchange risk. The purpose will be defeated if he is unable to deliver foreign exchange exactly on the due date. In real situations, it is not possible for any exporter to determine in advance the precise date. On which he is able to complete shipment and present document to the bank. At the most, the exporter can only estimate the probably date around which he would be able to complete his commitment.

With a view to eliminate the difficulty in fixing the exact date of delivery of foreign exchange, the customer may be given a choice of delivery the foreign exchange during a given period of days. An arrangement whereby the

customer can sell or buy from the bank foreign exchange on any day during a given period of time at a predetermined rate of exchange is known as 'Option Forward Contract'. The rate at which the deal takes place is the option forward sale contract with the bank with option over November. It means the customer can sell foreign exchange to the bank on any day between 1st to 30th November is known as the 'Option Period'.

Forward contract is an effective and easily available tool for covering exchange risk. New instruments like options, futures and swaps can also be used to cover exchange risks. These instruments are called financial derivatives as their value is derived from the value of some other financial contract or asset. When these instruments are bought or sold for covering exchange risk they are used for 'hedging' the exchange risk. When they are dealt in with a view to derive profit from unexpected movements in their prices or other changes in the exchange market, they are being used for speculative purposes. The scope of using these instruments for speculative purposes is very much limited in India. Some other Strategies may also be adapted to avoid exchange risk. These consist in deciding on the currency of invoicing, maintaining in foreign currency and deciding on the setting the debt.

FINDINGS OF THE STUDY

The Company has to hammer out its approach to risk management taking into account its specific circumstances. Here is brief description of company in India have fashioned its strategy towards foreign exchange risk management.

HCL Technologies is one of India's leading global IT Services companies, providing software-led IT solutions, remote infrastructure management services and BPO. Having made a foray into the global IT landscape in 1999 after its IPO, HCL Technologies focuses on Transformational Outsourcing, working with clients in areas that impact and re-define the core of their business. The company leverages an extensive global offshore infrastructure and its global network of offices in 18 countries to deliver solutions across select verticals including Financial Services, Retail & Consumer, Life Sciences & Healthcare, Hi-Tech & Manufacturing, Telecom and Media & Entertainment (M&E). For the quarter ended 30th September 2007, HCL Technologies, along with its subsidiaries had last twelve months (LTM) revenue of US \$ 1.5 billion (Rs. 6363 crores) and employed 45,622 professionals.

As its operations in many countries, the company is exposed to currency risk. Here is the description

1. They transact a major portion of their business in USD and the lesser extent other currencies and is thus exposed to currency risk, The Company manages risk on account of foreign currency fluctuations through treasury operations.
2. To mitigate the risk of changes in foreign exchange rates on cash flows denominated in USD, HCL technologies purchases foreign exchange forward contracts and the company does not speculate the currency exchange.
3. Foreign exchange transactions of their revenues were generally in USD. The average exchange rate of INR to USD in fiscal 2007 was Rs.41 against Rs.44 in fiscal 2006.

The above description of risk management in HCL is based on the information provided in the annual report of HCL for the year 2007.

4. CONCLUSIONS

Despite market expansion the profit generation is still a question mark, so companies have to search for areas of next generation like value added services, software enhancement and development other than just BPO services to survive in the market. In the present day economies are globalized and the stabilities of them is really at stake, the only rescue for the software companies is to improve their responsiveness to the changing scenarios. Companies have to develop their services to the bench mark level or global standards so that they can have acceptance all over the world. The troubles of many exporters are not a result of the volatility of the rupee but the unfavorably high-cost structure. Exporters are viable only when foreign exchange earnings get converted into more and more rupees. To improve rupee viability and preserve profits, exporters need to be efficient and productive and bring down aggregate rupee cost. Poor viability will not be resolved by hedging. Considering an inefficient exporter, it requires a breakeven exchange rate of Rs.45 dollar to show profit. It will dazzle at a rate above Rs.45. It will fizzle at any exchange rate below Rs.45. In case of forward contract. The forward contract locks in the exporter conversion of dollar revenues to rupee revenues at Rs.41, the market forward price per dollar. The market will surely not buy the exporters dollars at Rs.41 will be wholly ineffective exporters will be in serious trouble despite the perfect hedge.

The problem of viability will be solved only when the exporters breakeven moves down to Rs.41 per dollar. By contrast, an inefficient exporter that is viable at Rs.41 per dollar can take advantage of the hedge. The implicit dollar method will significantly preserve the dollar profitability exporters. The employees and managers of

exporting firms will be paid implicitly in dollars. The cost to the company will be in dollars. But the payout will be in rupees and at the prevailing exchange rates. If the dollar weakens, the dollar costs of employees and managers will be paid out in rupees at say, RS.39, if the dollar strengthens the cost of employees and managers will be paid out in rupees at say, Rs.43. To overcome these problems exporters should make good governance by making available superior human, social and business infrastructure even if the tax rates are high. Good governance lower the costs of operations and lowers the aggregate costs of doing business.

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