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RESEARCH ARTICLE

A STUDY OF HEDGING STRATEGIES FOR MANAGING FOREIGN EXCHANGE EXPOSURES IN SELECTED CORPORATE SECTOR UNITS IN INDIA

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ABSTRACT

For a long time, Indian economy has proven to be resilient to substantial exchange rate fluctuations. Arguably, this resilience has strengthened over time, as firms have learned to adapt to exchange rate variability, including through the development of the hedging practices of financial institutions and non-financial firms. Changes in information technologies have also increased the speed and the accuracy of information while the surge of financial innovations is providing the decision makers with new hedging techniques to deal with the uncertainty regarding financial flows. The present study examines the available evidence on the nature and extent of hedging behavior of companies in India. Using a field study and proprietary data, it unfolds the complex process of the foreign exchange exposure management followed by the selected corporate sector units engaged in international trade in India. It encompasses exporters, importers and business planners.

INTRODUCTION

In recent years, variations in value of rupee have been very impulsive and unpredictable. These fluctuations have had a profound impact on domestic and foreign sales and profit margins of MNCs operating in India. Many of the companies turned into ashes as a result of unfavorable exchange rate fluctuations. It results in too many questions; whether or not companies in India, are seriously managing their foreign exchange exposure? If not, what are the reasons? If yes, what strategies are they using for their management? While the risk management strategy of non-financial firms has been the subject of intense theoretical and empirical research, very little is known about the actual hedging practices of multinational firms. One possible reason for the absence of empirical evidence in the literature may be related to the difficulty in devising the appropriate measures of a firm's ability to construct its hedging strategies.

Objectives of the study

The focal point of the study is identification, measurement and management of foreign exchange exposure in selected corporate sector units in India. Other objectives of the study have been to determine the factors which are of special importance while managing foreign exchange exposure, examine the facilities available for managing foreign exchange exposure in India, investigate and verify the techniques used for managing foreign exchange exposure by corporate units and to assess the major hurdles in foreign exchange exposure management in India. For the purpose of study, overall management system of companies for hedging their foreign exchange exposure has been studied in detail. It includes the study of their awareness of foreign exchange exposure, policy of estimation of exchange rates and factors considered while making the analysis of fluctuations in exchange rates, areas of effect of exchange rate fluctuations, system for identification of exposure, existence of any exposure management system for hedging their exposure, need and reasons for hedging their foreign exchange exposure and factors considered for its management, management policy, periodicity of review of their exposure and their hedging policies. Emphasis has been laid on sequential procedure followed for foreign exchange exposure management. Thereafter, efforts to recognize the foreign exchange exposure and measurement of exposure have also been studied. Comparison between attitude of Indian and foreign companies towards development of separate exposure management system, estimation of foreign exchange exposure, periodicity of review of their exposure / hedging policies, management policy for management of their transaction, economic and translation exposure, number of hedging tools for management has also been made. Management policy of banking and non-banking companies towards for their transaction, economic and translation exposure has also been compared. The strategies to manage the exposures being very crucial have been scrutinized in detail.

RESEARCH METHODOLOGY

To make the study more qualitative, the study has included only information enrich top 200 companies which were ranked on the basis of their sales during 2003 by Economic Times. Out of these only 95 companies responded back. It

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encompasses not only major exporters and importers but also MNCs operating in various fields such as automobiles, steel, IT, pharmaceuticals and banking etc. Secondary data has been collected with the help of various business journals, reports, publications of research organizations, trade and professional bodies, magazines, newspapers, annual reports etc. Primary data has been collected with the help of questionnaire followed with interviews, discussions and interactions with various executives. The completed questionnaires have been edited for completeness, consistency and uniformity. It has also included comparative analysis of behavior of companies of different groups. Effect of various factors on different aspects of foreign exchange exposure management has been investigated with the help of many relational hypotheses. .Some of the hypotheses have been formulated to study effect of various factors on estimation policy, development of management system, management policy of companies towards transaction exposure, no. of techniques used for their management, translation loss/ gain, periodicity of review of exposure and hedging policies. For the purpose of study, management policies for managing transaction exposure have been divided into three groups; active management, regular management and no management. Three point scales have been used for this purpose. Number 3 has been used for active management, 2 for regular management and 1 for no management. Various statistical techniques such as chi square test, Z test and ANOVA etc. have been applied to test these hypotheses and to interpret the results of the study. The analysis of variance has been conducted at 5% level of significance.

Findings of the study

The present study has been divided into four parts. First part of the study includes the analysis of overall management system for foreign exchange exposure followed by the companies in India. It reflects the results of the study how companies undertake foreign exchange exposure management and try to reconcile stated objectives and actual practice. The other three parts of the study are related to the analysis of management practices followed by the MNCs for management of their transaction, economic and translation exposure.

1. Foreign exchange exposure management System

The results of this study reveal that majority of companies in India contemplate the effect of exchange rate vacillation on their market value and their competitive position in local market. Majority of companies consider expectations of foreign exchange market in order to make any predictions about future exchange rates to measure their foreign exchange exposure. A difference in concern of banking and non-banking companies has been observed. All of the banking companies consider the effect of exchange rate fluctuations. Big business tycoons are anxious about effect of these fluctuations on their competitive value in international market. Whereas, some of non-banking companies are not worried at all about the adverse affect of fluctuating exchange rates on their company. These non-banking companies are those companies which either do not indulge in international business activities at large scale, or have been successful in charging inflated prices in international market to cover their losses. Precise examination of factors affecting why and how the firm manages its foreign exchange exposure are explored on the basis of study of internal firm documents, discussions with managers, and data on their foreign-exchange derivative transactions. Results indicate that several commonly cited reasons for corporate hedging are probably not the primary motivation for why companies undertake risk management program. Factors like; costs of financial distress, problems of synchronizing investments and financing activities force companies in India to take care of their foreign exchange exposure.

Results of the study explore that majority of companies face all of three foreign exchange exposures such as transaction exposure, economic exposure and translation exposure. Hedging policy of the companies depends on mainly on the objective of company. Different companies have different management objectives, which are to be considered while deciding their management policies such as to eliminate all risk, allow profits, stabilization purpose, actively seek profits, eliminate risk selectively, seek competitive advantages, minimize net foreign exchange exposure, reduce stakeholders perceived risk and improve the ability to pursue investment plans & make value adding investments. Whether or not any company will establish a separate management system for management of its foreign exchange exposure, it depends on many factors. But in this study two factors are considered to be more important for this purpose. First foremost factor is the identification of effect of exchange rate variations on the company. Those companies, which do not agree that such kind of variations in exchange rate, can adversely affect their business; they will never establish any system for its management. Another factor is the objective of exposure management of the company. Any company who is willing to minimize or mitigate exposure by applying various strategies will definitely have separate system for its management. Dependence of management system of companies on these two factors has been analyzed in this study. The results of ANOVA reveal that management system of companies is significantly affected by objective of exposure management in contradiction to the effect of consideration for effect of exchange rate fluctuations. It is evident some of the companies have proper management system in order to eliminate all of their exposure. Many of them even try to eliminate their risk selectively. Only a few of companies wish to minimize their risk. As per the results of analysis of variance there is no difference between Indian and foreign companies regarding their attitude towards development of management system to hedge their foreign exchange exposure. Usually it is observed that foreign companies have proper management system whereas Indian companies do not bother so much about exposure management to develop a separate exposure management system.

Generally it has been observed that many of the companies facing foreign exchange exposure do not manage all of their exposure. Majority of companies are managing only their transaction exposure. Only a few of the companies are managing their economic exposure. Though everyone knows that unmanaged foreign exchange exposure can cause significant fluctuations in the earnings and the market value of the firm yet it is also argued that hedging is not so simple exercise. It is essentially a strategic function which requires specialized skills. Management of various exposures requires use of different strategies. Only few of the strategies are available for hedging foreign exchange exposure in Indian market as Indian derivative market is not so developed. Moreover most of the Indian companies are either not aware of various strategies which can be applied to mitigate their risk or they don't apply them so seriously. The results reveal that only few of companies make their best efforts to eliminate exposure completely by applying numerous strategies.

Success of exposure management requires not only establishment of exposure management system or applying various hedging strategies. There should be periodic evaluation of effectiveness of their hedging policies. System should be developed to smell out danger at the earliest stage and quicker decision making to handle it. Having a foreign exchange exposure management system in place will not protect a firm or enhance its performance unless it is embedded in a risk aware corporate culture. Moreover constant eye on market fluctuations and exposure is also essential. Results of analysis of variance reveal that there is no significant difference between Indian and foreign companies regarding their periodicity of review of their exposure and hedging policies which contradict the general belief. Usually it is observed that foreign companies develop systematic periodic review system for regular evaluation of effectiveness of their hedges whereas Indian companies are no so serious about review and evaluation. The results confirm that most of the companies in India review their exposure and hedging policy either daily or weekly. On one hand, some of the companies do not pay any attention for review of their exposure and hedging policies, on the other hand, some of the companies even follow the policy of monthly, quarterly or yearly review.

2. Management of Transaction exposure

Generally it has been observed that level of transaction exposure has significant effect on estimation policy, management system and review system of companies. It usually affects the degree of efforts any company will make in estimation of its transaction exposure. Usually it is observed that any company with high level of exposure makes in-depth analysis and applies various statistical tools in making estimation of its transaction exposure. On the other hand, companies with low level of exposure do not make so rigorous efforts in estimating their transaction exposure. The results of analysis of variance reveal that there is no significant effect of level of transaction exposure on estimation policy of the companies. Some of the companies facing even very low level of transaction exposure make proper estimation of their exposure by applying statistical techniques. They also take help of experts for their estimation purpose. Level of transaction exposure also effects the decision of any company to develop separate system for management of its foreign exchange exposure. Usually it is observed that any company with high level of transaction exposure makes serious efforts in management of their transaction exposure and they are more likely to develop separate management system for this purpose. The results of analysis of variance prove that there is no significant effect of level of transaction exposure on development of separate management system for foreign exchange exposure management. Some of the companies facing high level of transaction exposure do not have separate system to manage their transaction exposure whereas some of the companies with low level of transaction exposure have proper management system.

This research has also included comparative study of management policy of various companies. Results illustrate that most of the companies are managing their transaction exposure. But only 53 percent of companies are actively managing their exposure. The results of analysis of variance exhibit that there is significant difference in management policies of companies of different sectors. Comparison of banking and non- banking companies demonstrates that banking companies are more active in managing their transaction exposure as compared to non- banking companies. 92 percent of banking companies actively manage their transaction exposure on the other hand this percentage is only 53 percent in case of non- banking companies. There are many regulations of RBI guiding banks in India about their foreign currency activities, derivative activities and also their management policy for hedging their foreign exchange exposure. Non banking companies are not bound to have proper management system for hedging their exposure. They even do not disclose all the facts related to their foreign exchange exposure in their financial statements.

Usually it has been observed that Indian companies are not as active as foreign companies for hedging their transaction exposure. Foreign companies are usually dealing in many currencies at large scale. They enjoy the benefits of diversification, matching and netting. They also apply expert skills for mitigating their transaction exposure. On the other hand, Indian companies are usually assumed to be ignorant of their volume and actual impact of foreign exchange risk. But the results of analysis of variance show that management policy of Indian and foreign companies is similar which contradict the general belief. It is evident that some of the companies in India are actively managing their transaction exposure despite their low level of exposure. On the other hand some of the companies with high level of exposure do not manage their exposure so actively. The effect of estimation policy, management system and objective of exposure management on management policy of companies towards transaction exposure has also been studied. The results of analysis of variance confirm that management policy of companies towards transaction exposure is significantly affected by estimation policy of the company. It does not depend so much on management system and objective of exposure management.

Results of the study demonstrate that companies are actively using various hedging strategies for managing their transaction exposure. Matching and netting are most preferable option for all of the firms which helps them to bring down their exposure up to manageable level. It also explores that foreign currency receivables and payables arising from exports and imports have to be settled within six months. As a result, strategy of lagging is not so popular as compared to other strategies. Since there are no restrictions in India regarding the use of any freely convertible foreign currency for invoicing their international trade, companies are also applying the strategy of invoicing in strong currency, cross currency invoicing and currency diversification to reduce their transaction exposure. Many of them follow the strategy of hard currency settlements. Among derivatives, forward contracts are most popular among companies in India. Currency options are also being used very frequently in India. Though there is no restriction on the tenor and size of the swap in India yet due to complexity, usage of swap is not as popular as the use of forward contracts. Some of the companies are approaching to international derivative market for currency future contracts. But as there is no developed currency futures market in India there is very low usage of these contracts. Policy of insurance has just stepped into Indian market of management of this type of exposure. This is argued that foreign companies are more active in using more number of techniques to hedge their transaction exposure as compared to Indian companies. The results explore that there is no difference in attitude of Indian and foreign companies towards management of their transaction exposure. These results do not confirm the general observations.

Results of Carl Pearson correlation expose very low positive correlation between actual level of net exposure and number of techniques used for its management. These results do not conform to basic assumption that higher level of exposure, more number of techniques the company will apply for its management. Some of those companies which have very low level of exposure but they are using three or more than three techniques for managing their transaction exposure. On the other hand, there are some other companies also which have high level of exposure but they are using one or two techniques to manage their transaction exposure. Results of analysis of variance point out that level of exposure does not has significant effect on number of hedging tools used for management of transaction exposure. Usually it is stated that companies with high level of transaction exposure have regular review system whereas those with low level of exposure may not review so frequently. General belief about effect of level of transaction exposure on periodicity of review has been discarded. There is no significant effect of level of transaction exposure on periodicity of review of exposure and hedging policies. Some of the companies facing low level of transaction exposure review their exposure and effectiveness of their hedging policies regularly.

3. Management of Economic exposure

Economic exposures is the most pernicious and injurious exposure confronting business in a world of explosive exchange rates as it affects competitive position of a firm in international market. Management of economic exposure is not as easy as it involves management of expected future cash flows. Usually it is observed that companies in India do not measure their economic exposure. Results of the study explain that only 42 percent of the companies measure their economic exposure. There is significant difference in attitude of banking and non-banking companies towards measurement of their economic exposure. All of the banking companies make proper forecasting of their economic exposure as it is required as per RBI guidelines. Since the measurement of economic exposure requires expertise, only a few of non-banking companies make any estimation of their economic exposure. The results of analysis reveal that the companies which operate at high level usually make serious efforts to measure their economic exposure. The results of analysis of variance expose that there is significant effect of level of operation on development of separate management system for management of their economic exposure. These results comply with general view that the companies which operate at high level have a separate system comprising experts and professionals for management of their economic exposure. The study of management policies of MNCs for managing their economic exposure depicts that only 27 percent of companies are actively managing their economic exposure. There is discrepancy in the attitude of banking and non-banking companies towards the management of their economic exposure. Banking companies are more serious about management of economic exposure as compared to non-banking companies. Usually it has been observed that Indian companies are not as active as foreign companies for hedging their economic exposure. Results of analysis prove that management policy of the companies for the management of their economic exposure depends on level of operations of company.

Results of analysis of variance confirm to general belief that the companies which make serious efforts for the measurement of their economic exposure, they manage their economic exposure definitely by following the policy of either regular management or active management. On the other hand, those companies which are not measuring their economic exposure at all they are not managing their economic exposure. Various strategies can be applied to manage economic exposure such as financial derivatives and reallocation of resources. Use of financial derivatives such as future, forward, swap and option are helpful in reducing economic exposure only up to some extent as these derivatives do not provide permanent solution. Permanent solution to this problem is reallocation of resources but reallocation of resources is a long-term decision which requires operational flexibility. In fact, it enables the firm to selectively exploit favorable currency movements, to maximize profit potential and minimize the impact of adverse currency movements. MNCs with their concentrated networks in a few countries are not capable of effectively reducing their economic exposure. On the other hand, MNCs with greater breadth of operations are better equipped to effectively manage their economic exposure. By making necessary marketing and production revisions, the firm can either counteract the harmful effects of or capitalize on the opportunities presented by, a currency appreciation or depreciation.

Competitive advantage is based on expertise to reallocate the resources efficiently

It is easier for foreign companies to apply operational strategies to mitigate their economic exposure. Whereas in case of Indian companies, operational strategies are not so feasible option as they do not have so much flexibility in their operations. Results of the study show that most of the companies are taking help of financial derivatives to manage their economic exposure. It also explores that very few of the non- banking companies are making use of operational strategies. Even among various financial derivatives forward contracts are most popular as compared to other derivatives.

4. Management of Translation exposure

Translation of financial statements of foreign subsidiaries results into translation exposure at the time of preparation of consolidated financial statements. The companies not having any foreign subsidiary also have some or the other kind of assets, liabilities or transactions denominated in foreign currency. At the time of preparation of financial statements all of these items have to be denominated in reporting currency. Results of the study show that most of such Indian as well as foreign companies applies monetary/ non-monetary method for the purpose of translation of their assets and liabilities. Some of these companies are also applying current/ non-current method. Only a few of the Indian companies are following current method. All of these companies are translating their foreign currency transactions at the rate which was prevalent on the date of occurrence of transaction. Results of analysis expose that translation loss or gain of companies does not depend on method of translation. It is usually observed that most of the companies in India ignore their translation exposure completely. But in fact translation exposure can have adverse impact on both the overall accounting profits and consolidated balance sheet of the company. Some of the companies consider the management of translation exposure as an essential activity. It is evident that companies from different sectors have different attitude toward management of translation exposure. It points out that 67 percent of total respondents are not managing their translation exposure at all. It also shows that only 13 percent of companies are actively managing their translation exposure. Results of the study explore that most of the banking companies are managing their translation exposure either actively or regularly whereas most of the non- banking companies ignore it. Results of the study demonstrate that even those non banking companies which have foreign operations/ subsidiaries are not so serious about managing translation exposure. It can also be concluded from these results that non-banking companies having foreign subsidiaries are more serious about managing their translation exposure as compared to non- banking companies not having foreign subsidiaries.

Usually it is also stated that translation gain or loss depends on management policy of the company. The companies who manage their translation exposure actively do not face so much translation losses rather they enjoy translation gains. On the other hand companies who do not actively manage their translation exposure suffer huge translation losses. Results of the study reflect that some of the companies are not even managing their translation exposure but they have enjoyed translation gain. It may be one of the reasons for non-banking companies not taking their translation exposure so seriously. Results of analysis of variance reveal that translation gain or loss does not depend on management policy of company for management of translation exposure. Translation exposure can be managed fully by matching assets and liabilities in the overseas currency, whenever possible, but this may result in losing control of consolidated gearing. There is also problem in trying to match assets to liabilities in the countries where there are no sophisticated capital markets or in other cases a perfect match is not necessarily desirable. Other strategies which can be applied internally to hedge translation exposure include exposure netting, leading, lagging, adjusting flow of funds and balance sheet hedge. External techniques such as money market hedge, currency swap, cross currency swap and forward contracts can also be applied. Results of the study explore that majority of companies are using techniques of exposure netting, leading/lagging and balance sheet hedges. Usage of derivatives is very low as compared to other hedging techniques for management of translation exposure.

Conclusion

To conclude, the above investigations bring into light few vital facts related to foreign exchange exposure management practices in India. A difference in concern of banking and non-banking companies towards management of various foreign exchange exposures has been observed. It has been observed that majority of the companies have separate exposure management system to manage their foreign exchange exposure. Companies are more serious about management of their transaction exposure as compared to economic and translation exposure. The findings of this research are consistent with the composite of other empirical studies of corporate risk management in one sense that most of the firms engage in selective hedging. Among derivatives forward contracts are most popular among companies in India. Results of analysis of variance demonstrate that objective of exposure management has significant effect on periodicity of review. Periodicity of review is not affected by management system and management policy so significantly.

REFERENCES

Aabo, Tom, 2001, “E-Commerce and Exchange Rate Exposure Management: A tilt towards Real Hedging”, Journal of E-Business, Vol. 1, Issue-1 June.

Aliber, Robert Z., 1978, “Exchange Risk and Corporate International Finance”, Hasted Press, New York.

Allayannis, George and E. Ofek, 1997, “Exchange rate Exposure, Hedging, and the Use of Foreign Currency Derivatives”, Working Paper, University of Virginia.

Bodnar, Gordon M. and W.M. Gentry, 1993, “Exchange Rate Exposure and Industry Characteristics: Evidence from Canada, Japan and U.S.”, Journal of International Money and Finance (February), 29- 45.

Bradford Cornell and Alan C. Shapiro, 1983, “Managing Foreign Exchange Risks”, "Managing Foreign Exchange Risk", Midland Corporate Finance Journal, Fall.

Chowdhry, Bhagwan, and Jonathan B. Howe, 1999, “Corporate Risk Management for Multinational Corporations: Financial and Operational Hedging Policies”, European Finance Review, Vol. 2, 229-246.

Dalthan Medeiros Simasa and Otavio R. de Medeirosb, Feb 2005, “Translation of Financial Statements” Working Paper Series of Social Science Electronic Publishing.

Davis, Henry A., and Frederick C. Militello, Jr., 1995, “Foreign Exchange Risk Management: A Survey of Corporate Practices”, (Financial Executives Research Foundation, Morristown, New Jersey, USA) 44

Doukas, John, Christos Pantzalis, and Sungsoo Kim, 1999, “Intangible Assets and the Network Structure of MNCs”, Journal of International Financial Management and Accounting 10 (1), 1-23.

Dufey, Gunter and S. N. Srinivasulu, 1983, “The Case for Corporate Management of Foreign Exchange Risk”, Financial Management, 54-62.

Froot, Kenneth, David Scharfstein, and Jeremy Stein, 1993, “Risk Management: Coordinating Corporate Investment and Financing Policies", The Journal of Finance, Vol. 48 No. 5, 1629-1658.

Glen A. Larsen, Jr. and Gary R. Freeman, 1996, "Hedging Foreign Currency Transaction Exposure: The Importance of Real Rates of Interest", Journal of Financial and Strategic Decisions, Volume 9 Number 1 Spring.

Jorion, Philippe, 1990, "The Exchange Rate Exposure of U.S. Multinationals", Journal of Business 63 (3), 331-45.

Laurent L. Jacque, 1981, "Management of Foreign Exchange Risk: A Review Article", Journal of International Business Studies, Spring/Summer.

Niclas Hagelin and Bengt Pramborg, 2004, "Hedging Foreign Exchange Exposure: Risk Reduction from Transaction and Translation Hedging", Journal of International Financial Management & Accounting, Vol. 15, pp. 1-20.

Pringle, John J., 1991, "Managing Foreign Exchange Exposure", Journal of Applied Corporate Finance 73-82.

Shapiro, Alan C., 1996, "Multinational Financial Management", 5 th edition, Prentice Hall Inc., Upper Saddle River, New Jersey.

Ramanan, T. 2003, "Risk Management", Chartered Financial Analyst, Feb.

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