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A COMPARATIVE STUDY OF PRICING POLICIES AND OBJECTIVES
OF NON-U.S. BASED MULTINATIONAL CORPORATIONS
IN THE U.S. AND THE UNITED STATES FIRMS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Saeed Samiee Esfahani, B.S., M.B.A.

* * * * *

The Ohio State University
1976

Reading Committee:
Professor Bernard J. LaLonde
Professor Robert G. House
Professor David A. Ricks

Approved By

Adviser
Faculty of Marketing
The researcher wishes to take this opportunity to express his appreciation to those who have provided him with invaluable assistance in conducting this project.

My dissertation committee have assisted me in undertaking this research by providing invaluable comments and alternative courses of action at various stages of this study. Professor Bernard J. LaLonde, Riley Professor of Marketing and Logistics, chaired the committee. His suggestions throughout this study is most appreciated. His noble professional principals and code of ethics has provided this researcher with lessons which I can only hope to follow in my career. No words of gratitude will acknowledge his role as an adviser and friend.

Professor Robert G. House has had a fundamental influence on the structure and methodology of this research. His invaluable comments throughout this study are partially evidenced by tightness of the research design. I am grateful for his guidance and friendship. Professor David A. Ricks has contributed to this study by providing helpful suggestions and identifying valuable sources of information. His support of this research is most appreciated.

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VITA

May 18, 1946 .................................. Born, Teheran, Iran
May, 1969 .................................... B.S., Brigham Young University, Provo, Utah
1970-1971 ..................................... Teaching Assistant, California State University, Long Beach, California
June, 1971 ................................. Certificate in International Business, California State University, Long Beach, California
September, 1971 .......................... M.B.A., California State University, Long Beach, California
1972-1974 ................................. Assistant Director, Graduate Business Programs, The Ohio State University, Columbus, Ohio
1974-1976 ................................. Teaching Associate, Faculty of Marketing, College of Administrative Science, The Ohio State University, Columbus, Ohio

PUBLICATIONS


FIELDS OF STUDY

Major Field: Marketing
Second Field: International Business


Studies in International Business. Professors Robert Bartels and David A. Ricks
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CHAPTER I
INTRODUCTION

The focus of this study is the comparison of the pricing policies and objectives of non-U.S. based multinational firms' United States subsidiaries with that of United States based companies operating domestically.\(^1\) Investigation of the operations of non-U.S. based firms is a relatively new area in international business research since the bulk of the previous work have analyzed the activities of the American multinational corporations. There are a number of factors which have led to the concentration of efforts in investigating the American multinational firms. For one thing, the sheer size and number, as well as the rapid expansion, of the U.S. multinational companies created new areas for business research. Data for such research were easier to obtain from the U.S. based multinational companies than the

\(^1\) Defining a multinational corporation can lead to considerable disagreement among academicians and businessmen. Probably in the purest sense, a firm cannot be considered to be multinational until its ownership as well as the geographical distribution of its operations and management outlook are worldwide. Because no more than a handful of firms, generally non-U.S. based, are so characterized, many academic texts require a minimum number of foreign affiliates (generally 15) and a minimum level of foreign earnings (generally at least twenty percent of total company profits) before they consider the firm to be multinational. For the purpose of the present research, however, all non-U.S. based firms operating in the U.S. are considered to be multinational. See David B. Zenoff and Jack Zwick, International Financial Management (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969), p. 10.
non-U.S. based ones because of the geographical proximity of the head-
quartes of the U.S. based firms to the large number of academicians in
this country who were interested in this field. In addition, there
were no language barriers to overcome since the whole investigation
could be conducted in English.

In reviewing the literature, one finds that non-U.S. based multi-
national firms were not ignored, per se.\(^2\) Frequent mentions are made
as regards the operations of Royal Dutch Shell, Unilever, and others.
Three observations can be made so far as the coverage of the operations
of multinational corporations in the literature is concerned. First,
even the least observant reader will admit that the central point and
focus of most studies have been the U.S. based multinational corporation.
Second, only a very small collection of articles and doctoral disserta-
tions have focused their investigation on non-U.S. multinational firms,
and even fewer have analyzed the operations of non-U.S. multinational
companies in the United States. Finally, the literature in the field
appears to reflect primarily financial (including accounting) and manage-
ment aspects of the operations of multinational corporations, while
marketing aspects are not covered to the same extent. Furthermore,
within marketing itself, the topics of product and promotional policies,
for which data has been more readily available to researchers, have

\(^2\)Even though most of the search was concerned with American publi-
cations, the list of the periodicals reviewed included such non-U.S.
journals as The European Journal of Marketing, Management International
Review, and Management Today. The literature review also included a
number of books which were written by non-American authors and published
overseas.
received far more attention than pricing policies of non-U.S. based multinational companies.³

The subject of non-U.S. based multinational corporations with current operations in the United States is one that has been receiving increasing attention by politicians and academicians. In 1974, for the first time, hearings were held before the Subcommittee on Foreign Economic Policy of the United States House of Representatives Committee on Foreign Affairs about the increasing amounts of direct foreign investment in the United States and its impact on the U.S. business and economy.⁴ A review of the literature in the area of international business indicated that four major studies (doctoral dissertations) investigated this topic prior to these hearings. The first of such research took place in 1963 when Rocour investigated the management of European corporate subsidiaries in the United States.⁵ Little research appears to

³For example, see James C. Baker and John K. Ryans, Jr. (eds.), Multinational Marketing: Dimensions in Strategy (Columbus, Ohio: Grid, Inc., 1975); and S. Prakash Sethi and Jagdish N. Sheth (eds.), Multinational Business Operations, Vol. 3: Marketing Management (Pacific Palisades, California: Goodyear Publishing Company, Inc., 1973). Of these recently published books, the former has only one article on pricing aspects of multinational marketing, while numerous articles are reprinted with respect to product and promotional policies. The latter book, while outlined with respect to the marketing mix variables, completely ignores the pricing dimension.


have taken place for the next eight years even though the rate of foreign
direct investment in the United States was increasing rapidly. In
1971, Daniels studied the decision process of foreign direct manufac-
turing investment in the United States. Later, Arpan examined transfer
pricing aspects of non-U.S. multinational corporations. Ward was the
first to concentrate on marketing aspects of such corporations by invest-
tigating product and promotion adaptation by European firms operating
in the United States.

The literature dealing with various issues in pricing is by no
means scarce. A good part of this coverage is, however, from the

6A literature search revealed that aside from the work mentioned
in this section, no major work was reported in the area for the periods
between 1963 to 1971.

7John D. Daniels, Recent Foreign Direct Manufacturing Investment
in the United States: An Interview Study of the Decision Process (New

8Jeffrey S. Arpan, International Intracorporate Pricing: Non-

and Promotion Adaptation by European Multinational Corporations (New

10The books and articles in this field are too numerous to list here.
The following sources which were reviewed generally dealt more with the
economic aspects of pricing than with its practical aspects: Donald V.
Harper, Price Policy and Procedure (New York: Harcourt, Brace & World,
(Lexington, Kentucky: The University of Kentucky Press, 1962), Robert
A. Lynn, Price Policies and Marketing Management (Homewood, Illinois:
Richard D. Irvin, Inc., 1967), Donald F. Mulvihill and Stephen Paranka,
and Donald S. Watson, ed., Price Theory in Action (Boston: Houghton
viewpoint of the economist and not the marketing practitioner. Within the pricing literature in marketing, evaluation and analysis of the role of pricing in the international markets and pricing policies and objectives of multinational corporations is very limited. The coverage of the subject of international pricing within the marketers' perspective is generally limited to one chapter in international marketing texts. Furthermore, a literature review has revealed that to date the pricing policies and objectives of non-U.S. based multinational firms in this country has not been examined.

A study of the pricing policies of non-U.S. based multinational corporations not only fills a gap in the area of multinational pricing policies, but also is timely and of interest because of the hearings in the U.S. Congress which are likely to continue in the months and perhaps years to come.

Purpose of the Study

It is the general objective of this study to examine the pricing policies that are employed by non-U.S. multinational corporations in the U.S. market. This broad intent is then broken down into several more specific objectives relating to the following:

1. The extent to which pricing policies in non-U.S. based multinational firms differ from those of their U.S. based counterparts.

2. The elements which influence a change in the pricing policy of non-U.S. based multinational firms.

3. The degree to which non-U.S. based multinational corporations have similar pricing policies.

Statement of the Problem

Available literature about foreign corporations indicates that their operations are generally run differently than the firms operating in the United States.\(^ {12} \) When such firms establish subsidiaries in the U.S., they tend to treat their U.S. subsidiaries different than others.\(^ {13} \) Furthermore, because of a more competitive market condition and more demanding consumers in this country, they have to adopt new ways of doing business in order to be competitive and successful.\(^ {14} \)

The present research has sought to answer the question of the types of adaptations in the non-U.S. based firms' pricing policies which are found necessary for operating in the U.S. market. This study will furthermore look into the differences and similarities of the pricing strategy of U.S. and non-U.S. based manufacturing firms in the U.S. market.

With respect to the above, three additional questions were considered:

\(^ {12} \)Lawrence G. Franko, "Strategy + Structure - Frustration = Experiences of European Firms in America." European Business, Autumn 71, p. 33.

\(^ {13} \)Ibid., p. 34.

\(^ {14} \)Ward, op. cit., p. 82.
1. Do U.S. and non-U.S. based companies include similar elements in their pricing policies?

2. Do U.S. and non-U.S. based companies perceive the importance of various elements in their pricing policies in the same manner?

3. Are there any differences between the pricing policies of companies of different national origins, that is, based in various countries?

Methodology

It was the intention of this study to analyze and compare the pricing policies and objectives of non-U.S. based multinational corporations with those of U.S. based companies' operating in this country. The findings of this research provide a better understanding of pricing policies, objectives, and strategies. They also show any existing differences between domestic and multinational pricing policies, objectives, and strategies.

To accomplish this, a questionnaire was sent to 396 non-U.S. based multinational firms in the United States. These respondents were selected based on a proportional stratified sampling technique based on the number of such companies operating in this country. That is, the number of firms representing each country in the sample was in the same proportion as in the overall market.

15The original number of firms in the non-U.S. based group was 400. This number was eventually reduced to 345 because of invalid addresses and out of business replies to the marketing executive identification letter. The number of questionnaires sent (396) includes the pretest sample as well as an additional drawing of 24 firms. See Tables F.1 and F.2 of Appendix F for further information.
proportion as their number in the directory.\textsuperscript{16} The questionnaire was sent to top marketing executives of these companies and the accompanying letters of explanation were individually typed and addressed to each of the marketing executives in the sample. The top corporate marketing officers were identified via a preliminary letter which were also individually typed but addressed to the company. The text of the letter asked the firm to identify their top marketing executive so that a directory of marketing executives can be compiled. Those firms which did not respond to this letter, however, were not excluded from the mailing list. The letters to non-responding companies were addressed to the "Vice President of Marketing."

In addition, 450 U.S. based firms were asked to provide identical pricing policy information regarding their operation in the United States. The research instrument used in this phase of the study was identical to that used for collecting data from non-U.S. based multinational companies. Rewording of the questions nor any other type of change in the research instrument used for the U.S. firms was found necessary because the items in the questionnaire appeared to apply equally to companies of both types. This fact was further reinforced after the questionnaire was pretested. Using identical research instruments is ideal in such an instance since it minimizes possible bias created by the use of different forms of the same question. The use

\textsuperscript{16}J. Arpan and D. Ricks, \textit{Directory of Foreign Manufacturers in the United States} (Atlanta, Georgia: Publishing Services Division, School of Business Administration, Georgia State University, 1975).
of the same questionnaire for both types of firms, in turn, provided a more realistic base for cross-comparison of U.S. and non-U.S. based companies.

An ideal approach, of course, would be one of designing a study that is identical in methodology with one that has already covered the pricing policies and practices of U.S. companies' domestic operations and use non-U.S. based firms as respondents. Then the results of the latter can be compared with those of the former. However, since such studies with necessary details are generally scarce and outdated, the only way to make any comparisons was to collect data on both types of companies. A main idea presented here is that the marketplace is affected by dynamic forces which cause changes in the marketing mix variables' role and importance through time. This point is clearly reflected in two studies done in 1964 and 1973 as regards the role of pricing in marketing strategy of firms. While Udell in 1964 found that pricing was not among the top five important marketing policies and decisions, Banting and Ross in 1973 found that price was the second most important marketing decision of the responding firms.

The rate of response for the past studies which investigated non-U.S. based multinational firms has generally been about 15

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percent. Although the topic of this study is considered to be among the more sensitive issues of the firms' operations, there is no reason to believe that the sample on the whole were less likely to answer questions about their pricing policies than they would about intracorporate transfer pricing. However, in order to improve the rate of response the following guidelines were used:

1. Letters were addressed to individual marketing executives instead of the firm;

2. Letters were individually typed and signed;

3. The questionnaire was professionally type-set and printed;

4. The provision was made that if the above steps fail to produce the minimum required response rate, the executives in question will be called on the telephone and then will be sent follow-up letters.

In view of the fact that the questionnaire was the only source of primary data in this study, every effort was made to design a clear set of questions which were easy to answer but their total effect would be that of comprehensive coverage of the topic. The questionnaire was designed to cover the following areas:

1. Company ownership

2. Principal products sold by the company

3. Number of major competitors for each major product type

4. The importance of pricing in the firm's marketing program

5. Pricing policy of the firm

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Arpan, op. cit., pp. 50-56. The percent of questionnaires which were returned by the respondents in the pretest of the preliminary questionnaire was indeed 60 percent more than that of previous studies or nearly 24 percent.
6. Channel(s) of distribution employed

7. Number of people involved in setting prices and their positions

8. Final and general pricing objectives

9. Price leadership

10. The importance of various pricing considerations

11. Export-import pricing policy

12. Pricing policy with respect to fluctuations in currency exchange rates

The research instrument was pretested at three different levels. As a result of the pretest many changes were made in the questionnaire. The procedure for pretesting of the questionnaire is fully discussed in Chapter III.

Hypotheses

The following are the hypotheses which were tested in this study:

1. Not all companies perceive the importance of pricing in the same manner, and, therefore, it is expected that:

   a. The U.S. and non-U.S. based companies have different opinions so far as the importance of the pricing element of the marketing mix is concerned.

   b. The non-U.S. based companies of different nationality will have similar opinions with respect to the importance of the pricing element of the marketing mix.

2. The pricing objectives of non-U.S. based firms differ from those of U.S. based companies'.

3. The pricing objectives of firms differ with respect to their size as measured by their annual revenues. That is:
a. Large U.S. and non-U.S. based firms have pricing objectives that are different from one another.

b. Small U.S. and non-U.S. based firms have pricing objectives that are different from one another.

4. Final prices of U.S. and non-U.S. based firms are affected differently by the currency exchange rate fluctuations.

5. Those firms whose final prices are affected by currency exchange rate fluctuations have pricing policies which account for such changes in their pricing.

6. Final prices of U.S. and non-U.S. based firms are affected differently by the customs duties.

7. Those firms whose final prices are affected by customs duties have pricing policies which account for such changes in their pricing.

8. Non-U.S. based firms tend to have a more decentralized approach to pricing for the U.S. market than their American counterparts.

9. The rate of response of non-U.S. firms to the questionnaire is significantly less than that of the U.S. based firms'.

Limitations

The present research has a number of limitations which limit the general application of its final results. In the first place, non-U.S. based multinational firms differ widely in their treatment of their subsidiaries. 21 In the case of European multinational companies, for example, much more decision making responsibility is given to the managers of their U.S. subsidiaries than their European affiliates.

21Franko, op. cit.
Therefore, the results of this research cannot be applied to all non-U.S. based multinational firms.

A second limitation of this study stems from the fact that the sample was selected strictly from manufacturing subsidiaries of non-U.S. based multinational companies and U.S. based firms. The findings of this study cannot be generalized to non-manufacturing companies of U.S. and non-U.S. origin. Furthermore, if a multinational firm manufactures its product in its entirety abroad and imports it for the U.S. market, the results of this study will not be helpful in explaining their behavior.

A third limitation of this research is due to the regional concentration of non-U.S. multinational firms. According to information collected by Arpan and Ricks, heavy concentrations of non-U.S. manufacturers in this country are in such states as New Jersey (208), New York (190), Pennsylvania (84), Illinois (78), and California (70). This type of geographical concentration limits the application of the final results to the overall population as a whole since regional laws, regulations, and competition may have an impact on the policies adopted by companies of U.S. and non-U.S. origin. Table A.1 in Appendix A represents a state by state breakdown of the number of non-U.S. based firms operating in the United States.

Possible heavy concentration of non-U.S. based firms in certain industries also limits the extent to which the findings of this study can be generalized. For example, there is a heavy concentration of non-U.S. based firms in the non-electrical machinery industry (319),

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22 Arpan and Ricks, _op. cit._, pp. xix-xxi.
chemicals and allied products (1970), electrical machinery equipment and supplies (135), and professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks (112).\textsuperscript{23} A detailed breakdown of non-U.S. based firms' industry affiliation is presented in Tables B.1, B.2, and B.3 of Appendix B.

In addition, the data collected from the respondents and, therefore, the findings of this study, are subject to perceptual bias and accuracy limitations. Respondents' personal bias have undoubtedly entered into the data set. One source of bias has to do with the individual respondent's perception of company policies and operations. That is, he can at best reflect the situation as he perceives them. This type of bias should, however, be minimized since the position of the respondents in their respective firms necessitates their thorough understanding of their companies' policies. Furthermore, when a certain respondent has his views as to how the existing policies should be modified, a dissonance is created which could be reflected in his responses. It must also be noted that the respondents' ability and willingness to provide accurate information will affect the results of this study.

\textbf{Potential Contributions to the Study to Marketing Literature}

As indicated earlier, little information is available about the operation of non-U.S. based firms. Even less is known about the operations of the subsidiaries of such companies in the United States.

\textsuperscript{23}\textit{Ibid.}, p. xxii.
Therefore, a significant contribution of this study is that of shedding light on an important marketing aspect of non-U.S. based firms in this country and comparing it to what U.S. based firms are doing. That is, the study fills an existing gap in the literature by providing information on how non-U.S. based companies adapt to the U.S. market. Furthermore, this research answers the question of whether some non-U.S. based firms employ international pricing policies which are applied to all subsidiaries.

The literature's coverage of the pricing aspects of international marketing is very limited. After examining a large number of sources in international marketing and international business, only a few references were available which dealt with the pricing aspects of international marketing.\(^{24}\) For example, of the two recently published books of readings in international marketing, only one has an article on international aspects of pricing.\(^{25}\) This article is properly titled, "Some Aspects of International Pricing: A Neglected Area of Management Policy."\(^{26}\) Therefore, an additional contribution of this study to

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\(^{24}\) Most sources in this area, including those listed in footnote 11, deal with export, import, and transfer pricing.

\(^{25}\) Baker and Ryans, \textit{op. cit.} The subject, however, is not ignored by many international marketing texts. All such books have set aside one chapter in which they discuss such topics as export pricing and transfer pricing in multinational corporations. The role and importance of pricing and pricing policies in the operations of the multinational enterprise, is, however, generally ignored. See footnote 11 for references.

\(^{26}\) Ibid., pp. 143-149.
marketing theory is that it provides a new addition to the existing literature in international marketing.

Potential Contributions of this Study to Marketing Practice

Contributions of this study to management practice are twofold. First, the results of the study should indicate how much emphasis the U.S. and non-U.S. based firms operating in the United States put on the pricing variable of the marketing mix. Furthermore, the results of this research indicate that there is a difference between the two types of firms with respect to their pricing objectives. From the viewpoint of marketing practice, the managerial implications of these and other findings are analyzed and discussed.

A second contribution of this study to the practice of management is that of making more information available on non-U.S. based multinational corporations in the United States to policy makers on state and national levels. This additional knowledge should in turn aid them in gaining a better understanding of the operations of such companies and, perhaps, the impact of foreign direct investment on the U.S. business and economy can be evaluated. A direct implication of this is the interface of multinational corporations and host nations. During a period of uncertainty regarding the benefits that multinational firms provide for their host nations, it is particularly important that any decision to limit or control foreign investment is based on research findings and not on intuition and nationalism. Recent decisions by Canada and Australia to control and monitor foreign investment, are indicative of the need for more research about multinational
corporations. Clearly, a better understanding of the operations of such firms should also aid policy makers in dealing with problems confronting these companies.

Organization of the Report

This study is covered in five chapters. The present chapter was an introduction to this research project and included a statement of purpose and the problem, a brief discussion of the methodology, a list of hypotheses, limitations, and the potential contributions of the study to both, marketing theory and practice.

Chapter II is a review of the relevant literature to this study. Various topics of foreign investment in the United States, pricing as an element in marketing strategy, and international pricing is covered.

The research design of the study is detailed in Chapter III. This chapter includes the sample identification, size, and selection processes, the questionnaire design and pretesting, data collection process, and a discussion of some fundamental characteristics of the sample.

The collected data is analyzed and the findings are presented in Chapter IV. In addition, the operationalization of the individual hypotheses is explained as they are tested. Chapter V is essentially an extension of Chapter IV and includes discussions of implications of the findings and conclusions. The specific contributions of this research to marketing theory and practice, as well as future areas of research are also covered.

CHAPTER II
REVIEW OF THE CURRENT LITERATURE

INTRODUCTION

The relevant literature to the topic under investigation includes two distinct areas. The first area of importance is the foreign investment in the United States. The available literature is investigated for relevant information and findings about the operations and marketing activities of non-U.S. based firms in the United States. Coverage of this area is important to this study because it can provide information on history, current status, and growth of foreign direct investment in the United States. Furthermore, it will point out internal and external circumstances under which the topic of non-U.S. based multinational corporations have gained considerable importance. This part of the literature review will also have a brief statement on the marketing activities of non-U.S. based companies in the United States.

The second area of importance to this study is the role of pricing in the firm's marketing strategy. Relevant pricing literature may in turn be broken down into two areas. First, reasons for emphasis on pricing and the role of pricing in the firm's marketing strategy shall be discussed. Then, specific areas of international pricing which are directly related to this study shall be covered. It must be pointed out that in the review of the relevant pricing literature, frequent
mentions will be made to past research and marketing operations of U.S. based companies. The nature of this study requires that relevant pricing research to both types of companies, U.S. and non-U.S. based, be covered.

FOREIGN INVESTMENT IN THE UNITED STATES

The history of foreign capital and investment in the United States goes back some 200 years. Importation of foreign capital to the United States helped create industries, transportations systems, mining, and agricultural activities. Moreover, the purchase of the Louisiana Territory was made possible by foreign loans.

Foreign capital has been free to come to the United States since 1791 when Alexander Hamilton first initiated the open-door policy. Recently, this same policy was reaffirmed after close examination by the President’s Council on International Economic Policy.

Shortly after this policy was formulated, in 1800, the value of foreign investment in the United States stood at approximately $60 million. By 1914, this amount grew to about $7 billion. However, as a result of the start of World War I, European nations were forced to liquidate much of their assets abroad to help finance their national

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1J. Arpan and D. Ricks, Directory of Foreign Manufacturers in the United States (Atlanta, Georgia: Publishing Service Division, School of Business Administration, Georgia State University, 1975), p. vii.

2Ibid.

3Ibid. All the figures from this section have come from the same source, unless otherwise indicated.
efforts. By 1915 the United States became a creditor nation. Thirty-five years later, in 1950, the book value of foreign investment in the United States grew to $3.4 billion or less than one half of what it was prior to the start of World War I. In 1965, this amount grew to $8.8 billion. The final figures available for 1974, indicate that foreign direct investment in the United States amounted to $26.5 billion.\(^4\) This amount indicates an increase of 45 percent over 1973. The preliminary figures for 1974 showed net capital inflows of $2.22 billion and reinvested earnings of $1.55 billion by non-U.S. based firms in this country, less downward exchange rate valuation of $310 million.\(^5\)

Foreign direct investment from Europe accounts for 63 percent of total foreign direct investments in the United States. Twenty percent of foreign investments in the U.S. is by Canadian concerns, while Japan's share stands at one percent and Latin American countries\(^1\) at 9 percent. Figure C.1 and Table C.1 of Appendix C provide a breakdown of foreign direct investment in the United States.

In terms of the number of non-U.S. based companies that operate in the United States, one comprehensive directory indicates a figure of 2,500.\(^6\) These firms are either wholly or partly owned subsidiaries of


1,500 foreign firms. Many of them have been operating in this country for a long time, and their products are a familiar part of the domestic scene. The majority, as the above figures seem to indicate, came in the wake of investment that began in the early 1960's. Another directory, which is more recent and lists only foreign manufacturers in the United States, sets the number of firms operating in this country at 1,137.7

**Foreign Investment: An Anonymous Presence**

Those non-U.S. based companies which have been operating in this country for a long time no longer have the image of a foreign owned company. Typical of these companies are Shell Oil and Lever Brothers (both owned by Dutch and English), and Nestle (owned by the Swiss). There are several reasons, aside from the passage of time, that have contributed to the public's unawareness of non-U.S. ownership of many United States companies.8 In the first place, the entrance of a foreign firm into the U.S. economy has not traditionally been a major news event. The large size and the dynamic nature of the U.S. economy is such that new entries into the market are considered ordinary events and therefore go largely unnoticed except in the immediate locale. Furthermore, it was largely after the two devaluations of the dollar

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7Arpan and Ricks, *op. cit.*, p. xvii. The discrepancy between the figures presented in this section and those which appear in other sources, be it the number of firms or the amount invested or earned, is also due to the differences in the universe of reporting firms and the methodology used in collecting and analyzing the data.

8Ibid., p. xi.
that foreign investment began to receive increasing attention. The chart in Figure C.1 of Appendix C illustrates this point. Secondly, the U.S. laws do not require a foreign investment to be registered as such, nor is it required that they be approved by an agency of the U.S. government. As a result, foreign investment activities are not a matter of public record. Thirdly, most foreign firms adopt new names for their U.S. subsidiaries. A new name is preferred partly because some foreign names will be difficult or impossible to pronounce in English. Earning an American image and acceptability by the general public is perhaps another reason for adopting a new name. Finally, non-U.S. based firms entering the U.S. market go through great lengths to cover their true identity.

One reason for using a different identity in the United States has to do with industry cartels and Interlocking Directorates abroad and the U.S. antitrust legislation. When two members of an industry cartel establish subsidiaries in the U.S., oftentimes they are required to force their subsidiaries to follow cartel rules. This action in

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9At the present time the Securities and Exchange Commission regulations require reporting of ownership when ten percent or more of the voting securities of a U.S. corporation is held by a non-U.S. citizen. Also a proposed regulation by the Department of the Treasury will require reporting of non-U.S. ownership of U.S. firms even if the non-U.S. holdings are less than ten percent.


effect results in a price-fixing situation here which is not welcomed by the Federal Trade Commission and the Department of Justice. Adoption of a new name will undoubtedly help dissociate the subsidiary with its parent company and thus the industry cartel. Furthermore, it is not uncommon for non-U.S. based banks to own sizable interests in several companies concurrently, where two or more of these companies may be operating within the same industry. It is also not uncommon for such organizations to hold supervisory board chairmanship or vice-chairmanship in one or more of the companies in which they have large holdings. For example, Deutsche Bank, Aktiengesellschaft, holds chairmanship or vice-chairmanship in two companies in each of rubber, steel, and chemical industries. The anti-trust implications of this type of ownership in the U.S. is clear. Table 2.1 is a list of the major holdings of Deutsche Bank, A.G., in industrial firms.

Certainly non-U.S. based firms' greater awareness and sensitivity to cultural reactions to a "foreign presence" is also a reason for


13"Merchant Banking/The German Example: Three Rich, Powerful Banks Dominate the Economy," Business Week, April 19, 1976, pp. 91-99. Some additional fringe benefits of this type of ownership includes avoidance of unwanted shareholders and foreign takeovers. For example, after Kuwait purchased a large portion of Daimler-Benz, the government of Iran made an attempt to purchase a 39% interest in the automobile manufacturing concern from the Flick family. In order to avoid further non-German ownership of Daimler-Benz, Deutsche Bank which had a 28.5% interest in the company and the right of first refusal of the Flick's holdings, purchased an additional 29% interest in the company at a price far more attractive than what the Iranian government was offering.
# TABLE 2.1

Deutsche Bank's Holdings in Industrial Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continental Gummi-Werke</td>
<td>Rubber</td>
</tr>
<tr>
<td>Daimler-Benz</td>
<td>Automobiles</td>
</tr>
<tr>
<td>Enka Glanzstoff</td>
<td>Chemicals</td>
</tr>
<tr>
<td>Hoesch</td>
<td>Steel</td>
</tr>
<tr>
<td>Kali-Chemie</td>
<td>Chemicals</td>
</tr>
<tr>
<td>Klöckner-Werke</td>
<td>Steel</td>
</tr>
<tr>
<td>Mannesmann</td>
<td>Tubes, Machinery</td>
</tr>
<tr>
<td>Metallgesellschaft</td>
<td>Metals</td>
</tr>
<tr>
<td>Phoenix Gummi-Werke</td>
<td>Rubber</td>
</tr>
<tr>
<td>Preussag</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Reemtsma Cigarettenfabriken</td>
<td>Tobacco</td>
</tr>
</tbody>
</table>

Twenty-five Percent or More of the Stock of the Following Firms

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayerische Elektricitats-Werke</td>
<td>Utility</td>
</tr>
<tr>
<td>Bergmann-Elektricitats-Werke</td>
<td>Utility</td>
</tr>
<tr>
<td>Daimler-Benz</td>
<td>Automobiles</td>
</tr>
<tr>
<td>Hapag-Lloyd</td>
<td>Shipping</td>
</tr>
<tr>
<td>Karstadt</td>
<td>Retailing</td>
</tr>
<tr>
<td>Philipp Holzmann</td>
<td>Construction</td>
</tr>
<tr>
<td>Pittler Maschinenfabrik</td>
<td>Machinery</td>
</tr>
<tr>
<td>Suddeutsche Zucker</td>
<td>Sugar</td>
</tr>
</tbody>
</table>

hiding their foreign identity. Generally, periods from 1942-1975 can be considered a period of reappraisal for foreign companies' presence in the United States. In 1974, for the first time, hearings were held before the Subcommittee on Foreign Economic Policy of the United States House of Representatives Committee on Foreign Affairs about the increasing amounts of direct foreign investment in the U.S. and its impact on the U.S. business and economy. These hearings have in turn encouraged additional research in the area and no final decision has been reached with regard to non-U.S. based companies. The Canadian Government has also begun to crack down on foreign investment in that country. As a result, foreign investors in Canada now must show that their investment in an existing Canadian Company will benefit the Canadian economy before they are permitted to acquire such companies. The impact of the Canadian ruling made the U.S. Congressmen more aware of the situation, especially since the U.S. is the largest foreign investor in Canada. In addition, as the foreign exchange reserves of the oil producing nations are increasing rapidly, they began to invest their


funds abroad. Iran's purchase of a 25 percent interest in Krupp, the German steel producer, and Kuwait's purchase of a minority interest in Daimler-Benz are examples of such investments by the oil producing nations which may have triggered a warning in Washington.

A number of new regulations governing foreign investment in the United States were proposed as a result of these trends. For example, foreign ownership of U.S. firms must now be reported to the Department of the Treasury even if less than 10 percent of the voting securities of a U.S. company is held. Recently, the House Ways and Means

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16 The overall impact of OPEC (Organization of Petroleum Exporting Countries) direct investment in the U.S. appears to be far more psychological than actual. In the first place, a large portion of such funds have traditionally been invested in long term U.S. governments and government related bonds, notes and securities. Secondly, less than one-sixth of OPEC investments find their way directly to the United States. Finally, it appears that the managerial expertise which is a basic necessity for running large business enterprises is not readily available to OPEC nations. This perhaps explains why a large portion of their investments goes directly into the Eurocurrency market and Swiss banks. For further information on OPEC investments in the United States see, International Letter, Number 257, January 16, 1976.


18 "Foreign Ownership of U.S. Firms," International Dimension, Number 12, January 1975, p. 5.
Committee voted to eliminate any U.S. taxation of most dividend and interest income that foreigners earn from portfolio investments starting in 1976. Such taxes were eliminated to encourage importation of funds to help the U.S. economy. In addition, the Congressional hearings cited earlier led to the Foreign Investment Study Act.

Marketing Activities of Non-U.S. Based Companies

Marketing activities of non-U.S. based firms have not been covered comprehensively. In fact, a search of the available literature produced only one study which had exclusively focused on marketing related problems of foreign based firms. In this study, which involved a total of 53 European based firms, Ward analyzed product and promotion adaptation of such companies in the United States.

Few other publications have taken a broad view of the marketing activities of non-U.S. based companies in the United States. One such study is by Rocour, who is the first writer to explore this area.  


20"Foreign Ownership of U.S. Firms," op. cit.


In all, 59 companies were contacted by Rocour via two different questionnaires. His focus in this study was the subsidiaries' management in the United States. A section of this research is focused on "Functional Operating Problems," in which he discusses market analysis and sales, advertising, and production. The author, however, fails to discuss any of the marketing functions at length, nor does he make an attempt to form a model of the marketing system(s) of non-U.S. based companies.

Two other studies available also treated the subject of European firms in the United States at a macro level.\(^{23}\) Neither one of these studies deal with an element of the marketing mix exclusively, nor are their foci on the general marketing activities of such firms. They do, however, discuss such topics as product strategy and to what extent certain marketing decisions are centrally made.

**PRICING AS AN ELEMENT IN MARKETING STRATEGY**

**Background**

Pioneers in the area of pricing have examined the subject by the commodity lines, industries, operations research, behavioral science, and other viewpoints.\(^{24}\) The importance and complexity of the subject


matter is reflected in much of their work. Pricing has also received a great deal of attention as an element in marketing strategy. Qualitative and quantitative analyses of the subject matter from this standpoint also appears in the literature.\(^{25}\) It is this aspect of pricing which is of immediate interest in this section.

Pricing has been referred to as mystery-laden and one of the most complex and difficult of the strategy-making tasks.\(^{26}\) Furthermore, businessmen and academicians admit their inability to deal with the subject matter clearly and concisely.\(^{27}\) In an earlier study, executives of some of the largest firms in the United States made repeated reference to the "art" or "feel" of pricing decisions rather than observance of a particular pricing decision model.\(^{28}\) This clearly reflects the fact that pricing policies and decisions are not clear-cut issues. However, from a firm's viewpoint, price must be considered an essential and important variable of the marketing mix for two reasons.


In the first place, prices are where all of a firm's efforts are turned into revenues and profits. That is, in the long run, the survival and success of the firm is determined by how well corporate objectives have been translated into marketing objectives and hence pricing policies and objectives and how well pricing decisions are made. Incorrect or less than optimal pricing decisions will not be offset by the impact of even the best promotional campaign and channels of distribution arrangement. A second reason is that pricing is the only element in the firm's marketing mix which can be controlled by the company to a large extent. Yet, the market demand for a product or service is largely determined by its price. Furthermore, a firm's pricing policy is influenced by state and federal legislation more than any other part of the firm's marketing program. In this regard, one author states:

"...We have restraining laws affecting packaging, labeling, distribution policies, and promotional activities, but the key legislative regulations in marketing apply to pricing. Because of these legal considerations, executives are hesitant to disclose information about their companies' pricing practices. This hesitancy adds to the difficulty of acquiring the empirical data so badly needed if businessmen are to learn more about pricing." 29

The impact of the firm's pricing policy on its market performance, together with legal restriction make pricing an important and, at the same time, a difficult subject to study.

Reasons for Emphasis on Price

Traditionally, price has been considered an important marketing variable for at least two reasons. The first reason has to do with the nature of the economy during the time when a systematic economic theory was being developed by such economists as Adam Smith and David Ricardo.\(^3\) A typical nation's output consisted of raw materials and finished consumer goods. Little effort was made to differentiate competitive offerings through advertising, packaging, or branding. The most important differentiating variable in marketing of their raw materials and goods was price. Moreover, price was considered important because of low level of per-capita and average incomes.

A second reason given for emphasis on price is what one author refers to as its relative simplicity:

"...Prices are quantitative, unambiguous, and unidimensional, whereas product quality, product image, customer service, promotion, and similar factors are qualitative, ambiguous, and multidimensional."\(^3\)

Although price appears simple because in its quantitative sense it is represented by a single number, one would expect that it be multi-dimensional in nature since it is influenced by many factors of production and marketing. There is, however, little doubt that the end price is simple to understand by the general public when stated in units of measurement of common knowledge.


\(^3\)Ibid.
An additional reason for emphasis on price is its role in a competitive economic system. Maximum economic efficiency is reached through flexible pricing mechanism under a competitive economic condition.

**INTERNATIONAL PRICING**

The pricing element of the marketing mix does not contain a set of policies and objectives which are independent of the other marketing and non-marketing variables. Pricing policies and objectives must conform with all factors affecting the firm. When firms enter the international market, the rules of the game do not change much, but the conditions under which the firm must operate do. In words of an Eimco executive:

"...The price factors with which we deal in foreign marketing are not in themselves so new or different from our operations at home, but they are more numerous, more susceptible to change, and more difficult to keep track of. They are, therefore, much more complex to treat on a comprehensive basis. This is understandable because of the number of countries involved and the individual conditions in each with which we must contend."  

Therefore, policy in the international market must be well coordinated with products and markets as well as other factors which have an impact on firms' operations. This, however, does not mean that prices must be identical. One author indicates that the degree of coordination

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33Behrman, op. cit.
depends partly on the kind of price under consideration: wholesale price to distributors, retail prices to the consumer, prices on sales to governments, or inter-company sales prices of components and finished good items.34 Also, as indicated earlier, if the parent is a member of an industry cartel, it must oversee the prices of affiliates to keep them from violating the price agreements.

Pricing decisions which are made at corporate headquarters, generally suggest a pattern of uniform international prices. The question of the desirability of uniform pricing in international markets has been discussed by one author from three different viewpoints.35 From a legal point of view, uniform pricing is emphatically desirable in the multinational markets. In fact, legal attempts to bring about price uniformity are reflected in the U.S. Antidumping Act of 1921, as amended, Article VI of the General Agreement on Tariffs and Trade (GATT) of 1947, and the International Antidumping Code of 1967.36

From an economic point of view, uniform pricing is certainly undesirable in multinational markets because of the presence of competitive market structures—pure monopoly, oligopoly, and monopolistic

34Ibid.
36Ibid., p. 10.
competition.\textsuperscript{37} These differences are not taken into account by various antidumping measures.

From the point of view of a businessman, the desirability of uniform pricing in multinational markets depends upon his circumstance and market structure. If foreign competition is to be prevented and the firm's market position is to be preserved, the problem must be approached from a legalistic viewpoint.\textsuperscript{38} On the other hand, the businessman who wishes to sell his products internationally and utilize his market structure to his advantage will view the problem from the economic perspective. Therefore, the businessman's concern must change depending on whether his intention is holding his market position or market expansion.

Kressler finally concludes that there is economic justification for price discrimination where the geographic dimensions of an industry are redefined from domestic to an intermediate one.\textsuperscript{39}

Establishing Pricing Policy

It has been suggested that pricing is not as important as some of the other elements of the firm's marketing mix.\textsuperscript{40} Yet setting prices

\textsuperscript{37}Ibid., p. 11. The author's viewpoint here is essentially the same as the theoretical concepts of market segmentation, where profit maximization in several markets with various demand schedules for a product is achieved through charging optimum prices in each market. That is, where marginal cost equals marginal revenues of individual markets in a monopolistic competition market structure.

\textsuperscript{38}Ibid., p. 13.

\textsuperscript{39}Ibid.

and pricing policies are among the key marketing decisions made by the company and these responsibilities are generally delegated to top officers in the company. As one study points out:

"...Pricing policy is usually set by the international division or a corporate staff group primarily concerned with price decisions. In either case, marketing, financial, and manufacturing staff representatives—under the overall supervision of the international division vice president—will make pricing policy determination. In addition, these staffs usually coordinate with domestic division managers whose product lines are involved, and if the foreign sales volume is considerable the president's office may become involved."41

Another author states that because of the crucial importance of pricing policy, it is always considered to be among the primary responsibilities of top management.42 Only in the case of very large and decentralized firms, such as multinational companies, is there any delegation of authority to formulate pricing policies and strategies to subordinates and even then the pricing authority usually falls no further than to the national managements of the various overseas affiliates of the firm.43 Furthermore, this author points out that:

"...In contrast to the formulation of pricing policies and strategies, the implementation of the policies—that is, the day-to-day operational price making or routine pricing—is rarely a direct concern of the top management but is widely diffused throughout the organizational structure. This diffusion is often misinterpreted by textbook writers as evidence that pricing is handled as a matter of routine


43 Ibid.
by minor executives and that the theoretical concepts and
techniques of pricing are completely ignored. Close analysis
will reveal that the pricing decisions which the minor
executives make are nothing more than results of directions
top management has issued to lower echelons.4

Therefore, the day-to-day pricing decision in a company is made based
on guidelines and formulae and through consultation with the parent
firm. These formulae differ based on who the buyer is. That is, a
different formula is used for each of intercompany, intracompany, and
sales to distributors.45 With regard to this, a uniform pricing
system has been suggested. Although a uniform pricing system is
simpler to deal with and is fairer because it makes the cross compari-
son of the performance of local managers possible, it has three serious
drawbacks.46 First, those foreign affiliates which are jointly owned
with local investors are likely to have different profit objectives.
Because of this, those firms which employ a uniform pricing system,
exclude their joint ventures operations from this policy. Second,
uniform pricing may lead to antitrust difficulties because it tends
to bring prices more in line and thus lead to a price-fixing situation
and/or the division of the international market. Finally a switch to
a new pricing system, namely uniform pricing, can erode the firm's
relationship with its distributors as the traditional pricing systems
are being altered.

44 Ibid., p. 471.
45 Behrman, op. cit., p. 77.
46 Solving International Pricing Problems, op. cit., p. 4.
Generally, prices to distributors, which is of immediate importance to this study, are not uniform in various national markets. However, some enterprises have found it desirable to establish the same price for identical products around the world, especially if the markets were linked in some fashion. Linkages occur when the item is unique and well-known—such as a computer—or common and bought by customers travelling around the world—such as soap. Some multinational firms, however, prefer to establish a pattern of similar prices and the major factor that permits adoption of such a policy is the reduction of trade barriers among markets.

Overall setting of uniform price guidelines is a complex task. The decision to be made is no longer setting guidelines for an oligopolistic response within a single market. Behrman points out that uniform price guidelines must be a response to a series of (quasi-) oligopolistic markets in a way which collectively achieves the objectives of the enterprise (return on investment, sales growth, market penetration, diversification, or whatever.) He further points out that these calculations are not left to a team of finance officers or manager of affiliates, but that the subsidiaries generate information and

47 Behrman, op. cit.
48 Ibid.
49 Ibid., p. 78.
50 Ibid.
arguments relevant to the national markets and the parent decides how
to meld or compromise the separate interests of the affiliates.

The pricing policy of the firm is also affected by the local
government. National governments can exert two types of pressure on
the foreign firm's pricing policy. First, where government purchases
of some products such as pharmaceuticals are large, they can check
the price of the firm's product as well as competing products abroad
and pressure the company into lowering their prices if there are signi-
ficant differences in price levels. Secondly, the firm may be under
pressure to bring their prices more in line with world prices through
controls. This may be especially true where a large sector of the
economy is affected by those prices.

With respect to the firm's pricing decision process, Rutenberg
points out that in a multinational company pricing policy is more com-
plicated because of the issue of the extent of autonomy of the national
subsidiaries. He offers three pricing schemes, each requiring a
different degree of centralization, which are encountered in practice.
In the first pricing policy, the price of the product is the same
around the world, except that the customers absorb freight plus duty.
This type of policy, clearly, simplifies the tasks of coordination and
auditing. This type of policy is used in a number of companies that

51David P. Rutenberg, "Three Pricing Policies for a Multi-Product
Multi-National Company," Management Science, April 1971, p. 459, and
Behrman, op. cit., p. 78.

52Ibid.
have a massive U.S. market and therefore maintain an ethnocentric export orientation despite their plants abroad. As stated earlier, Behrman believes that this type of pricing policy is preferable when markets are linked in some fashion. In this type of policy, therefore, the corporation decrees that the U.S. price will be the standard worldwide base price.

Robinson criticizes this type of pricing policy and states that:

"The standard worldwide base price is most likely to be looked upon by management as full-cost pricing, including an allowance for manufacturing overhead, general overhead and selling expenses. Often ignored are (1) the necessarily arbitrary nature of these cost allocations, (2) differences in costs from market to market (in labor, capital, materials, and management in the case of overseas manufacture; in shipping, crating, insurance, tariffs, taxes, internal transport, distribution, and promotion in the case of exporting), (3) possible lower marginal cost of goods moving into foreign markets (particularly in reference to domestically oriented research and development), (4) differences in competitive position within the foreign markets, (5) differing degrees of optimum penetration for different foreign markets, (6) price controls enforced by a government or by a dominant supplier, (7) the cost of unforeseen and uncontrollable delay (for example, this factor has induced one firm to price unassembled plants in Eastern Europe at the same price as assembled price elsewhere), and (8) the equally unforeseen cost associated with anticipating performance ratings under certain types of contracts, such as training."54

53When a prominent domestic company plans to expand its markets abroad by building subsidiaries, and its product managers have not previously been involved in international business, they may be openly concerned about the instability of each foreign country and therefore suspicious of local nationals as potential employees. They are ethnocentric. Ethnocentrism is specially acute when the company has been successful in the past and thus considers its methods of problem solving unique. For further information see David P. Rutenberg, "Organizational Archetypes of a Multinational Company," Management Science, February 1970, p. 343.

In the second pricing scheme, national prices for the product line equal an optimally determined national weighting factor multiplied by a set of benchmark prices. In this type of policy, one nation is picked as the base and thus the benchmark prices are determined. Prices for the entire line in any other nation are these benchmark prices multiplied by a markup or markdown. This pricing scheme is much the same as when the prices on all items in the line sold west of the Rockies are marked up 15 percent or more.55

While this type of pricing is subject to the same criticism as the traditional cost-plus pricing, namely that it ignores the influence of demand and that it may fail to account for all costs of doing business, there is no reason to believe that a system of markups and markdowns from the benchmark prices can not be developed to account for the levels of national demands for the product or the product line. Therefore, the major point with respect to this type of pricing is not the formulation of a proper policy but its correct implementation. Kolde points out that firms can and do make proper use of markup pricing by first employing economic analysis to formulate pricing policy and then translating the results of their analyses into appropriate markup formulae.56 These formulae can be tailored for individual markets by adjusting the markup percentages and by including discounts and markdowns based on the demand levels of different markets. Clearly,

those markets which are characterized by a high demand level should be assigned the large markups and vice versa.

Rutenberg's third pricing policy calls for an independent pricing decision making by the local affiliates. The subsidiaries can take advantage of the competitive conditions in their local market(s) without being required to follow a certain pattern of coordinated pricing across the national boundaries.

In light of the prevailing market condition, a shift from Rutenberg's first pricing scheme (full-cost pricing) to his third pricing scheme (demand oriented pricing) would appear to be a natural move. Such conversions, however, have generally been very slow. Too many executives appear to be resisting any changes in their right to prescribe the price for all their markets. They have actually priced themselves out of the market because of the fact that their pricing policies and strategies were not based on the specific conditions which affect the local markets.57

There are conditions under which the less profitable pricing policies, schemes one and two, may be preferable. These conditions may arise from consumer reactions and because of problems of control. The customers of one multinational company are often other multinational companies. A multinational computer company such as IBM, for example, might sell to a multinational oil company. The petroleum concern will accept higher prices in a far away place, reflecting the higher costs

57Ibid.
of doing business, but it will object to prices which are much higher on some items than on others. Furthermore, it is unlikely that the oil company will be satisfied by explanations about the economic theory of discriminating monopolists. Rutenberg's third pricing policy has another shortcoming. This problem is basically administrative in nature and has to do with the cost of confusion and chaos of coordinating prices on hundreds of products worldwide. This problem, in turn, is directly related to the problem of keeping track of different demand elasticities for individual products in each market. Coordination of prices is necessary under the third scheme because of varying demand levels and inflation for the multinational companies' affiliates.

Two basic issues appear to be frequently encountered in the coverage of the pricing policy literature. In the first place, there is the issue of the relative weight given to pricing as an important marketing variable. Secondly, there is the issue of centralization versus the autonomy of individual affiliates with respect to pricing decisions.

Importance of Pricing

A number of studies are reported in the literature that examine the importance of the pricing variable in the marketing mix. The results of these studies are, however, conflicting and inconclusive. In the pioneering work by Udell, for example, he found that pricing was not picked as one of the five most important marketing policy areas.58

58Jon G. Udell, op. cit., p. 44.
Only fifty percent of the 135 responding marketing vice-presidents selected pricing as one of the five most important policy areas of their firms. In contrast, product research and development was selected as the most important factor contributing to the firm's success. Sales research and sales planning was ranked as the second most important policy area of the firm. Pricing was picked as the sixth most important factor contributing to the firm's success which was preceded by management of sales personnel, advertising and sales promotion, and product services.

The author offers three reasons for the relatively low ranking of pricing. The first reason is the shape of the competitive economy during the period when this study took place. That is, it was the buyers' market and supply or production capacity generally exceeded demand. As such, sellers were forced to be either very competitive or almost collusive in their pricing. Therefore, heavy reliance was placed on product differentiation and sales effort since the company could not generally deviate from the market price.

A second explanation, which is an extension of the first reason, has to do with the strategy of product differentiation. By successful implementation of this non-price competitive tool, a manufacturer can obtain some pricing freedom. If products are not differentiated, they must be sold at the market price. Udell states that if one manufacturer's price deviates from the market price, it would lead to all patronage

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[59Ibid., p. 45.]
going to the seller or sellers with the lowest price. While this may
be true in theory, it is unlikely that the entire sales of a product
will go to the lowest price seller or sellers. One would expect the
brand loyal customers, those impressed by the image of the manufacturer,
and some others for whom price is simply unimportant, to stay with the
more expensive brand even though different brands are identical.

Udell's third reason has to do with the affluence of the consumers.
As the family incomes increase, the well-to-do consumers become more
interested in non-price features of the product. Satisfaction is
obtained through the selection of the brand with better quality, styling,
distinctiveness. As a result, a consumer oriented management team must
find new ways of differentiating the product to satisfy the consumers.

In Udell's study, the importance of the pricing policy was approx-
imately the same for the industrial goods manufacturers and the pro-
ducers of durable or non-durable consumer goods. Forty-six percent of
the manufacturers of durable goods, fifty percent of the manufacturers
of non-durable goods, and forty-seven percent of the industrial goods
producers selected the pricing variable.60 Intuitive analysis of the
three types of producers should generally reflect the same results.
For example, one would expect that since non-durable goods are relatively
less differentiated than durable goods, pricing should play a more
important role in their offerings. Likewise, the industrial buyers
are more knowledgeable about the industrial market and therefore

60 Ibid., p. 46.
pricing may play a less important role in the sales or purchases of industrial goods than it would in the sales of consumer goods.

In a different study, Banting and Ross in a Canadian study found that price was the second most important variable of the marketing mix contributing to the firm's success.61 Product-service mix was the most important area among the respondents' first choice. The authors also asked for respondents' second choice associated with the remaining marketing variables after a first choice was picked. That is, if product-service mix which may be the most important element in a firm's marketing strategy is removed from the list, which remaining marketing variable would be their second choice for their marketing program's most important element. The respondents' second choice for the most important marketing area was promotion. Pricing was ranked second among the respondents' second choice. Furthermore, price to the ultimate user was of overwhelming importance within the firms' price mix. In fact other elements of the authors' price mix were considered relatively unimportant as judged by the number of respondents who considered them as important.62

The authors also analyzed their data by the type of firms, type of industry, size of firm, and type of consumer served.

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62Ibid., p. 10.
Both industrial and non-manufacturing firms' responses were consistent with that of overall population's. That is, pricing was the second most important area of the marketing mix contributing to their success. The consumer goods manufacturers, however, ranked price as the fifth most important variable, preceded by product-service mix, promotion, distribution, and marketing cost, budgeting and control. The higher ranking of price in the non-manufacturing firms reflects a greater emphasis on price competition. Although the authors attribute this to the fact that the Canadian supermarket industry has been hit by price wars for the past three years, they do not indicate what percent of the 45 responding non-manufacturing firms were in the supermarket business.

An industry by industry analysis of data indicated that while metal fabricating, paper, transportation and communications industries considered price to be the second most important variable of the marketing mix, foods and beverages industry and the retail and wholesale trade considered promotion to be a more important variable. The authors, however, do not show how much less emphasis is put on price by these consumer oriented industries as opposed to the industrial goods manufacturers.

Division of the responses by the size of the firm failed to produce any significant results concerning the importance of pricing. However, as the size of the firms as measured by their annual sales

\[63\text{Ibid.}, \text{p. 4.}\]
decreased, price became more important, receiving larger proportions of the choices as the number two key variable of their marketing mixes.

In analyzing the data by customer types, it was found that those firms selling to retailers believed price is less important than firms selling to other types of customers. This finding corresponds with the industry by industry analysis of data.

There are indeed some major differences between the findings of Udell and those of Banting and Ross. There are several reasons as to why such differences exist. The most significant reason is likely to be the elapsed time between the two studies. Another reason is the type of respondents each study concentrated on. Although Udell does not explicitly state that his sample was composed of American firms, it is reasonable to assume so. On the other hand, the Banting and Ross study concentrated strictly on Canadian firms. Furthermore, the composition of industry membership of respondents in the two studies might have partially influenced the results. Namely, Udell did not include any non-manufacturing firms in his study. Finally, differences in research techniques, including the instrument used, may partially explain the difference in findings.

Baker and Ryans in a study which involved 42 United States multinational firms, found that the competitors' prices were just as important as the production cost considerations in terms of their relative importance.64

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The authors, however, ranked production cost considerations above the competitors' prices because 22 respondents ranked it as being "very important" as opposed to 20 for the competitors' prices. International competitors' prices were, in turn, found to be more important to the international marketing executives than the domestic or local competition prices abroad.

The cost orientation and competitive pricing concerns of the respondents were even better reflected by the fact that consumer demand was rated only fourth in importance for the total group. This is somewhat contradictory with Rutenberg's third pricing scheme where the market demand helps determine the price. This finding may also be surprising to the domestic marketer in the United States where much attention is given to determining consumers' desires.

The authors also found that little consideration is given to tariffs and various other taxes, such as border taxes, in determining prices. This finding, however, may be reflecting a shortcoming of the research design of this study. A more appropriate line of questioning would have determined whether such expenses are accounted for in the firms' pricing policies in the long run. There is an evidence of this shortcoming in the results of the study. On a seven-point scale (ranging from zero to six in value), the mean rating score of tariffs and various taxes was 3.10 as opposed to a high figure of 4.92 for the mean rating score of the production costs and international competitors' prices and a low figure of 1.97 for the amount of advertising and promotion used. If the firms were divided into two groups depending
on how they were affected by tariffs and various taxes, i.e., whether they depend on the importation of semi-finished goods for further processing or rely on a total domestic manufacturing system, the results might have been different.

Liander found that pricing was a relatively unimportant marketing tool in Europe:

"Among those manufacturers who have reasonable latitude in setting their prices, there was generally a tendency to disregard pricing as an important element in marketing strategy. Operating on the assumption of a relatively inelastic demand and a market of limited size, many firms adopted a 'market-skimming' price policy in preference to a 'market-penetrating' one." 65

It must, however, be pointed out that the relative unimportance of pricing that Liander's study reflects is not necessarily based on a systematic business decision. Little emphasis on pricing is prompted by the lack of strong antitrust legislation, formal and informal inter-company agreements, trade associations' pricing regulations, and, perhaps to some extent, tradition. 66 In fact, centralized and top-level managements' involvement in the price decision-making process of 60 percent of the responding firms, as reported by the author, is indicative of this variable's relative importance.

Centralization of Pricing Decision-Making

Centralization or autonomy in decision-making is a subject that is almost invariably discussed with respect to the operations of large

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66 Ibid., p. 48.
companies and specially multinational firms. All of the studies that have already been reviewed discuss the issue of the centrality of the pricing decision-making process. Franko, for example, compared certain policy standardizations between European based firms operating in the United States, European based firms with subsidiaries elsewhere in Europe, and the U.S. multinational firms. He found that with respect to pricing, product design, customer financing, and budgeting and accounting policies, some difference exists between the European firms' operations in the United States and in Europe. The biggest difference was, however, in the area of customer financing or service, for which European firms operating in the United States appeared to have a policy that was different than that of the parents' subsidiaries in Europe. The author attributes the lesser degree of standardization of policies in European firms' subsidiaries in the U.S. to the more uncertain competitive environment in the American market. It must, however, be noted that these differences were not tested for their statistical significance. A comparative measurement of policy area standardization among firms is shown in Appendix D.

Another study found that multinational firms' affiliates have more autonomy in decision making:

"Because of the practice at present of trying to maximize the return on sales in each market, local manufacturing subsidiaries have been allowed to set their own prices in the local market in almost all cases. The exception to the granting of freedom to set prices is in the export area, where the general trend has been to suggest export list

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67Franko, op. cit., p. 34.
prices from the international division or domestic product division (when antitrust limitations permit). Naturally, the control problems involved in maintaining a reasonable and profitable pricing structure when various units are left to establish their own prices are massive."68

This study further showed that subsidiaries of multinational firms apply both an identical worldwide price and a demand oriented pricing scheme with respect to the distributor discounts and direct sales prices to manufacturers and the trade.

Baker and Ryans found that production costs are generally considered to be a less important factor by those firms in which pricing decisions are made in the various local markets.69 Firms which had a centralized pricing policy showed a pattern of putting increased emphasis on production costs. Further analysis indicated that the decentralized decision-making group considered markup to be of much greater concern, possibly because of their closer working relationship with distributors.

Cateora and Hess identify three types of decision making organizations: central, regionalized, or decentralized.70 A good example of centralized operations is Libby, McNeil and Libby which prior to their acquisition by Nestle eliminated regional autonomy and centralized all administration of overseas activities in their company headquarters in the United States. As a result, the company gained significant

68 Solving International Pricing Problems, op. cit., p. 36.
69 Baker and Ryans, op. cit.
70 Cateora and Hess, op. cit., p. 483.
personnel economies and was able to delegate more operating authority because of the higher caliber of personnel. Massy-Ferguson provides an example of a totally decentralized company. The firm has nine major market subsidiaries, each of which operates quasi-independently. The authors, however, associate most of the other multinational companies as being regionalized. For example, companies such as IBM, Colgate-Palmolive, and Dow Chemical enjoy the advantages of closer communications with their subsidiaries, while each affiliate enjoys a limited latitude of freedom in decision making. Thus, the authors conclude that there appears to be a trend for moving away from total autonomy in decision making and a shift toward a closer control of foreign affiliates and regionalization.

Pricing Objectives

As it was stated earlier, a firm's revenues and, therefore, profits are directly related to the prices that the company establishes for its products. Thus the company's survival in the long-run depends on how well the pricing task has been undertaken. A systematic planning approach to establishing prices would require that the firm first establishes its pricing goals. Clearly, these objectives may or may not be originated from the company's marketing department since the firm's goals must ultimately be congruent with its pricing objectives. In words of one author:

"The non-marketing sources are often extremely influential, because the consequences of pricing often pervades the entire company... in many profit directed firms, almost
all decisions are studied in the light of their impact on pricing.\textsuperscript{72}

Oxenfeld views the pricing goal for the marketing executive as that which tends to attain the goals set down for the firm itself.\textsuperscript{72}

As such he identifies nine goals:\textsuperscript{73}

1. Survival
2. Short-run profitability
3. Long-run profitability
4. Minimize risk of large loss
5. Have the firm's behavior regarded as acceptable, and preferably meritorious, by the community
6. Expose the firm to no more than a tolerable risk of legal prosecution
7. Limit indebtedness to a "safe" amount
8. Gain prestige for the firm by being the biggest firm in the industry, dealing with the best customers, etc.
9. Make the latest discoveries and improvements in the product available promptly to customers.

The above objectives, however, lack specificity and in some instances are too vague. It would be a difficult task to attain a goal which is not clearly defined and operationalized.

In the landmark study, and perhaps the most comprehensive study in pricing in big business to date, several pricing objectives were identified:\textsuperscript{74}

1. Obtain a predetermined rate of return on investments or sales
2. Maintain or increase market share


\textsuperscript{72}Oxenfeld, Pricing for Marketing Executives, op. cit., p. 58.

\textsuperscript{73}Ibid.

3. Stabilize prices
4. Meet or prevent competition
5. Maximize profits

Pricing objectives of twenty large corporations are presented in Appendix E.

As shown in Appendix E, at least among large American industrial concerns, rate of return appears to have been the most common pricing goal at the time the study was done. Two conditions were generally present, when this goal was selected. First, these firms were leaders in their respective industries. Second, this objective was typical in companies with new products and low-unit price, standardized, and high volume items. Some of the reasons offered by executives for selecting this goal include: (1) that it is a fair or reasonable objective, both in the public eye and because the firms' pricing structure is of great interest to the Justice Department, (2) industry tradition, and (3) it was representative of what the company thought it could get in the long-run.

The study also found a general trend toward the adoption of this goal either for the entire company or for certain products because of increasing awareness of the relationship between investment, capital, and profit and because rate of return is of great importance in dealings with the government. The general tendency of the smaller firms to duplicate the methods of the large and successful companies is also a reason for this shift in pricing objectives.

\[75\] Ibid., p. 256.
\[76\] Ibid., p. 258.
Another principal pricing goal often mentioned by firms was that of keeping or improving their share of the market. This objective is preferred in some companies because it relates the company's operation with the size of the market. That is, the firm may have a healthy return on investment or sales while it is suffering from a continual shrinking of its market share. Some companies may, however, choose to limit their market share in order to avoid any confrontation with the government and the antitrust authorities.\textsuperscript{77}

Stabilizing prices as a goal was generally chosen by those firms that prefer to avoid price wars even during the periods of declining demand. Furthermore, those industries characterized by having a "price leader" generally selected this pricing objective.\textsuperscript{78}

Meeting or preventing competition is selected by a large number of companies as a pricing system. It can be said that these firms have no pricing objective per se because they cannot control the goal and the tools used to achieve it.\textsuperscript{79} The pricing scheme of "market penetration" is related to this objective as firms introducing a new product set their prices at a low level to capture a larger market share early and to avoid competition.

Stanton states that profit maximization as a pricing objective is probably followed by more firms than any other pricing goal.\textsuperscript{80} Following

\begin{itemize}
  \item \textsuperscript{77}Ibid., p. 259.
  \item \textsuperscript{78}Ibid., p. 258.
  \item \textsuperscript{79}Ibid., p. 259.
  \item \textsuperscript{80}Ibid.
\end{itemize}
this goal would mean that the firm wants to maximize its profits for its entire output and not just a single product. As a result they may have to price some items at very low levels in order to increase customer response to some product or a related product of the firm. For example, Kodak may choose to sell its amateur cameras at relatively low prices, since they maintain a large share of the film market. Selling their cameras at this low price, on the average, will lead to a substantial increase in the company's film, chemical, and processing sales in the long-run.

Transfer Pricing

International intracorporate transfer pricing is a topic examined in many studies. The earliest comprehensive work in this area dates back to 1966.81 International transfer pricing between the subsidiaries of the international firm is generally practiced for shifting of profits of one or more subsidiaries in high income tax countries into "tax havens," where income taxes are low or non-existent. The subject of transfer pricing by non-U.S. based firms in the United States has been covered in one study.82

Transfer pricing is not of immediate concern to this study because it generally deals with prices of raw materials, semi-finished goods,

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and finished goods which are sold by one subsidiary to another. Final prices to middlemen and customers, however, have to be set by the firm based on the market demand, the market price, the competition, and the cost of production for the product. It may be true that the final prices of a firm which engages in transfer pricing can be more competitive as a result of savings which it offers, but there is no reason to believe that the firm would seek to sell at a lower than market price and thus reduce its profits. Furthermore, it would be difficult, if not impossible, to measure the exact impact of transfer pricing on firms' final prices.

One area of concern is that of intentional dumping of a product by a foreign firm in the United States. This action would permit the subsidiary to price the product at a very competitive level. Continuous usage of dumping would require that a "dumping strategy" be built in the firm's pricing policy. Collection of such data would, however, be virtually impossible because of anti-dumping regulations in the United States and many other countries.

Rate of Response of Non-U.S. Based Firms

The rate of response of U.S. and non-U.S. based firms has been a major concern in developing this study. Research by Arpan and Ricks has indicated that foreign corporations operating in the United States were often reluctant to provide any information about their operations
here.\textsuperscript{83} This general feeling on the part of Arpan and Ricks is, however, inclusive since they had not conducted a similar study on U.S. based firms. Had an identical questionnaire been sent to U.S. based firms, a cross-comparison of response rates would have been possible.

Franko held several lengthy interviews with executives of European companies with investments in the United States in 1973.\textsuperscript{84} Some executives indicated that their companies go through a series of complicated and lengthy processes to hide their investments in the United States from the press and the eyes of the public. Based on this, one would expect that their reluctance to cooperate with any academic research which would lead to a better understanding of their operations is certainly a reflection of those attitudes they expressed to Franko.

A finding to this effect is not of much substance in terms of theoretical or pragmatic research. Its only value is likely to remain in what it will reveal about the basic response rates of companies based in individual foreign countries and how they compare with the rate of response from U.S. firms. It should be noted, however, that the response rate of companies based in some foreign countries may be the same or better than those received in the United States, while the companies representing some countries are so few in number that a reliable measure of response rate from those nationalities becomes virtually impossible.


\textsuperscript{84}Franko, \textit{op. cit.}
SUMMARY AND CONCLUSIONS

The goal of this chapter was to cover the relevant literature to this study. In doing so, history of the development of non-U.S. based companies in the U.S. was briefly discussed and some recent studies about their operations were mentioned. A second area of the coverage included domestic and international aspects of pricing as an element in marketing strategy of various firms. Although the available literature provides some very important insights about the operations of non-U.S. based firms in the United States, it appears that the coverage of multinational corporate pricing strategy has been very limited.

The one area which appears to have been covered to some extent is the degree of centralization in pricing policy decisions in non-U.S. based firms as compared to the U.S. based companies. The evidence seems to suggest some distinct differences between the two types of firms, but no statistical tests have been conducted to make certain that those variations are not due to chance.

This literature review has two implications for the present study. In the first place, industry affiliation was not found to be a significant determinant of the individual firm's pricing objective and policy. This fact is reflected in Appendix E where various members of a given industry, say oil, are reported to have different pricing objectives. Secondly, for those industries which were examined by Banting and Ross, industry affiliation had no apparent influence on the importance of the pricing element of the marketing mix. Therefore,
rejection of certain hypotheses of this study is not due to equal
distribution of industry memberships between the U.S. and non-U.S. based
firms. Thus, by comparing the two types of firms, managerial and
strategic differences between them become evident.
CHAPTER III
RESEARCH DESIGN

Basic Design

The basic research design of this study can be classified as a survey of companies with respect to their current operations and pricing decision policy. Although the outcome of the study cannot be used for implementing an optimal decision making policy, it goes beyond the boundaries of basic research and approach what Tull and Albaum refer to as decisional research.\(^1\) Decisional or applied research is conducted to gather information for pending decision. The information collected through basic research may or may not be used for decision making in the future.\(^2\)

In order to accomplish the objectives of this study, a questionnaire was designed, pretested, and sent to two groups of firms. A copy of this questionnaire appears in Appendix K. The non-U.S. based companies were selected based on a proportional stratified sampling technique based on the number of such firms operating in the United States. The questionnaires were addressed to the top marketing executives of these companies and the accompanying letters of explanation


\(^2\)Ibid.
were individually typed. The top corporate marketing offices were identified via a preliminary letter which were also individually typed but addressed to the company. The text of the letter asked the company to identify their top marketing executive so that a directory of marketing executives could be compiled. A copy of this letter appears in Appendix G. Those firms which did not respond to this letter, however, were not excluded from the mailing list. The letters from non-responding companies were addressed to the "Vice President of Marketing."

The U.S. based firms were sent an identical research instrument to that used for collecting data from the non-U.S. based group (Appendix K). The pretesting of the questionnaire indicated that the research instrument was equally valid for both types of firms. Since the directories from which the U.S. sample was drawn identified the top corporate officers, letters of identification of their marketing executives were not necessary.

This survey research was designed to meet the objectives and answer the questions stated in Chapter I. The following steps were included in the basic design of this study:

1. Identification of populations of interest
2. Selection of samples
3. Size of samples
4. The questionnaire
5. Questionnaire pretest
6. Data collection
7. Analysis of data
Identification of Populations of Interest

There are two populations of importance to this study: (1) Non-U.S. based companies operating in the United States, and (2) U.S. companies operating domestically. The extent that the latter population is involved in doing business abroad is not of immediate importance since collected data was based on their domestic operations. Both populations include all manufacturing concerns and exclude members of the mining and petroleum industries. The exclusion of these two industries was based on the assumption that since their products are generally viewed as commodities, their prices are either controlled by international and domestic cartels and governmental controls or affected by world supply and demand. Therefore, the conditions under which they operate are different than the manufacturing firms and as such they cannot be grouped with one another.

The definition of foreign investment is essential in identification of non-U.S. based companies operating in the United States. A direct foreign investment in the U.S. by a foreign national is recognized as such when and only when such person or entity owns at least 20 percent of the U.S. company's capital stock.³

³This definition is used by the Department of Commerce which identifies a U.S. direct investment abroad as only 10 percent or more ownership in a foreign firm. Apparently, the lower ownership requirements of U.S. nationals of a foreign corporation before they are declared a direct foreign investor is based on tax legislation in the U.S. As such, the tax liabilities and reporting of foreign income by a company is increased when his investment overseas is identified as a direct foreign investment.
Selection of Samples

The non-U.S. based firm sample was culled from the Directory of Foreign Manufacturers in the United States which is the most recent and accurate listing of such companies. A proportional stratified sampling technique based on the number of firms in the directory was used to select the sample. This sampling technique is preferred to a basic random selection of the respondents (i.e., every second or third firm) for two reasons. In the first place, the number of firms in the directory is 1137. A basic random sampling technique would have required that every 2.84th listing be selected for the sample, if a sample of 400 was desired. Selection of every third company would have led to a sample size of 379 while if every second firm is selected, the sample size would have been 568. Therefore, the possibility exists that a country which should have not been presented in the sample, such as Iceland and Mexico, would be included among the respondents, while such countries as Norway and Luxemburg may have been totally ignored. Secondly, the directory is not perfect and has a number of erroneous entries. This fact was revealed in an earlier survey in which this

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4J. Arpan and D. Ricks, Directory of Foreign Manufacturers in the United States (Atlanta, Georgia: Publishing Services Division, School of Business Administration, Georgia State University, 1975). This directory only includes foreign based manufacturers in the United States. Non-U.S. based importers, i.e., sales subsidiaries of foreign based firms, are excluded from this study because they operate under a different set of conditions and their prices are highly vulnerable to currency exchange rate fluctuations, inflation in base country, customs duties, and other variables which affect the manufacturing subsidiary of the non-U.S. based company in the United States only to a limited extent and only when they import semi-manufactured goods or parts.
directory was used. A proportional stratified sampling method provided a better control on what was and was not being included in the sample.

Using a proportional stratified sampling technique resulted in each firm's country of origin being represented in the same proportion as in the original listing. For example, since the United Kingdom was represented by 362 firms in the original universe, in a sample size of 400 there were 129 United Kingdom firms. Mathematically, the selection procedure can be shown as follows:

\[ F_i = \frac{f_i \cdot S}{T} \]

Where:  
- \( F_i \) = Number of firms in the sample from country \( i \)  
- \( f_i \) = Number of firms in the universe from country \( i \)  
- \( S \) = Desired final sample size  
- \( T \) = Total number of firms in the original universe

The next step is to select the respondents from the universe. Selection of respondents is simply done by dividing the number of firms in the sample from country \( i \) to the number of firms in the universe from country \( i \). That is:

\[ M_i = \frac{F_i}{f_i} \]

Where:  
- \( M_i \) = the approximate number of firms from country \( i \) which separate the last selection from country \( i \) to the next selection from the same country.

According to the above, every \( M \)th company from country \( i \) should be selected for the sample.
Under ideal conditions the sample might be based on the amount of investment each foreign country is represented by in the United States, or perhaps based on the total sales of firms representing any particular country. Using either one of these variables as a basis for sampling is preferred because of the generally accepted notion that it is the amount of foreign investment and sales of a company that has an impact or affects the economy of the host nation and not the number of firms from each country. In other words, the country representing the largest number of firms, in this case the United Kingdom, will also have the largest number of firms in the sample. It must be acknowledged, however, that it is not inconceivable that another country with fewer firms have more investment and/or sales in the United States. Although that possibility exists, a better method of sample selection is not possible since precise data as to the values of each firm's investment and sales are not known.

The sample of United States firms was culled from the Dun and Bradstreet Million Dollar Directory and the Dun and Bradstreet Middle Market Directory. The firms were selected based on their Standard Industrial Classification number (SIC) and approximately in the same proportion as the non-U.S. based firms' distribution within the SIC groups. For example, since 26 percent of non-U.S. based firms are concentrated in the SIC group "35," an equal proportion of U.S. firms were selected from SIC group "35." Table B.2 of Appendix B lists the percentage of non-U.S. based firms in each SIC group. Aside from the method used, there did not appear to be any other criterion on which the selection of United States firms could be based to make this sample
more homogeneous with respect to the non-U.S. based companies. Therefore, the firms in this group were selected at random and based on the stated criterion from the above directories. Undoubtedly, the sample included some U.S. firms with overseas operations, but as indicated earlier, the questionnaire was worded so that it strictly applied to their domestic operations.

Size of Samples

The original sample size for this study was set at 800; 400 United States firms and 400 non-U.S. based companies. Not included in this number are those companies which were sent a pretest questionnaire. Selection of this sample size was based on two previous studies in which the approximate response rate from non-U.S. based firms was 15 percent. This response rate would have led to approximately sixty responses from non-U.S. based companies. In turn, sixty responses was the sufficient number of returns for statistical testing of the hypotheses in the present study. However, with respect to the potential number of returns for this study, two points were recognized. First, the respondents were from the top marketing management people or executives of the responding companies, who require a totally different


Computing confidence interval for sixty returns leads to ninety percent certainty that the actual number of returns will stay within less than three percent of expected number of returns. See Appendix L for more detail.
approach than the case would be in approaching the respondents in a consumer oriented research. Therefore, to the extent possible, questionnaires must be addressed to individual executives. Second, the topic of this research project was more sensitive than those previously cited. In an earlier pilot study, however, a questionnaire about pricing was sent to a proportional stratified pretest sample of 25 companies. Without any follow-up letters or calls the rate of response was 28 percent. This relatively high response rate is perhaps largely due to the fact that an attempt was made to speak to individual marketing executives over the telephone or leave them a message in the event that they were unavailable. During the course of the conversation, the research project was broadly explained and they were assured that the information they would provide would be kept in the strictest confidence and that they did not have to identify themselves nor their company. These factors together with a professionally printed questionnaire and personalized cover letter and self-addressed stamped envelope led to the high response rate which was achieved in the first pretest. However, an assumption about the consistency of the 28 percent rate of return for future mailings was premature at the time this study was proposed, since this figure is based on a small sample. A minimum expected rate of return of 15 percent would have left a confortable margin of 13 percent within which the response rate to the main questionnaire could vary. Tables F.1 and F.2 of Appendix F include a county by county breakdown of the non-U.S. based firms in both, the pretest and the main samples.
The number of United States companies in the main sample was also kept at 400. This is due to the fact that there did not appear to be any underlying theory that the number of questionnaires sent to one group of respondents should be any more or any less than those sent to a second group of responding firms, so long as the number of returns for both groups permits a meaningful analysis of responses.

Although the response rate in this study was high enough to avoid combination of certain numerical rating scale categories, the frequency of responses to some categories of importance of pricing were such that some categories of these two variables had to be combined to form new meaningful categories and at the same time make statistical testing of hypotheses possible. In case of the question on pricing objective, it was difficult, if not impossible, to combine various categories of responses which would result in meaningful groups. For the purpose of analyzing the responses to this question via chi-square statistics, those categories which had cell frequencies of fewer than five were excluded from the analysis.

The Questionnaire

The data collection instrument which was used in this study consisted of a questionnaire. Individual items in the questionnaire were developed by this writer based on the available literature. There did not appear to exist any particular form of questionnaire employed in the past studies which could be of much help to this study.

A six-point numerical rating scale was used for those questions which lend themselves to this type of design throughout the
questionnaire. There were two reasons for selecting a numerical rating scale where respondents could not choose a half-way or neutral response to any of the questions. In the first place, studies have shown that for scales of more than five or six equal appearing intervals, the amount of information added to the responses and/or the accuracy of the responses increases at a decreasing rate. That is, the decreasing marginal gains involved are not too much more accurate than a five or six-point numerical rating scale. The added categories, however, do create complexities in data and make its analyses more and more difficult. Furthermore, research to date has shown that as the number of scale points increase (from 3 to 22), the respondents' ability to discriminate among the various levels actually decreases at an increasing rate. Five and six-point scales, however, have consistently shown to be reliable and valid.

A second point which led to the selection of a six-point scale instead of a five-point one is rather intuitive in nature. It would

7Osgood and his associates tested a wide range of scales (all odd numbered) and found that with seven alternatives all of them tend to be used and with roughly, if not exactly, the same frequencies. See Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning (Urbana, Illinois: University of Illinois Press, 1957), p. 85.

generally be fair to assume that in the business world, decisions of one type or another will continually have to be made with respect to important elements of the marketing mix. Certain attitudes, perceptions, or predispositions will have to exist in order to deal with daily business problems.9 As such, the marketing executives are expected to have a non-neutral response to each question, even though it is not unlikely that a particular respondent may in fact have an indifferent response to a particular question.

The original design of the questionnaire included several items which were of rank order type. That is, the respondents would rank a number of items with respect to their importance relative to one another. In the early stages of questionnaire pretesting, however, it was found that some companies viewed certain variables in the rank order type questions as relatively unimportant as compared to the rest. That is, if they were to rank order the variables, after a certain rank the remainder of the variables would appear equally unimportant, or else they would have far less impact on their companies' operations that their ranks would indicate. As a result, a new form of questioning was devised which made rank order data available while it provided some interval measure of importance of each variable. In this form of question, the respondents were asked to provide relative rankings of those items in the question which were essential to their operations.

9Although a researcher can choose between odd or even number of scale points, a number of studies have shown that an even number of scale points tends to yield more valid results. See, for example, Jim C. Nunnally, Psychometric Theory (New York: McGraw-Hill Book Company, 1967).
or best described a certain policy area by distributing 100 points among them. Here the respondent would have the latitude to ignore those variables which were less important to him by assigning a zero or fewer points to them. This type of question was likely to put the respondents at ease when answering these items since two of the three executives interviewed in the pretest stage expressed some discomfort with the rank order items.

The obtained relative interval measures were in turn changed into rank order data by using a Fortran computer program. In case of ties, or equal importance score of two variables, the ranks which would have been assigned to them if one score was slightly less than the other, were added and then divided by two. For example, if the respondent in answering the first question assigned 30 points to "product" and 20 points each to "price" and "product research and development," the ranks of these three variables would be as follows: Product = 1; Price = 2.5; and Product research and development = 2.5.

In addition to these type of questions, the questionnaire included a number of fill-in items to provide background information about the responding firms. Appendices G through K provide identification and cover letters and the questionnaire which were sent to the various groups of respondents.

**Questionnaire Pretest**

The questionnaire was pretested at three different levels. In the first level, three members of the faculty of the College of Administrative Science at the Ohio State University were asked to review the
questionnaire and comment on its clarity and relevancy. After the original questionnaire was revised to account for the comments, the pretesting process entered its second stage. At this stage, three marketing executives of nationally known firms whose headquarters are in Columbus, Ohio, were approached and interviewed. In the course of the interview, the questionnaire was filled out by the executives and the difficulties they encountered in answering the questions as well as their comments were recorded. It was after this stage of pretesting that the rank order type questions were replaced by relative interval measures discussed in the previous section. This change was made because two of the three executives interviewed indicated that some marketing mix variables are much more important to them than others. As such they felt that a simple ranking of the variables would not provide a clear indication of the extent of importance of each factor.

In the third stage, a revised version of the research instrument was mailed to 50 U.S. and 25 non-U.S. based companies. The executives of the non-U.S. based firms were identified by telephone calls for the sake of expediency. The executives of the U.S. companies were identified in the directories from which they were selected.

The intent in including 75 firms in the pretest sample was to get back a minimum of 10 responses based on the estimated rate of return of 15 percent. The reason for including a larger number of U.S. firms in the pretest sample was simplicity and availability of large numbers of such firms. The non-U.S. based companies were selected based on a proportional stratified sampling method, while the U.S. based firms
were selected in the same proportion as non-U.S. based firms' Standard Industrial Classification densities.

All of the pretest questionnaires which were returned were completed as expected and, therefore, no additional modifications in the questionnaire were made. As a result, all of the pretest responses were included in the final analysis.

Data Collection

Before mailing of the questionnaire, it was necessary to identify the top marketing executives of non-U.S. based firms. In the pretest sample, the executives were identified by telephone calls. Calling individual firms in a sample of 400, however, would have been difficult and financially cumbersome. Instead, a letter was sent to each company asking them for the name of their marketing vice president or the individual who heads the marketing activities of their firm.

Appendix G is the form letter which was used for this purpose. Each letter was individually typed and a self-addressed stamped envelope was enclosed.

This stage of data collection produced 55 bad addresses and "out of business" replies. As a result, another 26 firms were added to the sample of 345. Additional firms could have not been included without having multiple representations by such large firms as Schlumberger, Philips and Shell.

Overall, the names of 218 of the non-U.S. based firms' executives were obtained. This is roughly 59 percent of the final sample. Table F.1 of Appendix F includes a list of the original and final samples, as
well as the number of useful replies and bad addresses from various countries in the sample. Those firms which did not respond to this letter, received a copy of the questionnaire addressed to their Vice President of Marketing.

The executives of the U.S. based companies were identified through the directories from which they were selected.

At the second stage of data collection, a copy of the questionnaire was mailed to 771 U.S. and non-U.S. based firms. However, since there were no changes in the research instrument after it was mailed to the pretest sample, this group was added to the main sample. Out of 846 questionnaires which were mailed, 450 were sent to U.S. and 396 to non-U.S. based companies. The overall rate of response was 22.7 percent which is well above the minimum expected rate of return of 15 percent. The response rate for the U.S. and non-U.S. based companies were less than one percentage point apart, or 22.2 percent for the non-U.S. type and 23.1 percent for the U.S. firms. All of these responses were used in the testing of the hypotheses. There were however a number of responses which arrived somewhat late and were excluded from the final analyses. Table F.2 of Appendix F presents a complete breakdown of responses by the country of origin. Cover letters to various types of firms, i.e., U.S., non-U.S. with response to the first letter, and non-U.S. without response to the first letter, as well as a copy of the final questionnaire are presented in Appendices H through K.

All together 47 uncompleted questionnaires were returned for various reasons. Of this total, 4 non-U.S. based firms were no longer foreign owned and were purchased by U.S. based companies. Another 11
firms had either moved or gone out of business. Of those who refused to respond, the overwhelming majority felt that their response would be confusing to the purpose of this research as explained in the cover letter. One non-U.S. based firm did not reply by saying that the very nature of the questionnaire would reveal their identity. A French tire manufacturer explained that "...it is not the policy of this corporation, at this stage in its United States development, to participate in surveys of this kind." The majority of non-U.S. respondents who refused to answer the questionnaire, however, did so because they felt that they were U.S. based and/or owned. Included in this group were some subsidiaries of large non-U.S. multinational companies based in Europe. Some stated that they are American owned and as an evidence indicated that their stock was being traded on the New York Stock Exchange. A few indicated that their firm was a subsidiary of an American based firm, and it was the stock of the American parent that was largely owned by a non-U.S. partner. Table F.3 of Appendix F presents a breakdown of non-response replies.

The fact that a large portion of non-U.S. non-respondents indicated that they did not qualify for the survey because they were not American has largely to do with the cover letter which was enclosed with the questionnaire. It was initially felt that it was desirable to let the non-U.S. respondents know that data was being collected about non-U.S. based companies. However, at times, when one or more non-U.S. partners have a minority interest in a U.S. based firm the companies and its executives may not think of themselves as non-U.S. based and certainly not as having their headquarters based in other countries. This appears
to be true inspite the fact that the influence of non-U.S. partners on policies and daily operations originates or has its roots abroad.

The collected data appears to have achieved one of the basic goals of this research design, i.e., that of getting responses from people who are actually involved in the pricing policy decision making process. Over 88 percent of the respondents were either personally responsible for making pricing policy decisions or were a member of the group or committee which made such decisions. This rate was almost equal for both U.S. and non-U.S. based firms, with the latter being just under 88 percent. The remaining respondents were all from the upper echelons of the responding firms.

In addition, a Kolmogrov-Smirnov test of the two digit Standard Industrial Classification numbers of responding U.S. and non-U.S. based companies indicated that the two samples were not independent of one another.\(^\text{10}\) That is, with respect to their SIC numbers, the U.S. and non-U.S. samples are similar. Therefore, any existing differences between the operations of the two types of firms is not due to self selection or differences in responding groups' SIC numbers. Table 3.1 presents the SIC group frequencies of the responding firms. According to the null hypothesis, if the computed D from the table is equal or less than the observed D from Table 3.1 at the .05 significance level,

\(^\text{10}\)The Kolmogrov-Smirnov test is a non-parametric statistical technique which tests whether two independent samples have been drawn from the same population or from populations with the same distribution. For further information see Sidney Siegel, *Nonparametric Statistics for the Behavioral Sciences* (New York: McGraw-Hill Book Company, Inc., 1956), pp. 128-136.
### TABLE 3.1
FREQUENCY OF RESPONSE IN EACH STANDARD INDUSTRIAL CLASSIFICATION CATEGORY

<table>
<thead>
<tr>
<th>Country</th>
<th>20</th>
<th>22</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>30</th>
<th>31</th>
<th>32</th>
<th>33</th>
<th>34</th>
<th>35</th>
<th>36</th>
<th>37</th>
<th>38</th>
<th>39</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>12</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>9</td>
<td>24</td>
<td>14</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>102</td>
</tr>
<tr>
<td>Non-U.S.</td>
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<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>28</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>88</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>14</td>
<td>52</td>
<td>23</td>
<td>5</td>
<td>14</td>
<td>6</td>
<td>190</td>
</tr>
</tbody>
</table>

### TABLE 3.2
STATISTICAL METHODS USED IN TESTING OF THE HYPOTHESES

<table>
<thead>
<tr>
<th>Techniques</th>
<th>1a</th>
<th>1b</th>
<th>2</th>
<th>3a</th>
<th>3b</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square Statistics</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kolmogrov-Smirnov test</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t test</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Test of significant difference between the rates of response of two samples</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
the two samples are independent with respect to their SIC number. The null hypothesis was, however, rejected since the largest observed $D$ was .13 as compared to the computed $D$ of .1979. Further testing of the sampling distribution as approximated by the chi-square distribution also resulted in the rejection of the null hypothesis.\textsuperscript{11}

**Analysis of Data**

The returned questionnaires were grouped based on their country of origin. A total of 118 variables were recorded on computer cards. Of this total, 79 variables were original and another 39 were generated from the actual responses. Generation of new variables were made possible through Fortran computer programs.

Four different statistical techniques were employed in testing of the hypotheses: chi-square statistics, the Kolmogrov-Smirnov test, $t$ test, and test of significant difference between the rates of response of two samples. In performing the chi-square and the $t$ tests, as well as other tasks such as data display, the *Statistical Package for the Social Sciences* was used.\textsuperscript{12} Table 3.2 lists the statistical techniques employed in testing of various hypotheses.

\textsuperscript{11}Ibid., p. 13. Siegel approximates the chi-square value using the formula $\chi^2 = 4D^2 \left( \frac{n_1 n_2}{n_1 + n_2} \right)$ where $n_1$ and $n_2$ are sample sizes and $D$ is the maximum observed value and 2 degrees of freedom is used.

CHAPTER IV

ANALYSIS OF DATA AND FINDINGS

The main objective of this study was to analyze and compare the
pricing policies and objectives of non-U.S. based firms with those of
U.S. based companies operating domestically. To accomplish this task, a
total 846 questionnaires were sent to 396 non-U.S. and 450 U. S. based
corporations. A total of 192 completed questionnaires were included in
the analysis of data; 88 from non-U.S. and 104 from U.S. based companies.
These questionnaires were coded and keypunched on computer cards. The
verification stage included a complete check of the values of all 79 ori­
ginal variables against the original questionnaire.\(^1\) Generation of new
variables, i.e., transformation of relative interval measures of 100 points
into absolute ranks, was made possible via a Fortran Computer program
which generated a complete set of data including the original variables.

The purpose of this chapter is to analyze the collected data and test
the hypotheses set forth in Chapter I. Various statistical tests which are
to be used in testing of the hypotheses were discussed in Chapter III.

The Importance of Pricing

The purpose of the first hypothesis was to compare the perceived
importance of the pricing variable for different types of firms as

\(^1\)This was made possible by the use of "LIST CASES" option of the
SPSS program. See Norman H. Nie, et al. Statistical Package for the
1975), pp. 137-139.
distinguished by their parent companies' countries of origin. Specifically it was proposed that:

Not all companies perceive the importance of pricing and its related elements in the same manner and, therefore, it is expected that:

a. The U.S. and non-U.S. companies have different opinions so far as the importance of the pricing element of the marketing mix is concerned.

b. The non-U.S. based firms of different nationality will have similar attitudes with respect to the importance of the pricing element of the marketing mix.

In order to test this hypothesis, the respondents were asked to provide relative ranking of those of the following items which they considered essential in their firm's success in the United States by distributing 100 points among them:

1. Cooperation and control of middlemen
2. Corporate image
3. Customer service support including transportation and storage
4. Marketing cost, budgeting, and control
5. Pricing
6. Product
7. Product research and development
8. Product service (including guaranties, warranties, and service)
9. Promotion (advertising, personal selling, and sales promotion)
10. Quality of middlemen
11. Sales research, analysis and planning

A twelfth category, "other," was also included so that respondents could fill-in their own marketing mix variable. The responses of the 12 items were, in turn, transformed into rank order data. The distribution of the ranks of the pricing variable (the fifth item) for U.S. and non-U.S. based companies appears in Table 4.1. In this table,
### TABLE 4.1

**DISTRIBUTION OF THE ORIGINAL RANKS OF THE PRICING VARIABLE**

<table>
<thead>
<tr>
<th>Pricing Ranks</th>
<th>Country</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S.</td>
<td>20</td>
<td>25</td>
<td>23</td>
<td>8</td>
<td>12</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Non-U.S.</td>
<td>9</td>
<td>23</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>88</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>29</td>
<td>48</td>
<td>35</td>
<td>15</td>
<td>21</td>
<td>6</td>
<td>5</td>
<td>21</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>192</td>
</tr>
</tbody>
</table>

### TABLE 4.2

**DISTRIBUTION OF THE COMBINED RANKS OF THE PRICING VARIABLE**

<table>
<thead>
<tr>
<th>Pricing Ranks</th>
<th>Country</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6-7</th>
<th>8-9-10-11</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S.</td>
<td>20</td>
<td>25</td>
<td>23</td>
<td>8</td>
<td>12</td>
<td>6</td>
<td>10</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Non-U.S.</td>
<td>9</td>
<td>23</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>23</td>
<td>88</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>29</td>
<td>48</td>
<td>35</td>
<td>15</td>
<td>21</td>
<td>11</td>
<td>33</td>
<td>192</td>
</tr>
</tbody>
</table>
columns 1 through 11 refer to the ranks of the pricing variable and the U.S. and non-U.S. rows indicate the result of responses from the two groups of respondents. The respondents from the U.S. have ranked the pricing variable of their marketing mixes between 1 and 9. That is, none of the responding U.S. firms felt that pricing was the tenth or eleventh most important variable in their marketing mixes. The ranks of price by non-U.S. based respondents, on the other hand, ranges from 1 to 11. The bottom row is the total number of respondents of U.S. and non-U.S. types in each pricing rank.

The appropriate statistical technique for testing of part "a" of this hypothesis is a test of equality of two multinomials which is similar to the chi-square test. Although an alpha level of .05 or a 95 percent confidence level was used for the statistical testing of this and other hypotheses, it was realized that even if a particular hypothesis is not statistically significant, its direction may very well be managerially significant. Conversely, statistical significance of a hypothesis does not automatically imply managerial significance. It was further realized that for the reliable testing of this and other hypotheses in which similar statistical techniques are employed, it might be necessary to collapse cells with a frequency less than 5 into other cells, or when possible exclude such cells from the chi-square test.

As a result of cell frequencies of fewer than five for ranks of 6, 7, 9, 10, and 11, ranks of 6 and 7 as well as 8, 9, 10, and 11 were combined to produce Table 4.2 in which frequency of occurrence of each rank for each of U.S. and non-U.S. group is equal or greater than 5.
In this table, it is assumed that pricing ranks of 6 and 7 and 8, 9, 10, and 11 are similar and can therefore be grouped together. Based on the computed chi-square value from the above table, the null hypothesis, that the distribution of the ranks of price for U.S. and non-U.S. based firms are similar, cannot be rejected at the .05 level of significance. That is, the results indicate that there is more than a 5 percent certainty that the difference between distribution of the ranks for the two groups is due to chance. However, since the level of significance of the computed chi-square is close to the rejection criterion, a Kolmogrov-Smirnov test on the data in Table 4.2 was conducted to determine whether the results of the two tests would be consistent. As a result of this test, the null hypothesis could not be rejected. It must be pointed out that the Kolmogrov-Smirnov test is not sensitive to cell frequencies and, therefore, it could be applied to Table 4.1. The purpose here was to make certain that the rejection.

---

^2When the data consists of frequencies in discrete categories, the chi-square test may be used to determine the significance difference between two independent groups. See Sidney Siegel, Nonparametric Statistics for the Behavior Sciences (New York: McGraw-Hill Book Company, Inc., 1956), pp. 104-116. For the computed value of chi-square (12.17143) and with 6 degrees of freedom, the significance level was .0583, or just slightly more than the predetermined level of .05.

^3The Kolmogrov-Smirnov test is a non-parametric statistical technique which tests whether two independent samples have been drawn from the same population or from populations with the same distribution. See Siegel, op. cit., pp. 128-136. The computed value of D (.165) from Table 4.2, was smaller than the critical value of D (.1970) as given by the equation D = 1.36 [(n_1+n_2)/n_1n_2]^{1/2} for .05 level of significance and where n_1 and n_2 are sample sizes.
of the hypothesis was not due to the deletion of certain categories. As in the previous case, the result of this test was also statistically insignificant.\(^4\) It appears that regardless of the test used, the likelihood of the significance of the relationship for managerial purposes is high. Even though the hypothesis was stated in a two-tailed fashion, Table 4.2 indicates that the direction of the ranks of price chosen by non-U.S. based firms is just the opposite of the ranks selected by U.S. based companies.

Testing of part "b" of the first hypothesis presented a problem since the number of respondents from companies of various origins were too few to warrant a test of equality of two multinomials. Table 4.3 is a country by country breakdown of the frequencies of occurrence for various ranks of price. The basic layout of this table is similar to that of Table 4.1. The only exception is that the U.S. group has been deleted and the non-U.S. row has been expanded to include responses from individual countries. In other words, the non-U.S. row of Table 4.1 is the same as the bottom row (TOTAL) of Table 4.3.

The Kolmogrov-Smirnov test which was used for partial testing of part "a" of this hypothesis offers an alternative method for testing part "b." The advantage of this technique is that it does not require a minimum frequency of occurrence in each cell. In order to apply this

\(^4\)The computed value of D (.165) was smaller than the minimum required level for the .05 level of significance (.1970).
**TABLE 4.3**

**DISTRIBUTION OF THE ORIGINAL RANKS OF THE PRICING VARIABLE FOR DIFFERENT COUNTRIES**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PRICING RANK</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Australia</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Belgium</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
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<td>1</td>
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</tr>
<tr>
<td>France</td>
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<td>0</td>
<td>0</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Japan</td>
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<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
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<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Netherlands Antilles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Norway</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sweden</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Switzerland</td>
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<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
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<td>1</td>
<td>1</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9</td>
<td>23</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
technique to the problem at hand, n two-by-eleven Kolmogrov-Smirnov
tests had to be conducted. The following equation is used for com-
puting n:

\[ n = \frac{k(k-1)}{2} \]

where:  
- \( n \) = necessary number of tests for comparing all non-U.S. company
groups with one another  
- \( k \) = number of non-U.S. company groups

The number of empty cells in Table 4.3 is such that in order to conduct
a meaningful test, responses from certain countries had to be combined.
This action, in turn, would result in an increase in the number of
respondents in each group. Although there are numerous ways of going
about this, the following combination was used:

1. Canada  
2. Germany  
3. United Kingdom  
4. Other European Economic Community (EEC) members (Belgium,
   France, Italy, and the Netherlands)  
5. Other Europe (Norway, Sweden, and Switzerland)  
6. Other (Australia, Japan, and the Netherlands Antilles)

In the above combinations, each group met one of the following criteria:

1. A country with more than ten cases constituted a group  
2. Members were related by an international economic
   agreement—in this case the European Economic
   Community  
3. Geographic location of the members is outside
   Europe and Canada

As a result, Table 4.4 was formed. This table is essentially the same
as Table 4.3. The only difference is that a number of rows have been
combined to form the new groups. The bottom row (TOTAL) is representa-
tive of total number of responses to each pricing rank from the non-U.S.
### TABLE 4.4

**DISTRIBUTION OF THE RANKS OF THE PRICING VARIABLE FOR DIFFERENT GROUPS**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>11</td>
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<tr>
<td>Germany</td>
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<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>5</td>
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<td>23</td>
</tr>
<tr>
<td>Other EEC</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Other Europe</td>
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<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>9</td>
<td>23</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>88</td>
</tr>
</tbody>
</table>

### TABLE 4.5

**TABLE AND COMPUTED D VALUES FOR KOLMOGOROV-SMIRNOV TESTS**

<table>
<thead>
<tr>
<th>GROUPS</th>
<th>D</th>
<th>COMPUTED D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada-Germany</td>
<td>.5263</td>
<td>.085</td>
</tr>
<tr>
<td>Canada-United Kingdom</td>
<td>.4968</td>
<td>.103</td>
</tr>
<tr>
<td>Canada-Other EEC</td>
<td>.5480</td>
<td>.298</td>
</tr>
<tr>
<td>Canada-Other Europe</td>
<td>.5263</td>
<td>.133</td>
</tr>
<tr>
<td>Canada-Other</td>
<td>.6902</td>
<td>.122</td>
</tr>
<tr>
<td>Germany-United Kingdom</td>
<td>.4350</td>
<td>.133</td>
</tr>
<tr>
<td>Germany-Other EEC</td>
<td>.4908</td>
<td>.257</td>
</tr>
<tr>
<td>Germany-Other Europe</td>
<td>.4665</td>
<td>.188</td>
</tr>
<tr>
<td>Germany-Other</td>
<td>.6458</td>
<td>.186</td>
</tr>
<tr>
<td>United Kingdom-Other EEC</td>
<td>.4610</td>
<td>.264</td>
</tr>
<tr>
<td>United Kingdom-Other Europe</td>
<td>.4350</td>
<td>.153</td>
</tr>
<tr>
<td>United Kingdom-Other</td>
<td>.6234</td>
<td>.181</td>
</tr>
<tr>
<td>Other EEC-Other Europe</td>
<td>.4908</td>
<td>.341</td>
</tr>
<tr>
<td>Other EEC-Other</td>
<td>.6636</td>
<td>.404</td>
</tr>
<tr>
<td>Other Europe-Other</td>
<td>.6458</td>
<td>.255</td>
</tr>
</tbody>
</table>

^Table values for .05 level of significance.
based respondents. The first column on the right (TOTAL) indicates the number of respondents in each group.

A total of 15 two-by-eleven Kolmogrov-Smirnov tests were applied to Table 4.4. The test results indicated that all six groups have similar distributions with respect to their members' ranking of price, i.e., the null hypotheses were not rejected in all fifteen cases at the .05 level. Table 4.5 is a list of the table values of $D$ at .05 level of significance and computed values of $D$ for the six groups. The "GROUPS" column of this table indicates the name of the two groups tested. The middle column is the table value for the Kolmogrov-Smirnov test at the .05 level of significance. The reason for having different table values for different groups is that the number of respondents vary from one test to another. The values in "COMPUTED D" column is computed from the entries in Table 4.4. The test results support the hypothesis that the importance of pricing for non-U.S. based firms of different national origins are similar.

Because of the method of data collection employed in this study, some interval measure of the importance of pricing is available. Table 4.6 includes the mean value for the importance of the pricing variable for selected countries.

**Pricing Objective**

The pricing objectives of firms of U.S. and non-U.S. type were analyzed to detect any possible difference between the pattern of pricing objective selection of the two groups. The following hypothesis was being tested:

The pricing objectives of non-U.S. based firms differ from those of U.S. based companies.
TABLE 4.6
CHARACTERISTICS OF THE RELATIVE INTERVAL MEASURES OF THE PRICING VARIABLE FOR SELECTED COUNTRIES

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Mean</th>
<th>Max. Value</th>
<th>Min. Value</th>
<th>S.D. a</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>16.547</td>
<td>80</td>
<td>0</td>
<td>15.457</td>
</tr>
<tr>
<td>All U.S.</td>
<td>19.221</td>
<td>80</td>
<td>0</td>
<td>17.281</td>
</tr>
<tr>
<td>U.S. 1 b</td>
<td>20.948</td>
<td>80</td>
<td>0</td>
<td>17.928</td>
</tr>
<tr>
<td>U.S. 2 c</td>
<td>17.043</td>
<td>75</td>
<td>0</td>
<td>16.361</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>13.386</td>
<td>70</td>
<td>0</td>
<td>12.341</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>13.870</td>
<td>50</td>
<td>0</td>
<td>13.067</td>
</tr>
<tr>
<td>Germany</td>
<td>13.167</td>
<td>40</td>
<td>0</td>
<td>11.765</td>
</tr>
<tr>
<td>Canada</td>
<td>11.364</td>
<td>25</td>
<td>0</td>
<td>10.023</td>
</tr>
<tr>
<td>Sweden</td>
<td>12.222</td>
<td>25</td>
<td>0</td>
<td>10.035</td>
</tr>
<tr>
<td>Switzerland</td>
<td>12.875</td>
<td>40</td>
<td>0</td>
<td>14.100</td>
</tr>
<tr>
<td>Japan</td>
<td>13.750</td>
<td>20</td>
<td>5</td>
<td>7.500</td>
</tr>
<tr>
<td>France</td>
<td>11.000</td>
<td>20</td>
<td>5</td>
<td>7.937</td>
</tr>
</tbody>
</table>

aStandard deviation.
bRespondents selected from the Million Dollar Directory.
cRespondents selected from the Middle Market Directory.

TABLE 4.7
DISTRIBUTION OF PRICING OBJECTIVES

<table>
<thead>
<tr>
<th>PRICING OBJECTIVE a</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>7</td>
<td>17</td>
<td>3</td>
<td>0</td>
<td>24</td>
<td>1</td>
<td>25</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>97</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>5</td>
<td>14</td>
<td>5</td>
<td>1</td>
<td>20</td>
<td>0</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>2</td>
<td>79</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>31</td>
<td>8</td>
<td>1</td>
<td>44</td>
<td>1</td>
<td>35</td>
<td>19</td>
<td>19</td>
<td>6</td>
<td>176</td>
</tr>
</tbody>
</table>

aThe pricing objective Numbers 1-9 correspond with list on the following page, and where 10 is the "other" category.
Alternative pricing objectives available to the respondents included the following:

1. Prices are set so that the firm may gain the largest possible share of the market
2. Prices are set so that the firm may maintain its market share
3. Prices are set at the high end of the price range
4. Prices are set at a high level and then are lowered after a certain time period has elapsed
5. Prices are set at a level which yield a satisfactory return on investment
6. Prices are set at a level which yield the highest return on investment
7. Prices are set at a level which lead to a specified profit goal
8. Prices are set at a level which lead to profit maximization
9. Prices are set at a level which lead to a specified sales goal

In addition, the respondents had the choice of filling in their own objective if it was not available in the above list. Of the 176 firms with a first choice response to these objectives, 6 firms stated their own and selected it as their firms' most important pricing objective.

Table 4.7 is the complete breakdown of pricing objective alternatives selected by U.S. and non-U.S. based firms. In this table various pricing objectives are identified by numbers 1 through 10. These numbers coincide with those used in the above list, with 10 being the "other" category. A total of 176 responses are included in the table; 97 U.S. and 79 non-U.S. based firms. The bottom row (TOTAL) represents the number of U.S. and non-U.S. based firms which have chosen various pricing objectives.

Because of the nature of the question used in compiling this table, it was not possible to collapse those categories with frequency of occurrence of less than five into others and still have generally
meaningful pricing objectives for statistical testings. In other words, there was no justification for combining 3 and 4, and 5 and 6, or 6 and 7. Certainly, the last category (10) could not be combined with any other. However, since there were only a total of 16 cases in the four categories mentioned, it was felt that meaningful results can be obtained in the absence of these pricing objectives. Therefore, Table 4.8 was formed and tested via chi-square statistics. The results indicated that the distribution of the pricing objectives of U.S. and non-U.S. based companies were not significantly different from one another.\(^5\) That is, the null hypothesis could not be rejected.

A basic shortcoming of the above test was that four categories were excluded from the analysis. To be certain that the obtained result is not biased by the omission of the four pricing objective categories, two Kolmogrov-Smirnov tests were conducted. In the first test, the original table (Table 4.7) was used. Here the result indicated that the two groups have different distributions of pricing objective.\(^6\) In the second test, the same table that was used for the chi-square test (Table 4.8) was examined to determine whether or not the discrepancy between the results of the chi-square test and the first Kolmogrov-Smirnov test is due to the exclusion of certain pricing objective categories from the former test. The Kolmogrov-Smirnov test of Table 4.8 did not show any significant differences between the two

\(^5\)Computed chi-square value for Table 4.7 was 5.637. With 5 degrees of freedom this value is insignificant at the .05 level.

\(^6\)The computed value of D (.227) was larger than the minimum required level for the .025 level of significance (.2243).
### Table 4.8

**Distribution of Pricing Objectives**

<table>
<thead>
<tr>
<th>Pricing Objectives</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>7</td>
<td>17</td>
<td>24</td>
<td>25</td>
<td>8</td>
<td>8</td>
<td>89</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>5</td>
<td>14</td>
<td>20</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>31</td>
<td>44</td>
<td>35</td>
<td>19</td>
<td>19</td>
<td>160</td>
</tr>
</tbody>
</table>

### Table 4.9

**Mean Values for Pricing Objective**

<table>
<thead>
<tr>
<th>Country</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>12.3</td>
<td>18.8</td>
<td>5.2</td>
<td>0.8</td>
<td>21.2</td>
<td>1.8</td>
<td>17.1</td>
<td>9.6</td>
<td>9.5</td>
<td>2.3</td>
</tr>
<tr>
<td>All U.S.</td>
<td>12.7</td>
<td>19.4</td>
<td>4.5</td>
<td>0.2</td>
<td>19.9</td>
<td>1.9</td>
<td>19.2</td>
<td>8.6</td>
<td>7.9</td>
<td>3.2</td>
</tr>
<tr>
<td>U.S. 1a</td>
<td>8.3</td>
<td>20.2</td>
<td>5.2</td>
<td>0.3</td>
<td>14.5</td>
<td>2.7</td>
<td>20.3</td>
<td>14.0</td>
<td>8.2</td>
<td>4.0</td>
</tr>
<tr>
<td>U.S. 2b</td>
<td>18.2</td>
<td>18.4</td>
<td>3.6</td>
<td>0</td>
<td>26.8</td>
<td>1.1</td>
<td>17.8</td>
<td>2.2</td>
<td>7.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>11.9</td>
<td>18.0</td>
<td>6.0</td>
<td>1.5</td>
<td>22.8</td>
<td>1.8</td>
<td>14.7</td>
<td>10.7</td>
<td>11.5</td>
<td>1.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>11.4</td>
<td>11.4</td>
<td>0.9</td>
<td>2.6</td>
<td>24.8</td>
<td>1.3</td>
<td>14.3</td>
<td>17.3</td>
<td>15.3</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>16.8</td>
<td>10.6</td>
<td>8.8</td>
<td>1.2</td>
<td>34.1</td>
<td>1.2</td>
<td>12.4</td>
<td>7.6</td>
<td>7.4</td>
<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>14.1</td>
<td>30.5</td>
<td>6.8</td>
<td>4.5</td>
<td>14.1</td>
<td>2.3</td>
<td>10.0</td>
<td>4.5</td>
<td>8.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>5.6</td>
<td>13.9</td>
<td>11.1</td>
<td>0</td>
<td>13.3</td>
<td>1.1</td>
<td>24.4</td>
<td>17.2</td>
<td>13.3</td>
<td>0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.4</td>
<td>25.0</td>
<td>17.1</td>
<td>0</td>
<td>13.6</td>
<td>0</td>
<td>15.0</td>
<td>0</td>
<td>25.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Japan</td>
<td>10.0</td>
<td>25.0</td>
<td>0</td>
<td>0</td>
<td>35.3</td>
<td>0</td>
<td>12.5</td>
<td>5.0</td>
<td>11.3</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>15.0</td>
<td>31.7</td>
<td>0</td>
<td>0</td>
<td>10.0</td>
<td>6.7</td>
<td>33.3</td>
<td>0</td>
<td>3.3</td>
<td>0</td>
</tr>
</tbody>
</table>

---

^(Respondents selected from the Million Dollar Directory.)

^Respondents selected from the Middle Market Directory.)
groups of respondents. Therefore, it would appear that the exclusion of the pricing objectives with small cells has resulted in the discrepancy between the results. In light of the tests performed, this hypothesis cannot be rejected.

An examination of the frequency of selection of individual pricing objectives reveals that the U.S. based firms seem to favor the pricing objective with a profit goal about twice as often as their non-U.S. counterparts. The non-U.S. based companies, on the other hand, tend to select pricing objectives which lead to high prices, profit maximization, or meeting a sales goal more than the U.S. based firms. It appears that the non-U.S. based companies' relative preference for higher prices is in agreement with the results of the first hypothesis in which these firms viewed pricing as being generally less important than other variables in the marketing mix as compared to American firms.

Table 4.9 presents the mean values of relative interval measures for each pricing objective alternative for selected countries and groups.

Pricing Objective and Corporate Size

A third objective of this study was to find out whether the distribution of pricing objectives remain different when the two groups of U.S. and non-U.S. are divided into large and small firms. Specifically the following hypothesis was proposed:

The pricing objective of firms differ with respect to their size as measured by their annual revenues. That is:

The computed value of D (.130) was smaller than the minimum required level for the .05 significance level (.2164).
a. Large U.S. and non-U.S. based firms have pricing objectives that are different from one another.

b. Small U.S. and non-U.S. based firms have pricing objectives that are different from one another.

Large and small companies were recognized as such based on whether their 1975 annual revenue figures were more or less than the median annual revenue figure for each of U.S. and non-U.S. groups. This method of distinction between large and small firms was used because other alternatives would have resulted in a less accurate estimation of corporate size. For example, one could suggest the use of an overall mean revenue value for separation of large and small firms. This method, however, would have led to unequal number of U.S. and non-U.S. respondents in the small and large categories. Unequal number of firms in each category is caused by the presence of some unusually large firms in the sample. Another alternative was to select two mean values, one for each of U.S. and non-U.S. based firms. This method would also result in unequal number of respondents in each group. Selection of an overall median value would also yield similar results.

A fundamental reason for selecting two median values for each of U.S. and non-U.S. based companies, however, was the basic research question underlying this study, i.e., are U.S. and non-U.S. based firms different with respect to their views toward the pricing variable of the marketing mix? To suggest that large and small companies should be differentiated by an overall mean or median value is to assume that there is some general relationship between the two groups of respondents and
this, in turn, would be misleading and detrimental to the purpose of this study.

Therefore, two median figures were selected. The median revenue figure for U.S. based firms was $5,000,000, whereas the non-U.S. based companies had a median revenue figure of $12,600,000. Table 4.10 is a list of pricing objective choices of U.S. and non-U.S. based companies by their corporate size. The pricing objective numbers 1 through 10 refer to the objectives listed in the testing of the previous hypothesis. A total 72 responses fall in the "Large Firms" category. Of this number, 40 were from U.S. and 32 from non-U.S. based companies. The total number of responses from "Small Firms" was 104, of which 57 were from U.S. and 47 were from non-U.S. based companies.

Because of numerous cell frequencies of fewer than five, chi-square statistics cannot be applied to the testing of this hypothesis. A Kolmogorov-Smirnov test of the equality of the distributions of large U.S. and non-U.S. based companies, however, indicated that the two distributions are not significantly different from one another at the .05 level.\(^6\)

The same procedure was used to test part "b" of this hypothesis. The test result indicated that the small U.S. and non-U.S. based firms' pricing objectives did not have distributions which were significantly different from one another.\(^9\) The test results did not support the assumption that pricing objectives varied with firm size.

\(^6\)The computed value of D (.281) was smaller than the minimum required level for the .05 or the .10 level of significance (.3226 and .2983, respectively.

\(^9\)The computed value of D (.182) was smaller than the minimum required level for the .05 or .10 level of significance (.2680 and .2404, respectively).
### TABLE 4.10
**DISTRIBUTION OF PRICING OBJECTIVE FOR LARGE AND SMALL FIRMS**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large Firms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>14</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td><strong>Small Firms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>17</td>
<td>1</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>57</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>47</td>
</tr>
</tbody>
</table>

### TABLE 4.11
**DISTRIBUTION OF RESPONSES: THE IMPACT OF FLUCTUATIONS IN EXCHANGE RATES ON FINAL PRICES**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>62</td>
<td>21</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>102</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>29</td>
<td>20</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>88</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>91</td>
<td>41</td>
<td>14</td>
<td>17</td>
<td>14</td>
<td>13</td>
<td>190</td>
</tr>
</tbody>
</table>

1 = No impact at all  
6 = Great deal of impact
The Impact of Exchange Rates on Prices

The perceived impact of the fluctuations of currency exchange rates by U.S. and non-U.S. based firms' executives were measured on a six-point rating scale. The distribution of the responses by the two groups were in turn compared. Specifically, the following hypothesis was advanced:

Final prices of U.S. and non-U.S. based firms are affected differently by the currency exchange rate fluctuations.

Table 4.11 represents the responses by U.S. and non-U.S. based firms with regard to the impact of exchange rate fluctuations on their final prices. A total of 190 responses were available for analysis. The last row of Table 4.11 (TOTAL) is the total number of responses by both groups to scale values of 1 through 6. A scale value of 1 indicates that the fluctuations in currency exchange rates have no impact on the firms' final prices, whereas a scale value of 6 reflects a great deal of impact by the fluctuations in currency exchange rates on final prices.

Table 4.11 was tested via chi-square statistics to determine any significant differences between the distribution of U.S. and non-U.S. groups. The test result indicated that there is, in fact, a highly significant difference between the distribution of the two groups. That is, the null hypothesis is rejected in favor of the present one.

10 The computed chi-square value was 24.172 which with 5 degrees of freedom is significant at .0002 level.
An additional test was applied to make certain that the mean values for the two groups were also significantly different from one another. An appropriate statistical technique which can be used to test the difference between the mean values is the t test. The test results indicated that the means of the two groups are also significantly different from one another. Therefore, it can be stated that the two groups perceive the fluctuation of exchange rates to have different affects on their final prices. An examination of Table 4.11, however, reveals that the non-U.S. based companies feel that they are more affected by exchange rate fluctuations than their U.S. counterparts.

An additional hypothesis was proposed to test whether the firms that perceived themselves as being affected by the fluctuations in currency exchange rates have in fact taken this factor under consideration in their pricing policies. The purpose here was to test the following hypothesis:

Those firms whose final prices are affected by currency exchange rate fluctuations have pricing policies which account for such charges in their pricing.

Being affected by fluctuations in exchange rates was defined as any firm which checked any number above 3 on the six-point numerical rating scale where "no impact at all" and "great deal of impact" were represented by 1 and 6, respectively. A two-by-two table was formed by putting the two groups of "affected" and "not affected" on one side and the respondents' 1

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11Under the separate variance estimate, the t value of 4.66 with 147.89 degrees of freedom was highly significant (p < .0004) for a two-tailed test.
replies as to whether they formally accounted for such fluctuations in
the pricing policies on the other. This two-by-two table was tested
with a chi-square test. ¹²

Test results indicated that the majority of those firms which per-
ceived exchange rate fluctuations as having an impact on their final
prices did in fact account for such changes in their pricing policy. ¹³
According to the table formed, over half of the responding firms do
account for such expenses in their pricing policies regardless of
whether they are affected by exchange rate fluctuations or not.

To be certain that this definition of "affected" has not been a
misleading cause in testing of this hypothesis, two other definitions
were used and the resulting tables were tested. In the first table,
being affected by fluctuations in exchange rates only included all
response to scales of 5 and 6 on the six-point numerical rating scale,
whereas the second table included all responses to scales of 3, 4, 5,
and 6. Both tables were tested in the same manner as before. The
results of both tests were highly significant and indicated that regard-
less of the definition used, firms which perceive fluctuations in
exchange rates as having an impact on their final prices, do account
for such an expense in their pricing policy.

¹² Since a continuous distribution (chi-square) is used to approxi-
mate a discrete distribution, a correlation suggested by Yates (1934)
is necessary to attempt to remove this source of error. See Siegel,
op. cit., p. 64.

¹³ Yates' corrected chi-square value of 38.354 with 1 degree of
freedom was highly significant (p < .00004).
The Impact of Customs Duties on Prices

The executives of both U.S. and non-U.S. based companies were asked to rate the impact of customs duties on a six-point rating scale. The distribution of the ratings by the two types of firms were then compared. The objective was to test the following hypothesis:

Final prices of U.S. and non-U.S. based firms are affected differently by the customs duties.

There are two basic rationales behind this hypothesis. In the first place, the literature does not provide any qualitative or quantitative support indicating that the non-U.S. based firms are affected differently by the customs duties than the U.S. based companies. Secondly, even though intuition seems to support the hypothesis, there is no reason to believe that the U.S. based firms are affected less than their non-U.S. based counterparts. It may very well be that the non-U.S. based companies, because of their nature, are more aware of such charges than the U.S. based firms.

Table 4.12 represents the responses by U.S. and non-U.S. based firms with regard to the impact of customs duties on their final prices. A total of 189 responses were included in testing this hypothesis. The cell entries indicate the number of times each rating has been picked by the U.S. non-U.S., and the total number of respondents.

The data in the table was tested with the chi-square technique to determine significant differences between the distribution of the ratings by the two groups. Test results indicated that the distribution of the two groups' responses with regard to the impact of customs duties on their final prices are in effect distinctly different from one another.14
TABLE 4.12
DISTRIBUTION OF RESPONSES: THE IMPACT OF CUSTOMS DUTIES

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>55</td>
<td>21</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>101</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>28</td>
<td>30</td>
<td>13</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>88</td>
</tr>
<tr>
<td>TOTAL</td>
<td>83</td>
<td>51</td>
<td>28</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>189</td>
</tr>
</tbody>
</table>

1 = No impact at all
6 = Great deal of impact
As with the fluctuations in currency exchange rates, an additional test was applied to make certain that the mean values of the groups are also significantly different. The result of a t test indicated a highly significant difference between the mean value of the rankings of the U.S. and non-U.S. based companies.\textsuperscript{15} The results of the above tests indicate that, in fact, there is a difference in the way the U.S. and non-U.S. based firms perceive the impact of customs duties on their final prices.

Another hypothesis which was advanced to determine whether the firms which perceive themselves as being affected by customs duties do have pricing policies that accounts for such an expense. Specifically, the following hypothesis was being tested:

Those firms whose final prices are affected by customs duties have pricing policies which account for such charges in their pricing.

The procedure used for testing this hypothesis was similar to that used for testing the previous hypothesis regarding fluctuations in currency exchange rates, including the manner in which "being affected by customs duties" was defined. The firms were grouped into two categories of "affected" and "not affected" and cross-tabulated with respect to their pricing policies which either did or did not account for customs duties charges. The data, which formed a two-by-two table, was tested

\textsuperscript{14}The computed chi-square value of 13.828 with 5 degrees of freedom was significant at .0167 level.

\textsuperscript{15}Under separate variance estimate, the t value of 2.81 with 164.19 degrees of freedom was significant at .006 level for a two-tailed test.
with Yates' corrected chi-square test. The resulting statistic indicated that the distributions of these two variables are significantly different from one another.16

Further testing of this hypothesis with two new definitions of "being affected by customs duties" also revealed highly significant relationships. In the first test, being affected by customs duties included all responses to scales of 5 and 6 on the six-point rating scale presented in Table 4.12. The second test, on the other hand, included all response to scales of 3, 4, 5, and 6 as those who perceived their firms as being affected by customs duties charges. Therefore, it appears that the firms which are affected by customs duties do in fact formally account for such charges in their pricing policy.

Centralization of Pricing Decision Process

This area of decision process is one that has been covered to a limited extent in the past, although none of the studies had been statistically tested for significance. These studies were covered in Chapter II. Here, the specific interest was to test the following hypothesis:

Non-U.S. based companies tend to have a more decentralized approach to pricing for the U.S. market than their American counterparts.

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16Yates' corrected chi-square value was 28.157 which with 1 degree of freedom is highly significant (p < .00004).
To test this hypothesis, the respondents were asked to rate the degree of independence in their pricing decisions on a six-point numerical rating scale. Decentralized pricing decision process was broadly defined as the latitude of freedom which the respondents felt in formulating their own pricing policies. In other words, the extent to which the respondents believed that their pricing policy decisions were made independent of other subsidiaries, divisions, and headquarters. Table 4.13 is the distribution of responses by U.S. and non-U.S. based firms. A total of 187 responses were included in testing this hypothesis. Each cell indicates the number of times a particular rating was selected by the U.S., non-U.S., or total number of respondents.

The data in Table 4.13 was subjected to chi-square analysis to determine if there was a significant difference between the distribution of responses of the two groups. Test results indicated that the distribution of responses of U.S. and non-U.S. based firms were significantly different from one another.\textsuperscript{17}

A further test was conducted to determine whether the mean values for the two groups are also different. Using the t test, a highly significant difference between the mean values of the ratings by the two groups of respondents resulted.\textsuperscript{18} The above tests, however, have shown differences and no direction, per se, has been discussed. A

\textsuperscript{17}The computed chi-square value of 36.341 with 5 degrees of freedom is highly significant (p < .00004).

\textsuperscript{18} Under separate variance estimate, the t value of 5.83 with 185.00 degrees of freedom is highly significant (p < .0004).
**TABLE 4.13**

**DISTRIBUTION OF RESPONSES:**
**DEGREE OF CENTRALIZATION**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>53</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>11</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>17</td>
<td>34</td>
<td>87</td>
</tr>
<tr>
<td>TOTAL</td>
<td>64</td>
<td>17</td>
<td>14</td>
<td>13</td>
<td>24</td>
<td>55</td>
<td>187</td>
</tr>
</tbody>
</table>

1 = Totally centralized
6 = Totally decentralized
comparison of the mean values for the two groups and the contents of Table 4.13 appear to indicate the direction of the difference. The mean value of the ratings of the U.S. respondents was 2.66, whereas the non-U.S. respondents had a mean rating value of 4.32. Also, Table 4.13 reveals that a larger number of non-U.S. responses have clustered under ratings of 4, 5, and 6. To be exact, 69 percent of the non-U.S. responses were included in these ratings. Clustering of most of the responses under ratings of 4, 5, and 6 is a clear evidence that the non-U.S. firms tend to be more decentrally managed with respect to their pricing decisions.

The Response Rate of U.S. and Non-U.S. Based Firms

A major concern of this study, throughout its development and data collection, was the rate of response to a questionnaire about pricing from non-U.S. based firms. Based on the difficulties encountered by previous researchers in securing a high rate of return from non-U.S. based companies to questionnaires on various research topics, and because of Congressional hearings regarding the activities of non-U.S. based firms, a substantially lower rate of responses was expected from the non-U.S. based companies. Specifically, the following hypothesis was formulated:

The rate of response of non-U.S. based firms to the questionnaire is significantly less than that of U.S. based firms'.

The statistical test which was used for testing this hypothesis is illustrated in Appendix M. Two different tests are in order depending on which non-U.S. response rate is applied. In the first test, the
difference between the number of questionnaires received prior to
the deadline may be tested. As indicated in column three of Table
F.2 in Appendix F, the number of returns for non-U.S. and U.S. based
firms are 88 and 104 based on sample sizes of 396 and 450, respectively.
Using the procedure outlined in Appendix M, no statistically signifi-
cant differences in response rates were found.\textsuperscript{19}

In a second test, all of the responses which were received, in-
cluding those which were received after the deadline, were tested. The
reason for this second test is that at the time this hypothesis was
formulated there was no stipulation as to the time period within which
the questionnaires should be returned. It is, however, interesting to
note that when all of the responses are taken into account, the non-
U.S. based firms' response rate exceeds that of U.S. based companies'
by almost one percent. Column six of Table F.2 in Appendix F lists
the overall rates of response. Overall, 96 non-U.S. based and 105
U.S. companies responded to the questionnaire. Using the procedure
outlined in Appendix M, these numbers were analyzed to determine whether
there is a significant difference between them. The test result indi-
cated that there is no significant difference between the response rates
of the two groups.\textsuperscript{20}

\textsuperscript{19}The probability associated with a Z value of .308 is .3520.
This is, there is only a 35 percent certainty that the difference is
not due to chance.

\textsuperscript{20}The probability associated with a Z value of -.310 is .3783.
That is, there is only a 38 percent certainty that the difference is
not due to chance.
Another factor which must be considered in testing of this hypothesis is the number of "no-response" replies which were received from the U.S. and non-U.S. based firms. In view of the fact that a large percentage of these replies were non-U.S. based firms which for one reason or another did not identify themselves as non-U.S. based, one can suggest that with a different form of a cover letter, a substantial number of such no-responses would have been actual responses credited to non-U.S. based firms' response rate. In this case, the rate of response by non-U.S. based companies would far exceed the rate of response by U.S. based firms. However, in the absence of actual completed questionnaires, it would be difficult to make any further analysis of the rates of response by the two groups.

SUMMARY

This chapter was specifically addressed to the operationalizing and testing of the hypotheses. The data supported six of the nine hypotheses examined in this study. In addition, part "b" of the first hypothesis which dealt with similarity of non-U.S. based firms' responses with respect to the importance of the pricing variable was supported. Part "a" of this hypothesis, although not supported from a statistical viewpoint, is significant from the perspective of the marketing executive. In fact there was only a six percent certainty that the difference between the U.S. and non-U.S. based firms' responses is due to chance.
The only hypotheses which were not supported dealt with the pricing objectives and corporate size (third hypothesis) and the difference in response rates of the U.S. and non-U.S. based companies (ninth hypothesis). Table 4.14 summarizes the results of the tests conducted.
TABLE 4.14

SUMMARY OF RESULTS

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<thead>
<tr>
<th></th>
<th>1a</th>
<th>1b</th>
<th>2</th>
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</tr>
<tr>
<td>Kolmogrov–Smirnov test</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t test</td>
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<td>✓</td>
<td>✓</td>
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<td></td>
</tr>
<tr>
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<tr>
<td>Hypothesis Not Supported</td>
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<td>✓</td>
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<td>✓</td>
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</tr>
</tbody>
</table>

\(p < .06\)
CHAPTER V

SUMMARY AND CONCLUSIONS

The intent of this research has been to analyze and compare the pricing policies and objectives of the U.S. based firms with those of the non-U.S. based companies'. Data collected via a mail questionnaire was analyzed and the results were presented in Chapter IV. The objective of this chapter is to present the findings of the study and compare it with the relevant literature.

Importance of the Pricing Variable in Firm's Marketing Mix

The first hypothesis of this study stated that the U.S. and non-U.S. based firms have different opinions with respect to the importance of the pricing variable in their marketing mixes. This hypothesis was not supported at the .05 level of significance. The test result, however, was statistically significant at the .06 level. It would appear that the hypothesis is managerially significant even though it was not statistically significant. The data in Tables 4.1, 4.2, and 4.6 indicate that the non-U.S. based firms put less emphasis on the pricing variable of their marketing mixes than the U.S. based companies. The mean relative interval measure for the U.S. based firms is 19.221; the same figure for the non-U.S. based companies is 13.386.1 Although analysis of relative

1Relative interval measures are the values assigned by the respondents to each of twelve categories in the first item of the
mean values tends to hide some basic data characteristics, it appears that the marketing effort of non-U.S. based firms is more evenly distributed among the marketing mix variables. The non-U.S. based firms have higher relative mean values for product research and development, promotion, sales research, analysis, and planning, quality of middlemen, and cooperation and control of middlemen than the U.S. based firms. U.S. based companies put more emphasis on product and price. The remaining relative mean values for the U.S. based firms are either below or almost the same as for the non-U.S. based companies.²

The U.S. based companies had relative mean values of 10 or higher for product, price, and customer service support (including transportation and storage). The non-U.S. based firms had relative mean values of 10 or more for product, price, customer service support (including transportation and storage), and promotion.

The preceding analysis reveals that price is by no means unimportant to non-U.S. based firms. By putting less emphasis on price than their U.S. counterparts, however, the non-U.S. based firms can concentrate on other factors that give them a competitive edge. Competitiveness can then be maintained by concentrating on promotion, product research

questionnaire. These values may vary from 1 to 100 depending on the respondents' view of the importance of each category. The average value of each category for members of a particular group is referred to as the mean relative interval measure for that group.

²If there was at least a 10 percent difference between the relative mean figures of a marketing mix variable of U.S. and non-U.S. based firms, it was assumed that the group with the higher mean value puts more emphasis on that variable.
and development, sales research, and selectivity with respect to their middlemen.

Some U.S. companies also use this strategy to obtain a competitive position in the U.S. market. The official policy of Hewlett-Packard Company is that of concentrating resources on product development and product excellence and then charging a premium price for their efforts. Product research and development and quality control over final products tend to differentiate Hewlett-Packard products from the rest to such an extent that force price to be a far less important factor in the selection of their product by the prospect.

Non-U.S. firms' tendency to adopt a non-price competitive strategy is not surprising when one considers the type of environment within which the parent company took shape. One factor which contributes to the non-U.S. based firms' involvement in non-price competition may be the existence of industry cartels abroad. As a result of these agreements, when two members of an industry cartel establish subsidiaries in the U.S., they may require their subsidiaries to follow cartel rules. Following such rules leads to a price fixing situation which

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3This is not to say that the company is not affected by market pressures and lacks price sensitivity. In the case of Hewlett-Packard's handheld scientific calculators, for example, prices have dropped from $395 in 1971 to about $80 for a similar model in 1976. Yet, the company continues to charge a higher price for its products than others, and will continue to do so as long as it can hold on to its differentiating advantages. Furthermore, it should be noted that Hewlett-Packard had no competition in the handheld scientific calculator market for about 3 years. See "Hewlett-Packard: Where Slower Growth is Smarter Management." Business Week, June 9, 1975, p. 50.
is illegal in the United States. That the non-U.S. based firms entering the U.S. market go through great lengths to hide their true identity may be partially explained by such industry cartels. It must, however, be noted that test results in no way support or indicate a price fixing situation. What the results do indicate is that non-U.S. based companies are putting relatively less emphasis on price as a competitive tool than their U.S. counterparts.

Another factor which has led to the apparent popularity of non-price competition among non-U.S. based firms is the business tradition of Europe. Price cutting as a competitive strategy generally has been considered an unethical business practice in many countries within which the parent companies of non-U.S. based firms have existed for many decades.

Still another explanation for engaging in a non-price form of competition is the local market conditions. It was not the objective of this study to look at the importance of pricing on an industry by industry basis. Therefore, the possibility cannot be ruled out that in certain industries, non-U.S. firms are simply reacting to a condition of administered pricing.


6It must be pointed out, however, that even administered prices are affected by market pressures. See Jules Backman, *Price Practices and Price Policies* (New York: The Ronald Press, 1953), p. 3.
The long-run strategic implications of non-U.S. based firms' views toward the importance of the pricing variable in their marketing mix should not be ignored by the U.S. based firms' marketing executives. Non-U.S. based firms' emphasis on promotion may mean increasing brand loyalty or company/product image in the minds of their prospects. Even more important is their emphasis on product research and development. This factor would tend to give the non-U.S. based companies a better competitive position by reducing the number of possible substitutes for their goods and services.

Another hypothesis which is related to the previous one stated that the non-U.S. based firms of different nationality have similar views with respect to the importance of the pricing variable in their marketing mix. This hypothesis was tested via the Kolmogrov-Smirnov test at the .05 level of significance and was supported by the data.

If U.S. and non-U.S. based companies were expected to have different opinions as to the importance of the pricing variable in their marketing mix, then it could follow that the non-U.S. based firms of different origins must generally hold similar views toward the importance of price. Cultural and business conditions discussed in the preceding paragraphs, also tend to support this finding.

Pricing Objective

The second hypothesis of this study stated that the pricing objectives of non-U.S. based firms differ from those of the U.S. based companies. The null hypothesis was rejected at the .05 level of significance. That is, the distributions of the pricing objectives of the U.S.
and non-U.S. based companies are significantly different from one another.

The following pricing objective alternatives were available to the respondents:

1. Prices are set so that the firm may gain the largest possible share of the market
2. Prices are set so that the firm may maintain its market share
3. Prices are set at the high end of the price range
4. Prices are set at a high level and then are lowered after a certain time period has elapsed
5. Prices are set at a level which yield a satisfactory return on investment
6. Prices are set at a level which yield the highest return on investment
7. Prices are set at a level which lead to a specified profit goal
8. Prices are set at a level which lead to profit maximization
9. Prices are set at a level which lead to a specified sales goal
10. Other

Table 5.1 presents the percentage of firms which selected each of the above pricing goals. An equal percentage of the respondents from each group have selected the pricing objective which yields a satisfactory return on investment (objective 5) and that with which they can maintain their market share (objective 2). In addition, an almost equal percentage of firms selected the pricing objective with which they could gain the largest possible share of the market (objective 1).

The non-U.S. based companies chose the objective which lead to profit maximization more than their U.S. counterparts (objective 8). Profit maximization was selected by 6 percent more non-U.S. based companies than the U.S. based firms. Selecting profit maximization as a pricing objective is important because to some extent it reflects the level of managements' sophistication. Profit maximization, as it turns
TABLE 5.1

PERCENT OF COMPANIES SELECTING EACH PRICING OBJECTIVE

<table>
<thead>
<tr>
<th>PRICING OBJECTIVES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>8</th>
<th>9</th>
<th>10</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>7</td>
<td>18</td>
<td>3</td>
<td>0</td>
<td>25</td>
<td>1</td>
<td>26</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Non-U.S.</td>
<td>6</td>
<td>18</td>
<td>6</td>
<td>1</td>
<td>25</td>
<td>0</td>
<td>13</td>
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<td>100</td>
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<tr>
<td>% of TOTAL</td>
<td>7</td>
<td>18</td>
<td>5</td>
<td>b</td>
<td>25</td>
<td>b</td>
<td>20</td>
<td>11</td>
<td>11</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

\( ^a \)Pricing objective numbers correspond with the list below.
\( ^b \)Less than 1 percent.

1. Prices are set so that the firm may gain the largest possible share of the market
2. Prices are set so that the firm may maintain its market share
3. Prices are set at the high end of the price range
4. Prices are set at a high level and then are lowered after a certain time period has elapsed
5. Prices are set at a level which yield a satisfactory return on investment
6. Prices are set at a level which yield the highest return on investment
7. Prices are set at a level which lead to a specified profit goal
8. Prices are set at a level which lead to profit maximization
9. Prices are set at a level which lead to a specified sales goal
10. Other
out, is perhaps the one pricing goal which is difficult, if not impossible, to define and operationalize. It is never quite clear at what point the firm will reach its objective. One would expect that a sophisticated management would select only those objectives which can be operationalized; such as a specified return on investment.

A second pricing objective which was selected by more non-U.S. based firms than U.S. based ones was that of setting prices at a level which leads to a specified sales goal (objective 9). Selection of this objective is not surprising in light of the fact that the relative mean importance figure of non-U.S. based firms for "sales research, analysis, and planning" variable of the marketing mix was higher than the same figure for the U.S. based companies (Table 4.6).

Another pricing objective which was selected by a larger percentage of non-U.S. based firms was that of pricing the product at the high end of the price range (objective 3). Although relatively few firms selected this objective, in part it may be an indication that these firms are engaged in a non-price form of competition and concentrate their marketing effort on other variables of the marketing mix. The fact that their prices are high may also point out that they have been successful at differentiating their product from the rest of their competitors or creating a distinctive image for themselves.

Only one respondent selected the pricing goal of setting prices at a high level and then lowering them after a certain time period has

---

elapsed (objective 4). This pricing objective is much the same as the
pricing strategy of market skimming which is either naturally or inten-
tionally associated with the introduction of many new products. In
addition, only one firm selected the pricing objective in which prices
are set at a level which yield the highest return on investment (objec-
tive 6). One would encounter much difficulty in defining and opera-
tionalizing this pricing goal as the case was with the pricing objective
of profit maximization.

An almost equal percentage of U.S. and non-U.S. based firms selected
the "other" category (objective 10). These firms almost invariably
indicated that their pricing objective was that of setting the prices of
their products competitively with other products in the market. Such a
pricing policy seems to dictate market prices to the company even if it
leads to an overall loss.

Even though this hypothesis was supported by the data, it has
few, if any, implications for the marketing manager. The results, how-
ever, do imply differences in management's philosophy of business.
For example, the pricing objective of a specified return on investment
may imply that the management is finance oriented, whereas maintaining
market share as a pricing objective may imply that the management is
market oriented.

The pricing goal of the firm is built in its pricing policy and
should lead to the attainment of corporate objectives. The fact that a
larger number of non-U.S. based firms selected the pricing goal of profit
maximization may be indicative of their inability to translate their
corporate objectives in their pricing policy.
Pricing Objective and Corporate Size

A third hypothesis of this study had to do with the pricing objectives of large and small corporations. It stated that large U.S. and non-U.S. based firms have pricing goals which are different from one another and small U.S. and non-U.S. based firms have pricing objectives which are different. The test results indicated that at the .05 level of significance, both parts of this hypothesis were not supported. The distribution of the pricing objectives of large U.S. and non-U.S. based firms, as well as those of small U.S. and non-U.S. based companies, are not significantly different from one another.

Table 5.2 is the percentage of large and small firms which have selected each pricing objective. Among large firms, the U.S. respondents form a large cluster under the pricing goal which leads to a specified profit goal (objective 7). The large non-U.S. based firms, on the other hand, seem to have selected the pricing goals which lead mainly to market shares and pricing at the high end of the price range with larger frequencies.

Among small firms, the non-U.S. based companies seem to have selected two pricing goals more often than their U.S. counterparts. These pricing objectives are those which lead to profit maximization and specified sales goals.

The Impact of Exchange Rates on Prices

The fourth hypothesis of this study stated that the final prices of U.S. and non-U.S. based firms are affected differently by the fluctuations in the currency exchange rates. The distributions and
### TABLE 5.2
PERCENT OF LARGE AND SMALL COMPANIES SELECTING EACH PRICING OBJECTIVE

<table>
<thead>
<tr>
<th>PRICING OBJECTIVES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>TOTAL</th>
</tr>
</thead>
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<td></td>
<td></td>
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<td></td>
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<td>0</td>
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<td>0</td>
<td>35</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>Non-U.S.</td>
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<td>9</td>
<td>0</td>
<td>25</td>
<td>0</td>
<td>9</td>
<td>13</td>
<td>13</td>
<td>0</td>
<td>100</td>
</tr>
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<td>SMALL FIRMS</td>
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<td></td>
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<td></td>
</tr>
<tr>
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<td>19</td>
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<td>7</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Non-U.S.</td>
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<td>13</td>
<td>4</td>
<td>2</td>
<td>26</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>4</td>
<td>100</td>
</tr>
</tbody>
</table>

*The pricing objective numbers correspond with the following list:

1. Prices are set so that the firm may gain the largest possible share of the market
2. Prices are set so that the firm may maintain its market share
3. Prices are set at the high end of the price range
4. Prices are set at a high level and then are lowered after a certain time period has elapsed
5. Prices are set at a level which yield a satisfactory return on investment
6. Prices are set at a level which yield the highest return on investment
7. Prices are set at a level which lead to a specified profit goal
8. Prices are set at a level which lead to profit maximization
9. Prices are set at a level which lead to a specified sales goal
10. Other
the means of responses of U.S. and non-U.S. groups to a six-point rating scale measuring the impact of fluctuations in currency exchange rates on their final prices were significantly different from one another.

Even though this hypothesis was stated and tested in a two-tailed fashion, the direction of difference clearly indicates that the non-U.S. based firms' final prices are affected to a larger degree by the fluctuations in the currency exchange rates. Table 4.11 is indicative of this point since a larger percentage of non-U.S. responses are clustered under the rankings of 5 and 6, where a rating of six reflects a great deal of impact.

The fact that the prices of non-U.S. based firms operating in the United States are more sensitive to currency revaluation and devaluation means that they are likely to be taking a greater advantage of their multinational networks of operation: That is, the raw materials purchase, production, financing, and other business functions may be shifted from one country to another so that the firm may enjoy a greater efficiency in their worldwide operations. By definition, multinational companies are the prime candidates for enjoying this type of efficiency and sensitivity of non-U.S. based firms' final prices to exchange rate fluctuations may well be reflecting this point.

A significant fact which should not be overlooked is that nearly one-third of non-U.S. based firms indicated that their final prices were not affected by exchange rates. There are two potential explanations for this. In the first place, many non-U.S. based firms in the United States are given larger degrees of latitude with respect to their
This greater freedom may have triggered a domestic self-sufficiency program by the U.S. managers of these companies. A more convincing explanation which is not totally independent of the first, is that a number of non-U.S. based multinational companies found their way into the U.S. market by purchasing existing companies. The new owners, in turn, may have decided to let their U.S. subsidiary operate as they previously were and not change such things as sources of supply by exerting pressure on the new subsidiary.

A fundamental question which should be asked is whether the non-U.S. firms' final prices are really affected by revaluation and devaluations or is it that their responses are biased by the fact that they are non-U.S. owned. Conversely, the issue is whether the U.S. companies are largely left unaffected by exchange rates or is it that they are really unaware of the extent to which they are affected by such fluctuations. It would be a very time consuming effort to determine whether the perceptual responses are true reflections of the real world or not.

The basic assumption underlying this and other similar research work is that the responses are in fact reflections of the reality. Non-U.S. based firms, however, are more likely to be aware of expenses connected with fluctuations in currency exchange rates because if they were to optimize their world-wide returns, they would engage in frequent export and import of capital, raw material, and semi-finished and finished goods.

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9"Why Foreign Companies are Betting on the U.S.," Business Week, April 12, 1976, pp. 51-54.
This fact is supported by an earlier study which dealt with intracorporate transfer pricing of non-U.S. multinational firms. The study found that revaluations and devaluations were very important to all firms in the sample.\(^\text{10}\)

Another hypothesis which is related to this area states that those firms whose final prices are affected by currency exchange rate fluctuations have pricing policies which account for such charges in their pricing. The statistical method used for testing this hypothesis was the chi-square test. This hypothesis was supported at the .05 level of significance.

The basic notion underlying this hypothesis was to find out whether the pricing policy of U.S. and non-U.S. based firms are consistent with reality. The finding of this test indicates that the majority of the companies who perceive themselves as being affected by the currency exchange rate fluctuation do in fact have pricing policies which are consistent with their perceptions of the reality.

The test results also indicate that 21 percent of all responding firms have pricing policies which formally account for revaluation and devaluation expenses in their final prices.\(^\text{11}\) The 30 firms which fall in this category have presumably established their pricing policies in


\(^{11}\text{Firms which had ratings of 1, 2, or 3 to the question of the impact of the fluctuations in currency exchange rates on their final prices were defined as being unaffected by such fluctuations. The remaining respondents were considered to be affected by revaluations and devaluations.}\)
anticipation for changes in their sources of supply or markets. Only 12 companies or slightly over 27 percent of the responding firms which were affected by fluctuations in currency exchange rates had pricing policies which did not formally account for such charges. In essence, these firms' perception of the real world is not consistent with their pricing policy.

The Impact of Customs Duties on Prices

The sixth hypothesis of this study stated that the final prices of U.S. and non-U.S. based firms are affected differently by the customs duties. The distributions and mean values of the ratings of non-U.S. and U.S. based firms on the six-point rating scale measuring the impact of customs duties on their final prices were significantly different from one another. Table 4.12 and the larger mean rating value of non-U.S. based respondents indicate the direction of the difference. That is, the non-U.S. based firms are affected by customs duties to a greater extent than their U.S. counterparts. This finding is in agreement with the previous finding regarding exchange rate fluctuations. One would expect that those firms which are affected by the exchange rate fluctuations, feel its impact, partly because of the flow of funds between the subsidiary and the parent company and vice versa and partly because they are engaged in exporting and/or importing. Exporting to other countries as well as importation of raw materials and semi-finished and finished goods would expose the companies' final prices to customs duties charges. The finding is also in agreement with raison d'être of multinational firms. That is, efficient employment of the available resources around the world would necessitate the firm to
transfer raw materials, parts, supplies, and semi-finished and finished goods from one market to another. Alternatively, the company would make efficient use of the available resources in one market and export to others.

The same arguments used in discussing the impact of fluctuations in exchange rates on final prices also apply to the impact of customs duties on final prices. These include the perceptions of U.S. and non-U.S. based firms of the factors that affects their prices, the degree of independence in the decision making process within the firms, and the issue of non-U.S. purchase of U.S. companies.

As economic communities such as the European Economic Community expand their domain and as an increasing number of countries seek to minimize trade barriers by reducing or eliminating tariffs and quotas, the importance of this variable in the export/import decision process and pricing policies of the firms will undoubtedly diminish. According to one study, many companies no longer look at customs duties as a major variable.\(^\text{12}\)

Another hypothesis of this study which deals with customs duties states that those firms whose final prices are affected by customs duties have pricing policies which account for such charges in their pricing. The data indicated that those firms which perceived themselves as being affected by the customs duties have pricing policies which formally, account for such charges in their final prices.

\(^{12}\text{Arpan, op. cit., p. 71.}\)
The test results also indicated that over 32 percent of those firms which were not affected by customs duties reported that their pricing policies formally accounts for such charges if and when they occur.\textsuperscript{13} There may be two reasons for a firm which is not affected by customs duties to formally account for such an expense in its pricing policy. For one thing, the presence of customs duties charges are much more amplified than exchange rate fluctuations. A number of domestic industries' are continually seeking additional trade barriers for imported goods. As a result this variable receives periodic attention. Another explanation may be that these companies have looked into the future of their firms in formulating their pricing policies in anticipation of entering the export business or finding alternative sources of supply from overseas.

In addition, over 11 percent of the firms which felt that customs duties affects their final prices reported that their pricing policies did not account for such charges. It would appear that these firms' perception of reality is not consistent with their pricing policy.

Centralization of Pricing Decision Process

The eighth hypothesis of this study stated that non-U.S. based companies operating in the United States tend to have a more decentralized approach to pricing for the U.S. market than their American counterparts. \textsuperscript{13}Firms which had ratings of 1, 2, or 3 to the question of the impact of customs duties on their final prices were defined as being unaffected by such fluctuations. The remaining respondents were considered to be affected by customs duties.
The data indicated that the distributions and the mean values for the U.S. and non-U.S. based groups were significantly different from one another. Also, based on the larger mean value of the rating scales' of non-U.S. based firms and from Table 4.13, it is clear that these firms tend to be more decentralized managed with respect to their pricing policy decisions. This finding is somewhat similar to a finding presented in an earlier study in which the results indicated that the European based firms operating in the United States tend to deviate from the policies of their parent companies presumably because of the more uncertain competitive environment in the U.S. Franko found that these subsidiaries were given a greater freedom of action than the subsidiaries of the U.S. multinational corporations. Another study, confirms the finding of the present study and states that the reason for permitting such a price structure is that firms are trying to maximize the return on sales in each market. The only exception to this practice is export pricing, where the general trend has been to suggest export prices from the international decision when antitrust limitations permit.

The findings of the present study also substantiate the results of an earlier study in which non-U.S. based firms were found to be the most

14 Franko, op. cit., p. 34.
15 Ibid.
17 Ibid.
independent group of subsidiaries in the world. Relative differences in larger size of the U.S. subsidiaries of non-U.S. based firms, higher degree of competition, and a faster rate of change were given as reasons for the higher degree of autonomy of non-U.S. based firms in the United States. The results also indicate that the degree of independence in pricing decision making by non-U.S. based firms approaches Rutenberg's third pricing scheme where local affiliates are independent in their pricing decision making.

More stringent legal restrictions in the U.S. are also likely to have contributed to the degree of freedom of action which the non-U.S. based firms enjoy. The presence of cartels and interlocking directorates discussed in Chapter II, might make the subsidiary of some non-U.S. based firm in the United States prime candidates for legal actions.

The relatively more centralized pricing policy decision process in U.S. based firms is not much different than the way European companies control their European subsidiaries. In fact, of the eight decision areas examined in one study, freedom in pricing decisions of the European subsidiaries of European firms was similar to that given to U.S. based firms.

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19. Ibid.
The Response Rate of U.S. and Non-U.S. Based Firms

The ninth hypothesis of this study stated that the rate of response of non-U.S. based firms to the questionnaire is significantly less than that of the U.S. based firms'. No statistically significant difference between the rate of response of the U.S. and non-U.S. based firms to the research instrument of this study were found.

The reason for including this hypothesis was twofold. First, in an earlier study it was indicated that the foreign corporations were often reluctant to provide any information about their operation. Testing the response rate of non-U.S. based firms with that of a group of U.S. companies, would show whether the response rates of U.S. and non-U.S. firms significantly vary from one another. The results of the present study points out that the relatively low response rate from non-U.S. based firms has nothing to do with their being foreign. Secondly, one study had indicated that some European firms go through a series of complicated and lengthy processes to hide their investments in the United States. The finding of the present research indicates that for the sample tested, the non-U.S. based firms do not tend to hide themselves or withhold information by not responding to such questionnaires any more than the U.S. based firms.

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23 Frank, *op. cit.*
CONTRIBUTIONS OF THIS STUDY TO MARKETING LITERATURE

The major contribution of this study to marketing theory is that of providing empirical information of pricing policies and objectives of non-U.S. based firms in the United States and comparing it to what the U.S. based firms are doing domestically. Providing information on international pricing is a contribution to the literature for two reasons. First, the literature's coverage of international pricing from a marketing standpoint is quite limited, and relatively little is known about the pricing strategies employed by various firms in the world markets. The present study provides pricing policy information regarding non-U.S. based firms in the United States. Such policies from a corporate headquarters' point of view are international pricing policies, even though they are domestic in the sense that they are adapted to the U.S. environment.

Second, relatively little information is available about non-U.S. based multinational companies and even less is known about the marketing activities of such firms in the United States. This study sheds light on one marketing aspect of non-U.S. based companies operating in this country.

From a conceptual framework standpoint, one contribution of the present study to marketing literature is the finding that non-U.S. based firms tend to put less emphasis on price than their U.S. based counterparts. The results of this study indicate that non-U.S. based firms operating in the United States tend to deemphasize the role of price in formulating their marketing plan for the U.S. market. An additional contribution of this study to marketing theory is the finding that
pricing policy decisions of non-U.S. based companies are more independently formulated than their U.S. counterparts. A number of reasons were given for the presence of this relatively high degree of autonomy of non-U.S. based companies in the previous section, including the more competitive structure of the U.S. market, tougher anti-trust laws, method of non-U.S. based firms' entry into the U.S. market, and the generally larger size of the U.S. subsidiaries.

CONTRIBUTIONS OF THIS STUDY TO MARKETING PRACTICE

The findings of this study have several implications for the marketing executive which should contribute to his better understanding of the environment within which his business enterprise competes and survives. A major contribution of this study to marketing practice consists of the findings of the first hypothesis. That is, the U.S. companies tend to place more emphasis on the pricing variable of their marketing mixes than non-U.S. based firms. From the standpoint of U.S. based companies, this finding has long-range managerial implications. The non-U.S. based companies, by putting less emphasis on price, can concentrate their marketing effort on other marketing mix variables. Concentration of efforts on product research and development and promotion may build long-range product superiority and goodwill for the company. In the long-run this policy could be helpful for the non-U.S. based firm and detrimental to the U.S. based company. It is also important to point out that many non-U.S. based companies which enter the U.S. market or expand their U.S. operations have already built a solid international reputation for themselves. Therefore, the fact
that they place more emphasis on non-price competitive methods might be due to distinctly different managerial approaches and not because of their lack of resources or that they need to establish a name for themselves.

A second contribution of this study to the practice of marketing has to do with the findings of the eighth hypothesis. The fact that non-U.S. based firms' pricing policy decisions are more decentralized reflects one thing. It indicates their relative freedom in the pricing decision process which can be translated into their ability to meet their competition head-on, or in case of business controlled prices, exert pressure on the market if necessary.

It is relatively difficult to measure the competitive advantage which this freedom in decision making provides. One may conceivably argue that the reason for non-U.S. based companies' greater latitude in pricing decisions is that their parent companies are so out of touch with their U.S. subsidiary that their intervention with their pricing decision making may in fact put the subsidiary at a competitive disadvantage. It is, nevertheless, important to note that none of the other studies reviewed have attributed non-U.S. based firms' greater degree of independence in decision making for the U.S. market to inadequate communication between the parent company and its subsidiary.

An additional contribution of this study to marketing practice is connected with findings of the fourth and the sixth hypotheses. It appears that the non-U.S. based firms greater sensitivity to fluctuations in currency exchange rates and customs duties is because of their international ties with other subsidiaries and markets. This has two
implications for the U.S. based firms' marketing executive. First, the non-U.S. based multinational companies have and use their international network of operations as a total system to achieve greater degrees of efficiency. The U.S. based firms' management must realize the competitive advantages that their non-U.S. based firms' sensitivity to customs duties and fluctuations in currency exchange rate could be due to the fact that they have cultivated export markets for their U.S. manufactured or assembled goods. Cultivation of export markets by U.S. based firms should provide them with increased opportunities for growth.

It must also be pointed out that non-U.S. affiliation of a company does not necessarily mean that the firm is importing parts of its products. At best, this is only one of several explanations as to why they are more sensitive to customs duties and exchange rate fluctuations. Of a number of firms which commented on their sources of supply and raw materials, about half indicated that their raw materials came almost entirely from the U.S. suppliers.

A final contribution of this study is that of making more information available to policy makers in the United States. The ninth hypothesis established that the non-U.S. firms were not significantly less cooperative in terms of responding to a mail questionnaire about their operations than their U.S. counterparts. A direct implication of this has to do with the interface of multinational corporations and host nations. It is important that any decision to limit or control foreign investment be based on research findings. That is, the advantages and disadvantages of foreign investment must be fully understood before a decision regarding their control is made. A better
understanding of the operations of non-U.S. based firms in the United States will also aid policy makers in dealing with problems with which such firms are confronted.

AREAS FOR FUTURE RESEARCH

The present study was an attempt to explore the non-U.S. based firms' strategies with respect to one marketing variable and compare the results with the views of the U.S. based companies. Pricing as an element in the firm's marketing strategy is important because the firm can exercise relatively more control over this than other strategic marketing variables. Therefore, additional studies in the area will provide the management with various competitive strategies. For one thing, a comparative study of the pricing policies and objectives of sales subsidiaries of non-U.S. manufacturers and the U.S. and non-U.S. based manufacturing firms in the U.S. may explain the determinant which lead to foreign direct investment decisions in the United States. In addition, longitudinal studies at the consumer or user level may reveal strategies which marketing executives may not wish to share with the researcher. In order to limit or control the impact of compounding variables, the study could be conducted in one industry, one product, or one or more groups of buyers.

Another area which can be enhanced by further study is the non-U.S. based firms' pricing policies and objectives from the viewpoint of their parent companies. Additionally, individual pricing models of non-U.S. based firms in the U.S. can be investigated to show how their approach differs from (1) the U.S. based companies, (2) the U.S. multinational
companies, and (3) the subsidiaries of U.S. multinational firms overseas. Also, such studies may be extended to include only members of a particular industry for closer examination of their policies and strategies.

The area of physical distribution management of non-U.S. based firms needs to be investigated. It is generally agreed that physical distribution can be a potential cost saver in a company's marketing program. In this respect, several non-U.S. based companies abroad have developed new techniques, equipment, and programs which has led to a considerable savings for the firms involved. When such methods of physical distribution management is adopted by the U.S. subsidiaries of such firms, it may place their U.S. counterparts at a considerable disadvantage.

In addition, other areas of non-U.S. based firms' marketing programs may offer opportunities to the researcher. For example, an examination of the market information systems employed by such companies would provide valuable information from conceptual and practical points of view.

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25Stanton, op. cit., p. 433.
# APPENDIX A

## TABLE A.1

State Affiliation of Non-U.S. Based Companies Operating in the United States

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## APPENDIX B

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</table>

Source: J. S. Arpan and D. A. Ricks, *Directory of Foreign Manufacturers in the United States*, Atlanta, Georgia: Publishing Services Division, School of Business Administration, Georgia State University, 1975, p. xvii.
TABLE B.2

Industry Affiliation of Non-U.S. Based Companies, Percent of Companies in Each Industry and the Number of U.S. Firms in Pretest and Main Samples

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<thead>
<tr>
<th>SIC</th>
<th>PERCENT</th>
<th>PRETEST SAMPLE</th>
<th>MAIN SAMPLE</th>
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</tr>
<tr>
<td>10</td>
<td>0.5</td>
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</tr>
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<td>-</td>
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<td>0.8</td>
<td>-</td>
<td>-</td>
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<tr>
<td>32</td>
<td>2.5</td>
<td>2</td>
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<td>4.7</td>
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<td>25.6</td>
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<td>37</td>
<td>2.4</td>
<td>2</td>
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<td>38</td>
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<tr>
<td>50</td>
<td>b</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

TOTAL 99.2 50 400

*aThe number of firms in the pretest and main samples were equally divided between those taken from the Million Dollar and Middle Market Directories.

bLess than 1/2 of 1 percent—generally 1 or 2 firms.
### TABLE B.3

Industry Titles of Standard Industrial Classification Numbers

<table>
<thead>
<tr>
<th>SIC</th>
<th>INDUSTRY</th>
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</thead>
<tbody>
<tr>
<td>07</td>
<td>Agriculture</td>
</tr>
<tr>
<td>10</td>
<td>Metal mining</td>
</tr>
<tr>
<td>11</td>
<td>Coal mining</td>
</tr>
<tr>
<td>13</td>
<td>Crude petroleum and natural gas extraction</td>
</tr>
<tr>
<td>14</td>
<td>Non-metallic and quarring, except fuel</td>
</tr>
<tr>
<td>15</td>
<td>Construction</td>
</tr>
<tr>
<td>20</td>
<td>Food and Kindred products</td>
</tr>
<tr>
<td>21</td>
<td>Tobacco manufactures</td>
</tr>
<tr>
<td>22</td>
<td>Textile mill products</td>
</tr>
<tr>
<td>23</td>
<td>Apparel and other finished products made from fabrics and other similar materials</td>
</tr>
<tr>
<td>24</td>
<td>Lumber and wood products except furniture</td>
</tr>
<tr>
<td>25</td>
<td>Furniture and fixtures</td>
</tr>
<tr>
<td>26</td>
<td>Paper and allied products</td>
</tr>
<tr>
<td>27</td>
<td>Printing, publishing, and allied industries</td>
</tr>
<tr>
<td>28</td>
<td>Chemicals and allied products</td>
</tr>
<tr>
<td>29</td>
<td>Petroleum refining and related industries</td>
</tr>
<tr>
<td>30</td>
<td>Rubber and miscellaneous plastic products</td>
</tr>
<tr>
<td>31</td>
<td>Leather and leather products</td>
</tr>
<tr>
<td>32</td>
<td>Stone clay and glass products</td>
</tr>
<tr>
<td>33</td>
<td>Primary metal industries</td>
</tr>
<tr>
<td>34</td>
<td>Fabricated metal products, except ordnance, machinery, and transportation equipment</td>
</tr>
<tr>
<td>35</td>
<td>Non-electrical machinery</td>
</tr>
<tr>
<td>36</td>
<td>Electrical machinery, equipment, and supplies</td>
</tr>
<tr>
<td>37</td>
<td>Transportation equipment</td>
</tr>
<tr>
<td>38</td>
<td>Professional, scientific, and controlling instruments; photographic and optical goods, watches and clocks</td>
</tr>
<tr>
<td>39</td>
<td>Miscellaneous manufacturing industries</td>
</tr>
<tr>
<td>44</td>
<td>Water transportation</td>
</tr>
<tr>
<td>50</td>
<td>Wholesale trade</td>
</tr>
</tbody>
</table>

APPENDIX C

Figure C.1

Foreign Direct Investment in the United States
Book Value at Year-End

[Bar chart showing billion dollars of investment from 1970 to 1974 by sectors: Other, Trade, Insurance, Petroleum, Manufacturing.

### TABLE C.1

**FOREIGN DIRECT INVESTMENT IN THE UNITED STATES AT THE END OF 1974**

<table>
<thead>
<tr>
<th>Area</th>
<th>Investment</th>
<th>Percent of Total</th>
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<tbody>
<tr>
<td>Germany</td>
<td>$1,590,000,000</td>
<td>6</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4,770,000,000</td>
<td>18</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5,565,000,000</td>
<td>21</td>
</tr>
<tr>
<td>Other EEC</td>
<td>2,120,000,000</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL EEC</strong></td>
<td><strong>$14,045,000,000</strong></td>
<td><strong>53</strong></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1,855,000,000</td>
<td>7</td>
</tr>
<tr>
<td>Other Europe</td>
<td>795,000,000</td>
<td>3</td>
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<tr>
<td><strong>TOTAL EUROPE</strong></td>
<td><strong>$16,695,000,000</strong></td>
<td><strong>63</strong></td>
</tr>
<tr>
<td>Canada</td>
<td>5,300,000,000</td>
<td>20</td>
</tr>
<tr>
<td>Japan</td>
<td>265,000,000</td>
<td>1</td>
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<tr>
<td>Latin America</td>
<td>2,385,000,000</td>
<td>9</td>
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<tr>
<td>Other</td>
<td>1,855,000,000</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$26,500,000,000</strong></td>
<td><strong>100</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Investment</th>
<th>Percent of Total</th>
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</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$8,215,000,000</td>
<td>31</td>
</tr>
<tr>
<td>Petroleum</td>
<td>6,360,000,000</td>
<td>24</td>
</tr>
<tr>
<td>Finance, Insurance,</td>
<td>6,095,000,000</td>
<td>23</td>
</tr>
<tr>
<td>and Real Estate</td>
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<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>4,240,000,000</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>1,590,000,000</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$26,500,000,000</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

APPENDIX D

A Comparison of Certain Policy Standardizations in Multinational Corporations

Finished product pricing
Quality
Brand names
Product design, models, styles, or formulae
Customer financing or service
Product mix (Product lines produced)
Dividend policy
Budgeting and accounting policy

Scale: 1 = Policy totally different 7 = Policy identical

European company with headquarters in Europe and subsidiary in U.S.A. Average of 17 companies.

U.S. company with headquarters in America and foreign subsidiary. Average of 73 companies.

European company with headquarters in Europe and subsidiary elsewhere in Europe. Average of 17 companies.

## APPENDIX E

### Pricing Goals of Twenty Large Corporations

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>PRINCIPAL PRICING GOAL</th>
<th>COLLATERAL PRICING GOAL</th>
</tr>
</thead>
</table>
| Alcoa            | 20% on investment (before taxes); higher on new products [about 10% effective rate after taxes] | (a) "Promotive" policy on new products  
(b) Price stabilization                                                                                                                                     |
| American Can     | Maintenance of market share                                                             | (a) "Meeting" competition (using cost of substitute product to determine price)  
(b) Price stabilization                                                                                                                                       |
| A & P            | Increasing market share                                                                  | "General promotive" (low-margin policy)                                                                                                                     |
| du Pont          | Target return on investment—no specific figure given                                    | (a) Charging what traffic will bear over long run  
(b) Maximum return for new products—"life cycle" pricing                                                                                                     |
| Esso (Standard Oil of N.J.) | "Fair-return" target—no specific figure given                                             | (a) Maintaining market share  
(b) Price stabilization                                                                                                                                     |
| General Electric | 20% on investment (after taxes); 7% on sales (after taxes)                                | (a) Promotive policy on new products  
(b) Price stabilization                                                                                                                                     |
| General Foods    | 33%/5% gross margin; ("1/2 to make, 1/2 to sell, and 1/2 for profit"). expectation of realizing target only on new products | (a) Full life of food products and novelties  
(b) Maintaining market share                                                                                                                                     |
| General Motors   | 20% on investment (after taxes)                                                          | Maintaining market share                                                                                                                                     |
| Goodyear         | "Meeting competitors"                                                                    | (a) Maintain "position"  
(b) Price stabilization                                                                                                                                     |
| Gulf             | Follow price of most important marketer in each area                                      | (a) Maintain market share  
(b) Price stabilization                                                                                                                                     |
| International Harvester | 10% on investment (after taxes)                                                          | Market share: ceiling of "less than a dominant share of any market"                                                                                       |
| Johns-Manville   | Return on investment greater than last 15-year average (about 15% after taxes); higher target for new products | (a) market share not greater than 20%  
(c) Stabilization of prices                                                                                                                                    |
| Kennecott        | Stabilization of prices                                                                  | Target return of 20% on investment before taxes                                                                                                             |
| Kroger           | Maintaining market share                                                                | Increase market share                                                                                                                                     |
| National Steel   | Matching the market—price follower                                                     |                                                                                                                                                         |
| Sears, Roebuck   | Increasing market share (8-10% regarded as satisfactory share)                           | (a) Realization of traditional return on investment of 10-15% (after taxes)  
(b) General promotive (low margin) policy                                                                                                                     |
| Standard Oil (Indiana) | Maintain market share                                                                   | (a) Stabilize prices  
(b) Target-return on investment (none specified)                                                                                                           |
| Swift            | Maintenance of market share in livestock buying and meat packing                         |                                                                                                                                                    |
| Union Carbide    | Target return on investment                                                             | Promotive policy on new products; "life cycle" pricing on chemicals generally                                                                                   |
| U.S. Steel       | 8% on investment (after taxes)                                                          | (a) Target market share of 30%  
(b) Stable price  
(c) Stable margin                                                                                                                                             |

APPENDIX F

TABLE F.1

Non-U.S. Based Firms Operating in the United States
Representative Numbers of Firms in the
Original and Final Samples

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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<td>50</td>
<td>18</td>
<td>4</td>
<td>7</td>
<td>14</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Luxembourg a</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>95</td>
<td>37</td>
<td>0</td>
<td>27</td>
<td>37</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Netherlands Antilles</td>
<td>11</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>53</td>
<td>19</td>
<td>0</td>
<td>13</td>
<td>19</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>59</td>
<td>21</td>
<td>1</td>
<td>8</td>
<td>20</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>362</td>
<td>127</td>
<td>14</td>
<td>65</td>
<td>113</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>1,137</td>
<td>406</td>
<td>35</td>
<td>218</td>
<td>371</td>
<td>100</td>
<td>58.8</td>
</tr>
</tbody>
</table>

aNo Luxembourg based firms were identified in the directory.

A: Number of non-U.S. based firms operating in the U.S.

B: Number of letters which were set out for the purpose of identifying non-U.S. based firms' marketing executives.

C: Number of letters in Column "B" which were returned either because the firms had moved or had gone out of business.

D: Number of useful replies to the first letter.

E: Number of respondents in the final sample to whom the main questionnaire was sent.

F: Number of replies to the first letter as a percent of each country's population in the final sample.

G: Total percent of replies to the first letter.
## TABLE F.2

A Complete Breakdown of Responses

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Pretest Sample</th>
<th>Total No. Respondents</th>
<th>Number of Responses</th>
<th>Returned Responses</th>
<th>Late Responses</th>
<th>Overall Percent Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Austria</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>33.3</td>
<td>0</td>
<td>33.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>4</td>
<td>58</td>
<td>11</td>
<td>19.0</td>
<td>4</td>
<td>25.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
<td>28</td>
<td>3</td>
<td>10.7</td>
<td>1</td>
<td>14.2</td>
</tr>
<tr>
<td>Finland</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Germany</td>
<td>5</td>
<td>67</td>
<td>17</td>
<td>25.4</td>
<td>0</td>
<td>25.4</td>
</tr>
<tr>
<td>Italy</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>75.0</td>
<td>0</td>
<td>75.0</td>
</tr>
<tr>
<td>Japan</td>
<td>1</td>
<td>15</td>
<td>4</td>
<td>26.7</td>
<td>0</td>
<td>26.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2</td>
<td>39</td>
<td>7</td>
<td>17.9</td>
<td>0</td>
<td>17.9</td>
</tr>
<tr>
<td>Antilles</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>20.0</td>
<td>0</td>
<td>20.0</td>
</tr>
<tr>
<td>Norway</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
<td>20</td>
<td>9</td>
<td>45.0</td>
<td>0</td>
<td>45.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>21</td>
<td>7</td>
<td>33.3</td>
<td>2</td>
<td>42.8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8</td>
<td>121</td>
<td>23</td>
<td>19.0</td>
<td>1</td>
<td>19.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-U.S. Subtotal</th>
<th>25</th>
<th>396</th>
<th>88</th>
<th>22.2</th>
<th>8</th>
<th>24.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States$^a$</td>
<td>25</td>
<td>225</td>
<td>58</td>
<td>25.8</td>
<td>0</td>
<td>25.8</td>
</tr>
<tr>
<td>United States$^b$</td>
<td>25</td>
<td>225</td>
<td>46</td>
<td>20.4</td>
<td>1</td>
<td>20.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S. Subtotal</th>
<th>50</th>
<th>450</th>
<th>104</th>
<th>23.1</th>
<th>1</th>
<th>23.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>75</td>
<td>846</td>
<td>192</td>
<td>22.7</td>
<td>9</td>
<td>23.8</td>
</tr>
</tbody>
</table>

$^a$ Respondents selected from the Million Dollar Directory.

$^b$ Respondents selected from the Middle Market Directory.
### TABLE F.3

Breakdown of the Non-Response Replies

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Changes to U.S. Ownership</th>
<th>Out of Business/Invalid Address</th>
<th>No Response</th>
<th>Total</th>
<th>%a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1</td>
<td>-</td>
<td>4</td>
<td>5</td>
<td>8.6</td>
</tr>
<tr>
<td>France</td>
<td>-</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>17.9</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>9.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>15.4</td>
</tr>
<tr>
<td>Antilles</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>40.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>7.4</td>
</tr>
<tr>
<td>Unknown</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>4</strong></td>
<td><strong>7</strong></td>
<td><strong>25</strong></td>
<td><strong>36</strong></td>
<td><strong>9.1</strong></td>
</tr>
<tr>
<td>% of 396</td>
<td>1.0</td>
<td>1.8</td>
<td>6.3</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>-</td>
<td>4</td>
<td>7</td>
<td>11</td>
<td>2.4</td>
</tr>
<tr>
<td>% of 450</td>
<td>-</td>
<td>.9</td>
<td>1.6</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4</strong></td>
<td><strong>11</strong></td>
<td><strong>32</strong></td>
<td><strong>47</strong></td>
<td><strong>5.6</strong></td>
</tr>
<tr>
<td>% of 846</td>
<td>.5</td>
<td>1.3</td>
<td>3.8</td>
<td>5.6</td>
<td></td>
</tr>
</tbody>
</table>

a Based on the number of respondents from each country to whom a questionnaire was sent.
Dear Sir:

We are in the process of compiling a directory of marketing executives and thus need your assistance in providing a prompt response by completing and returning this letter to us. This directory is being compiled under the auspices of the Faculty of Marketing of The Ohio State University.

If there is no "Vice President of Marketing" in your organization, please give the title and name of the person who is undertaking the marketing activities of your firm. If there is more than one person in this position, please name them by their respective divisions.

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President of Marketing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please correct company address if it is incorrect. Thank you very much for your cooperation.

Sincerely yours,

Saeed Samiee, Doctoral Candidate

Bernard J. LaLonde, Professor of Marketing

SS/BJL/th
Dear Mr.:

We are undertaking a study of marketing policies of different companies and would like you to help us by filling out and returning the enclosed questionnaire.

The number of questions has been kept to a minimum, but we think that the survey covers some very important areas of marketing policy. Our purpose is to provide a general description of marketing activities and, therefore, we have not asked that you identify your company. All information that you supply will be held in strictest confidence. No individual or company will be identified in any way.

Since the number of participants in this study is small, your participation and early response are essential to the accomplishment of our objectives. Please take a few minutes now to answer the questions and mail it back to us. If there are any questions, we will be glad to answer them by return mail or by telephone.

Thank you very much for your cooperation.

Sincerely yours,

Saeed Samiee
Doctoral Candidate

Bernard J. LaLonde
Professor of Marketing

SS/BJL:dld
enclosure
Dear Mr.:

You have been identified as the individual who is in charge of marketing activities of your firm. We are undertaking a study of marketing policies of firms whose headquarters offices are outside the United States and would like you to help us by filling out and returning the enclosed questionnaire.

The number of questions has been kept to a minimum, but we think that they cover some very important areas of marketing policy. Our purpose is to provide a general description of marketing activities and, therefore, we have not asked that you identify your company. All information that you supply will be held in strictest confidence. No individual or company will be identified in any way.

Since the number of participants in this study is small, your participation and early response are essential to the accomplishment of our objectives. Please take a few minutes now to answer the questions and mail it back to us. If there are any questions, we will be glad to answer them by return mail or by telephone.

Thank you very much for your cooperation.

Sincerely yours,

Saeed Samiee
Doctoral Candidate

Bernard J. LaLonde
Professor of Marketing

SS/BJL:dld
enclosure
THE OHIO STATE UNIVERSITY

APPENDIX J

Cover Letter for the Non-U.S. Based Firms which did not Respond to the Identification Inquiry in Appendix C

Dear Mr.:

We are undertaking a study of marketing policies of firms whose headquarter offices are outside the United States and would like you to help us by filling out and returning the enclosed questionnaire.

The number of questions has been kept to a minimum, but we think that they cover some very important areas of marketing policy. Our purpose is to provide a general description of marketing activities and, therefore, we have not asked that you identify your company. All information that you supply will be held in strictest confidence. No individual or company will be identified in any way.

Since the number of participants in this study is small, your participation and early response are essential to the accomplishment of our objectives. Please take a few minutes now to answer the questions and mail it back to us. If there are any questions, we will be glad to answer them by return mail or by telephone.

Thank you very much for your cooperation.

Sincerely yours,

Saeed Samiee
Doctoral Candidate

Bernard J. LaLonde
Professor of Marketing

SS/DJL:did
enclosure
APPENDIX K

The Questionnaire

INSTRUCTION: The majority of the questions in this survey can be answered either by checking one or more of the choices given or by filling in the blanks. Please answer the following questions and feel free to make additional comments.

1. Please provide relative ranking of those of the following items which you consider essential in your firm's success in the United States by distributing 100 points among them. (More points reflect greater importance):

   - Cooperation and control of middlemen
   - Corporate image
   - Customer service support including transportation and storage
   - Marketing cost, budgeting, and control
   - Pricing
   - Product
   - Product research and development
   - Product service (including guarantees, warranties, and service)
   - Promotion (advertising, personal selling, and sales promotion)
   - Quality of middlemen
   - Sales research, analysis, and planning
   - Other, please specify:

   TOTAL 100

2. To what extent do you feel that your U.S. competitors have had an impact on your firm's pricing policy or pricing objective (i.e., the impact of those firms that you are in competition with in the United States on formulation of your firm's pricing policy and pricing objective). "Pricing policy" and "pricing objective" are defined as follows:

   PRICING POLICY: Definite courses of action set up for the purpose of securing uniformity of procedure under generally similar conditions with respect to selling prices.

   PRICING OBJECTIVE: A specific corporate and/or marketing goal that is to be attained through the method of pricing employed, e.g., twenty percent return on investment or maximizing market share.

   NO IMPACT GREAT DEAL
   AT ALL OF IMPACT

   A. Pricing policy . . . . . 1 2 3 4 5 6
   B. Pricing objectives . . . . 1 2 3 4 5 6

3. To what extent do you feel that your U.S. customers have had an impact on your firm's pricing policy or pricing objective (i.e., the impact of the U.S. customers' price sensitivity on formulation of your firm's pricing policy and pricing objective):

   NO IMPACT GREAT DEAL
   AT ALL OF IMPACT

   A. Pricing policy . . . . . 1 2 3 4 5 6
   B. Pricing objective . . . . 1 2 3 4 5 6
4. Please provide relative ranking of those of the following statements which best describe your firm's final price objective (list or catalog prices) by distributing 100 points among them. If only one statement applies, you should assign all the points to that statement. (More points reflect greater importance):

<table>
<thead>
<tr>
<th>Statement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prices are set as low as possible so that we may penetrate quickly into the market</td>
<td></td>
</tr>
<tr>
<td>Prices are initially set high and are lowered after a certain period of time has elapsed</td>
<td></td>
</tr>
<tr>
<td>Prices are generally set at a high level</td>
<td></td>
</tr>
<tr>
<td>Prices are set so that they may promote a group of related products (i.e., products that are used together, such as cameras and films)</td>
<td></td>
</tr>
<tr>
<td>Prices are set competitively with other products in the marketplace</td>
<td></td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
</tbody>
</table>

5. Please provide relative ranking of those of the following statements which best describe your firm's general pricing objective (actual revenues the firm earns after all discounts, markdowns, etc.) by distributing 100 points among them. If only one statement applies, you should assign all the points to that statement. (More points reflect greater importance):

<table>
<thead>
<tr>
<th>Statement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prices are set so that we may gain the largest possible share of the market</td>
<td></td>
</tr>
<tr>
<td>Prices are set so that we may maintain our market share</td>
<td></td>
</tr>
<tr>
<td>Prices are set at the high end of the price range</td>
<td></td>
</tr>
<tr>
<td>Prices are set at a high level and then are lowered after a certain period has elapsed</td>
<td></td>
</tr>
<tr>
<td>Prices are set at a level which yield a satisfactory return on investment</td>
<td></td>
</tr>
<tr>
<td>Prices are set at a level which yield the highest return on investment</td>
<td></td>
</tr>
<tr>
<td>Prices are set at a level which lead to a specified profit goal</td>
<td></td>
</tr>
<tr>
<td>Prices are set at a level which lead to profit maximization</td>
<td></td>
</tr>
<tr>
<td>Prices are set at a level which lead to a specified sales goal</td>
<td></td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
</tbody>
</table>

6. To what extent do you believe the following factors have an impact on your final prices:

<table>
<thead>
<tr>
<th>Factor</th>
<th>No Impact</th>
<th>At All</th>
<th>Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluctuations in currency exchange rates</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs duties</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. To what extent do you believe the pricing function in your total corporate group is decentralized (i.e., pricing policy decisions are made independently from other subsidiaries, divisions, and headquarters):

<table>
<thead>
<tr>
<th>Centralized</th>
<th>Totally</th>
<th>Decentralized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>6</td>
</tr>
</tbody>
</table>
8. Does your company's pricing policy formally account for the following expenses:

<table>
<thead>
<tr>
<th>Expense</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Fluctuations in currency exchange rates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Customs duties</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Please provide relative ranking of those of the following pricing considerations that are important to your firm's operations by distributing 100 points among them. (More points reflect greater importance):

<table>
<thead>
<tr>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowances and deals</td>
</tr>
<tr>
<td>Term of Sales</td>
</tr>
<tr>
<td>Margins offered to middlemen</td>
</tr>
<tr>
<td>Price to ultimate user</td>
</tr>
<tr>
<td>Returned goods policy</td>
</tr>
<tr>
<td>Other, please specify:</td>
</tr>
</tbody>
</table>

100 TOTAL

10. Please indicate the importance of the following channels of distribution alternatives to your company by distributing 100 points among them. If only one alternative applies, it should get 100 points. (More points reflect greater importance):

<table>
<thead>
<tr>
<th>Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, product(s) are sold directly to users</td>
</tr>
<tr>
<td>One, product(s) are sold to retailers where users may purchase them</td>
</tr>
<tr>
<td>One, product(s) are sold to wholesalers where users may purchase them</td>
</tr>
<tr>
<td>Two, product(s) are sold to wholesalers, wholesalers to retailers, where users may purchase them</td>
</tr>
<tr>
<td>Other, please specify:</td>
</tr>
</tbody>
</table>

100 TOTAL

11. Does your company have any manufacturing facilities in the United States?

<table>
<thead>
<tr>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Manufacturing — assembly operations only</td>
</tr>
<tr>
<td>No manufacturing</td>
</tr>
</tbody>
</table>

Please indicate the number of years your firm has had manufacturing or assembly operations in the U.S. __________________

12. Please check one of the following statements regarding your firm's ownership and fill in the blanks:

<table>
<thead>
<tr>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% American ownership</td>
</tr>
<tr>
<td>Joint U.S. and non-U.S. ownership and participation</td>
</tr>
<tr>
<td>100% non-U.S. owned</td>
</tr>
</tbody>
</table>

If your firm has either 100% non-U.S. or joint U.S. and non-U.S. ownership, please indicate the nationality of major partners and percent owned by each

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>% OWNERSHIP</th>
</tr>
</thead>
</table>
13. Please indicate approximate total corporate revenues (including all divisions and subsidiaries) for 1975 for your U.S. operations:

$____________

14. Approximately what percent of your company's total U.S. sales volume is derived from industrial goods? ____________ %

15. Do you consider your firm a price leader in your industry (one who often initiates price changes)?
   YES _________, NO________

16. What are your major product types (i.e., those which yield a large portion of your sales and/or profits) and approximately how many competitors do you have for each product (those competitors which you often monitor to detect their product, promotion, and price changes)?

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>No. of Major Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

17. Please indicate the corporate title of all the people who are involved in making pricing policy decisions:

   1. 3. 5. 
   2. 4. 6. 

18. Please state your corporate title:

COMMENTS:

PLEASE RETURN TO: Faculty of Marketing, College of Administrative Science, The Ohio State University, 1775 College Road, Columbus, Ohio 43210
APPENDIX L

Computation of Confidence Interval for the Minimum Expected Response Rate

If $\hat{p}$ = proportion of questionnaires
$n$ = expected rate of return
$d$ = percent of variation from $n$
$Z$ = percent of certainty

Then:

$$\hat{p} \pm Z(\alpha/2) \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$

$$\hat{p}_L = \hat{p} - Z(\alpha/2) \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}, \quad \hat{p}_V = \hat{p} + Z(\alpha/2) \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$

$$d = 2Z(\alpha/2) \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$
APPENDIX M

Computation of Significant Difference Between the Rate of Response of Two Samples

Analysis: From central limit theorem it follows that the proportion of successes \( \hat{p} = X/n \) may be assumed to be normally distributed with mean \( p \) and variance \( pq/n \) provided that \( n \) is large.

\( \hat{p}_1, \hat{p}_2 = \) Independent sample proportions based on \( n_1 \) and \( n_2 \) trials from two binomial populations with probabilities \( p_1 \) and \( p_2 \).

\( n_1 \) and \( n_2 \) are large enough to treat \( \hat{p}_1 \) and \( \hat{p}_2 \) as normal variables.

Therefore, \( \hat{p}_1 \) and \( \hat{p}_2 \) are normally distributed:

\[
\mu \hat{p}_1 - \hat{p}_2 = \hat{p}_1 - \hat{p}_2 \quad \sigma^2 \hat{p}_1 - \hat{p}_2 = \frac{p_1 q_1}{n_1} + \frac{p_2 q_2}{n_2}
\]

For the first test, for example, 104 U.S. and 88 Non-U.S. based companies responded to the questionnaire. To make certain that the difference in response rates is not merely due to chance, the following hypotheses are set up and tested:

\[ H_0: \quad \mu = 0 \]
\[ H_1: \quad \mu > 0 \]

\[
\hat{p}_1 - \hat{p}_2 = 0.45333
\]

\[
p = (104 + 88)/846 = 0.22695 \quad \text{and} \quad q = (1 - p) = 0.77305
\]

\[
\sigma_{\hat{p}_1-\hat{p}_2} = \sqrt{\frac{.17544}{450} + \frac{.17544}{396}} = .02886
\]

\[
\hat{p}_1 - \hat{p}_2 = 104/450 - 88/396 = .45333
\]

\[
Z = p_1 - p_2 / \sigma_{\hat{p}_1-\hat{p}_2} = .308
\]

Comparing the above \( Z \) value with those in the table reveals that their is only a less than 35 percent chance that the difference in response rates is not due to chance.
BIBLIOGRAPHY

BOOKS


Arpan, J., and Ricks, D. Directory of Foreign Manufacturers in the United States. Atlanta: Publishing Services Division, School of Business Administration, Georgia State University, 1975.


PERIODICALS


Leff, Nathaniel H. "Multinational Corporate Pricing Strategy in the Developing Countries." Journal of International Business Studies (Fall 1975), 55-64.


Miller, George A. "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity to Process Information." Psychological Review, 63 (March 1956), 81-97.


Rutenberg, David P. "Organizational Archetypes of a Multinational Company." Management Science, 16 (February 1970), 337-349.


"Those Foreign Investors: Tell Why They Came." Commerce America, July 5, 1976, pp. 7-9.


Villaneuva, R. T. "Case for and Against the Multinationals." Conference Board Record, 10 (November 1973), 61-63.

"Why Foreign Companies Are Betting on the U.S." Business Week, April 12, 1976, pp. 50-59.


Wriston, W. B. "World Corporation." Conference Board Record, 10 (November 1973), 53-56.


UNPUBLISHED SOURCES


UNPUBLISHED DOCUMENTS


REPORTS


"Direct Investment in the U.S. by Foreign Firms, II." Notes on International Business Research. Number 8, December, 1974.


International Letter. Federal Reserve Bank of Chicago. Number 242, October 3, 1975; Number 244, October 17, 1975; and Number 247, November 7, 1975; Number 252, December 12, 1975; Number 257, January 16, 1976; Number 268, April 2, 1976; Number 269, April 9, 1976, Number 275, May 21, 1976; Number 280, June 25, 1976.