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Navigating Global Finances: An In-depth Analysis of Foreign Exchange Exposure in Multinational Companies - Insights from Industry Practitioners

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Abstract:

Purpose: *The primary objective of this study is to investigate the behavior of practitioners in the face of global finance challenges, with a specific focus on operating foreign exchange exposure.*
Design/Methodology/Approach: *The study relies on a survey conducted among 200 leading multinational companies listed in the Forbes 500.*
Findings: *The results obtained from the specialized questionnaire indicate that hedging is pursued, albeit not fully but partially.*
Practical Implications: *In conclusion, the study supports the perspective that hedging Operating Foreign Exchange Exposure is not simple; rather, it is a complex undertaking.*
Originality/Value: *The research method is unique as it is based on a specific sample of top managers from 200 multinational companies.*

Keywords: *Global finance, foreign exchange exposure, MNC.*

JEL Classification: *G11, G12.*

Paper type: *Research article.*

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1. Introduction

Foreign exchange exposure is a measure of a firm's profitability, net cash flow, and market value changing as a result of a change in exchange rates. An important duty of the financial manager is to measure the effect of foreign exchange exposure and manage it in such a way as to maximize the profitability, net cash flow and market value of the firm. When foreign exchange rates change, the effects on a firm can be measured in several ways.

There are three types of foreign exchange exposure. The first is translation or accounting foreign exchange exposure. This exposure has to do with income and equity effects on the firm. It results from exchange rate changes and their effects on financial statements.

The second type of exposure is transaction exposure. This results due to exchange rate changes and the fact that we must settle receivables or payables in a foreign currency. This exposure results in cash flow alterations.

Operating foreign exchange exposure measures the change in expected cash flows as a result of an unexpected alteration in foreign exchange rates. This is a long term exposure that affects revenues expenses and general competitiveness of the firm, the third type of foreign exchange exposure.

The first half of this paper will illustrate some background information on the economic (operating) form of foreign exchange exposure. The second half of the paper will include a survey sent to over two hundred multinational companies, which were listed in the Forbes 500 top multinational companies. This portion of the paper will include a copy of the survey itself, the cover letter that explained to the companies CFO what the purpose of our survey was, and an explanation of our observations from the responses sent back to us.

2. Operating (Or Economic) Exposure

Foreign exchange operating exposure is defined as the possibility that the net present value of a company's expected cash flow will change due to an unexpected change in foreign exchange rates. There can be an upward or downward change in value.

This depends on the effect of the exchange rate change on sales volume, prices, and costs. When looking at the well being of the company from a long-term perspective, economic exposure is far more important than changes caused by translation and transaction exposure.

One major problem is that since economic exposure involves estimating future cash flows over an arbitrary period of time, it is almost entirely subjective.

Economic exposure does not stem from the accounting process but rather derives from economic analysis. It is a total management responsibility since it involves the interaction of strategies in sourcing, production, finance and marketing.

It is important to note that an expected change in foreign exchange rates is not included in the definition of economic exposure. Both investors and management have already factored this information into their evaluation of expected operating results and market value.

From an investor's perspective, if the foreign exchange market were efficient, any information about expected changes in foreign exchange rates would be widely known and as a result be reflected in a firm's market value. Basically, only unexpected changes in exchange rates, or an inefficient foreign exchange market, would cause market values to change.

From a management perspective, budgeted financial statements already include information about the effect of an expected change in foreign exchange rates. With regards to economic exposure, an unexpected change in exchange rates will impact a firm's expected cash flow at four levels: Short Run, Medium Run at Equilibrium, Medium Run at Disequilibrium, and Long Run.

The short run is generally a firm's one year operating cycle. The gain or loss on cash flows depends on the currency used to denominate those expected cash flows. The currency of denomination cannot be changed for existing obligations such as purchases or sales commitments.

In addition, because of the difficulty in changing sales prices and renegotiating factor costs for a short run period, it is almost inevitable that realized cash flows will be different from expected cash flows, which were budgeted earlier. It is important to realize that as time passes, prices and costs can be adjusted relative to changes in foreign exchange rates.

Expected medium-run equilibrium cash flows are those that are shown in a firm’s two- to five year budget assuming that equilibrium conditions exist among foreign exchange rates, national interests rates, and national inflation rates. If equilibrium exists continuously, a firm will be able to adjust its prices and costs in order to maintain its budgeted position and as a result economic exposure will be zero.

If a firm is unable or unwilling to adjust operations, the firm would experience economic exposure because of the unexpected change in cash flows and as a result its market value might be altered. It is important to realize that equilibrium conditions are a component of national monetary, fiscal and balance of payment policies.

In the case of medium-run cash flows at disequilibrium, a company may not be able to adjust prices and costs to reflect the new competitive condition caused by changes in foreign exchange rates. As a result, the company's realized cash flows will be different from its expected cash flows and the company's market value can change because of unexpected deviations in cash flows.

Long-run cash flows are those cash flows beyond five years. At this level, a firm's cash flows will be influenced by the reactions of existing and potential competitors to foreign exchange rates under disequilibrium conditions. Whether or not a firm is purely domestic or multinational, if they are subject to international competition, then they will be exposed to foreign exchange economic exposure in the long run, whenever foreign exchange markets are not continuously in equilibrium.

When it comes to managing economic exposure, the objective of a firm is to anticipate and influence the effect of unexpected changes in exchange rates on future cash flows. This requires that management recognize disequilibrium conditions when they occur, and preparing a strategy to react properly.

This can be accomplished if a firm diversifies both its financing base and its operations internationally. When diversifying its financing base, firms will generally try to source funds in more than one capital market and in more than one currency.

When diversifying operations, a firm will try to recognize a change in comparative costs in the firm's own plants located in different countries. In addition, it will observe changed profit margins or sales volume in one area compared to another, depending on price and income elasticities of demand and competitor's reactions.

Management might make marginal shifts in sourcing raw materials, components, or finished products. If there is any spare capacity, production runs can be lengthened in one plant and reduced in another. Marketing efforts can be strengthened in export markets where the firm's products have become more price competitive because of the disequilibrium condition.

Variability of a firm's cash flow is reduced by international diversification of its production, sourcing, and sales because exchange rate changes under disequilibrium conditions are likely to increase the firm's competitiveness in some markets while reducing it in others. This can completely neutralize the effects of economic exposure.

3. Analyzing the Data

As previously indicated, a survey of two questions was e-mailed to the Chief Financial Officer's of two-hundred United States based Multinational Companies. The cover letter explained to .them that the purpose of the survey was to see, if and how they managed their foreign exchange risk. It was also indicated to them that it was an academic research paper. The firms receiving the survey were the two hundred largest Multinational Companies appearing in the Forbes 500 list.

The fact that these corporations had foreign operations was verified by checking the Directory of American Firms Operating in Foreign Countries (Columbia University Business Library). The email indicated that all responses would be anonymous and confidential. A total of thirty- two usable responses were returned for a response rate of sixteen percent. The response rate for mail questionnaires is usually around twenty-five percent, but can be even lower.

Question one asked if the companies hedged economic foreign exchange exposure:

- ➢ Approximately forty-five percent of the respondents do in fact hedge economic foreign exchange exposure.
- ➢ The rest of the respondents either did not hedge economic foreign exchange exposure or marked it as inapplicable.

Question two asked for the techniques used by these companies to hedge against economic foreign exchange exposure.

- ➢ Approximately sixty percent of the respondents who hedge economic foreign exchange exposure do so through the use of forward foreign exchange hedging.
- ➢ Approximately fifty percent of the respondents who hedge economic foreign exchange exposure do so through the diversification of financing.
- ➢ Approximately thirty-three percent of the respondents who hedge economic foreign exchange exposure do so through the diversification of sales.
- ➢ Approximately twenty-five percent of the respondents who hedge economic foreign exchange exposure do so through the diversification of sourcing

4. Conclusion

This study provides evidence on translation, transaction, and economic foreign exchange exposures. From these responses, it is possible to make several conclusions regarding these different kinds of exposure.

1. A number of the respondents indicated that they do not hedge any of the exposures. This would be consistent with the opinion of those who contend that hedging is a dangerous and risky process, which can easily increase exposure and losses rather than decrease exposure and maximize value in foreign regions.

2. The two most widely used techniques to hedge operating foreign exchange exposure are the forward foreign exchange hedge and diversification of financing.

3. This study provides evidence on operating foreign exchange exposures. From these responses, it is possible to make several conclusions regarding these different kinds of exposure. Finance managers hedge the operating exposure they face by both contractual and non contractual types. Even though we have not specified, we feel they hedge short term exposures with contractual forms of hedging. Additionally, we believe they hedge both short term and long term exposures with diversification of sales, sourcing and financing, additionally to contractual hedges.

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APPENDIX A:

1. Do you hedge economic foreign exchange exposure?

Yes:
No:

2. What techniques do you use to hedge economic foreign exchange exposure?

A) Money Market Hedge:
B) Forward Foreign Exchange Hedge:
C) Currency Options:
D) Diversification of Operations:
E) Diversification of Financing:
F) Diversification of sales:
G) Diversification of sourcing:
H) Futures Hedging:
I) Other:
J) Do not hedge: