INTERNATIONAL INTRACORPORATE PRICING: NON-AMERICAN SYSTEMS AND VIEWS

BY

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ACCEPTANCE

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TABLE OF CONTENTS

TABLE OF CONTENTS--Continued

TABLE OF CONTENTS--Continued

ABSTRACT

The determination of prices for intracorporate sales is one of the more complex aspects of pricing and financial management in multinational operations. Internal sales are often the single most important method of effecting capital transfers among the different environments in which the multinational firm operates, and comprise a highly secretive area of decision making.

Past research has been concerned only with American multinational firms. The specific purpose of this study was to explore non-American systems of international intracorporate pricing and to compare them with those of American multinational firms in terms of orientation, variables and parameters considered, degree of system complexity, problems encountered, and methods used to solve or circumvent them.

The one hundred forty-five non-American firms with manufacturing subsidiaries in the United States comprised the sample for this study. Correspondence with the top financial officer of the American subsidiaries and personal interviews with sixteen of them provided the major share of information for this research. Discussions with partners of the eight international accounting firms served as a check on the reliability of firm responses and provided a more global view of differences in national systems and problems encountered.

The hypotheses focussed on the similarities of problems encountered with transfer pricing, on differences in their perceived importance, and on

cultural influences as major causes for these differences. Principal conclusions resulting from the investigation of the hypotheses were as follows:

(1) As a group, the American subsidiaries of non-American firms are singularly independent operationally, even though there are differences in their degrees of autonomy. Regardless of the looseness of control exercised, however, all of their non-American parents retain absolute control over intracorporate pricing.

(2) Transfer prices are set by parent company financial executives, regardless of parent nationality. In no case does the person responsible for setting prices have a rank lower than treasurer, and in most cases he is the financial vice-president.

(3) All multinational firms consider essentially the same external variables when they formulate their transfer prices, but non-American firms generally consider fewer internal parameters, such as profit center and return on investments criteria.

(4) Non-American systems are generally more market oriented than American systems. National preference exist, however, and are reflected in transfer pricing systems when some degree of orientation choice is permitted. Although these preferences are culturally based, the opportunity to choose is primarily determined by the nature of competition in both final and transferred good markets. Legal restrictions are becoming an increasingly important factor.

(5) Distinct national patterns are identifiable for British, Canadian, French, German, Italian, Japanese and Scandinavian firms. These patterns are discernible in terms of variables and parameters considered and in transfer price orientation.

(6) External pressures are forcing greater use of market prices and limiting the opportunities for price manipulation. These pressures are increasing the importance to management of having a defensible intracorporate pricing system and intensify with increases in the value of internal transfers.

(7) Corporate size appears to exert a harmonizing influence on firm outlook and behavior. The very large multinational firms exhibit the most similarity in terms of attitudes, systems, and problems, regardless of their nationality.

(8) There presently does not exist a universally optimal system of international intracorporate pricing. Corporate goals are so diverse

and the international environment so complex and metamorphic that no single system has proven optimal for all firms at all times, or even for one firm over time. Theoretical treatments have not provided an answer to the international transfer pricing problem, and there is no consensus among business practitioners either. Minimizing conflicts with host governments is becoming the major criteria for optimality.

Some of the broader implications of this study are that American business schools are undervaluing the importance of transfer pricing in international business operations, that corporate financial reports and international trade statistics are considerably distorted by intracorporate transfers, and that there is a great need for additional research on all facets of international intracorporate pricing.

CHAPTER I

INTRODUCTION

The Problem

The yearly operations of a multinational firm involve a considerable amount of trade between the parent and its subsidiaries. The parent sells and buys a variety of goods and services to and from its subsidiaries, the prices of which might appear irrelevant at first glance. As long as the performance of the entire organization is being evaluated, it does not appear important to determine which part of the organization contributes how much of the total profit. As national tax authorities were to find out, however, it does make a difference where the income eventually ends up within a corporation. Careful price manipulation of intracompany transfers makes it possible for corporations to report either profits or losses for their operations in a country at a given point in time, often resulting in substantial income tax avoidance in the eyes of tax officials.

As more information about intracorporation pricing became known, several other variables were to emerge as important considerations. Customs duties, exchange restrictions, competitive advantages and threats of expropriation, devaluation and revaluation were several major non-tax considerations cited by American multinational firms.[1] Cost and price details must

[1] See James Shulman, Transfer Pricing in International Business, Doctoral Dissertation, Harvard University, 1965; and Solving International Pricing Problems, New York: Business International Corporation, 1965.

be known for optimal resource allocation even in the absence of the above items. Determining prices for intracorporate transfers is a highly sensitive and increasingly important decision making function for the firm, and has considerable implications and ramifications for parties both external and internal to it.

The small amount of research that has been done in this area has involved only American multinational firms. Although they conduct a substantial proportion of the world's international business, they still represent only a portion of the total. The American's relative share is decreasing and in many areas is surpassed by non-American multinational firms.[1] The considerable amount of international business conducted by these latter firms justifies their use as the subject of this study.

The specific purpose of this study was to investigate the intracorporate pricing systems of non-American multinational companies and, in so doing, obtain a better and more complete understanding of the total problem.

Background for the Problem

One of the more noticeable and economically significant developments of the twentieth century has been the phenomenal growth of the corporation, not just in quantity or quality, but in sheer physical size. Mergers, acquisitions, consolidations, and nearly exponential growths of individual corporations have created problems not only for Antitrust and Internal Revenue Service officials but also for corporate executives.

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[1] In particular, see Stanley E. Rolf and Walter Damm, The Multinational Corporation in the World Economy (New York: Praeger, 1970), pp. 9-10, and Rainer Hellmann, The Challenge to U.S. Dominance of the International Corporation, (Cambridge, Massachusetts: Dunellen, 1970) chapters 1 and 2.

A necessary shift to more decentralized operations and management has been made to lighten the increasing load on top management. A profit center system to measure, evaluate and motivate these divisional managements has also been established. The need has arisen subsequently for a rational system to arrive at "an optimal price" for intracompany transfers of goods and services at varying stages of production and distribution.

A basic problem occurs whenever more than one profit center exists. Transfers between profit centers approach a zero sum game situation in the sense that any increase of one division's profits must come at the expense of another's. This sort of internal competition can easily lead to internal fighting, power struggles, failures to undertake profitable opportunities, and a general increase in management headaches.

The objective of top management has been to devise methods which will satisfy the goals of divisional managers to earn adequate profits for their divisions while simultaneously furthering corporate goals.[1] Some systems have functioned well domestically and have provided a logical foundation for good control systems. In multinational operations, however, the application of the profit center system for control and evaluation purposes becomes more difficult. When a firm operates across national boundaries and in differing economic social and political environments, new and further complicating dimensions are added to its already complex domestic set. Opportunities for profit maximization can arise which may override the significance of the existing control system, or the foreign environment may contain threats to the operations which necessitate using a different

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[1]See James Shulman, op. cit, Chapter 1.

rationale for making management decisions. The basic transfer pricing problem is not different for a firm operating solely domestically or internationally. What is different is the number of variables and constraints that should be considered in the price determination process.

Viewed in the above light one might suspect that all multinational firms face the same problems and would, therefore, have similar intracorporate pricing systems. This is not the case. The most obvious reason is that the intracorporate pricing decision is only one of many decisions made by firms involving the maneuvering of liquid assets within the corporation, and only one of an even larger number of decisions involving the basic functional operations of the firm. Each individual corporation has a mixture of goals and constraints that are unique, and which necessitate different strategies and outlooks.

Transfer prices so significantly affect the net profitability of the firm that the locus of decision making power resides high in the corporate hierarchy, irrespective of its parent's nationality. Although the titles of the persons directly involved may vary from President to Financial Vice-President to Comptroller to Treasurer, it is the person who has the responsibility for the overall financial management of the company who has the responsibility for setting intracorporate prices.

The continuing importance of the problem can be attributed to several developments. First, increased awareness by numerous groups other than company management has lead to increased interest and surveillance of company practices. This has been particularly true in those areas in which national governments have an interest: income tax, tariffs, anti-trust and political opinion. The income tax authorities are concerned with receiving

"their fair share" of tax revenues from the company and are not favorably disposed to the idea of the firm's profits being understated in their respective countries because of artificially inflated intracorporate prices (which overstate the costs of the buying firm and hence understate its net income). Customs officials, on the other hand, do not want to lose revenue from the duties assessed on the value of transferred goods if the intracorporate prices are artificially deflated. The antitrust officials are concerned with potential dumping violations and price discrimination practices made possible by managed intracorporate prices. Finally, other government officials become interested when their constituents and financial backers have vested interests that are being adversely affected.

Other major groups affected by transfer pricing (outside of governmental ones) are creditors, labor unions and investors. The creditors and investors must determine how much of the firm's profit may have resulted from deflated intracorporate prices. Labor unions, on the other hand, want to know whether the profits are understated due to the use of artificially inflated intracorporate prices. In sum, there are many different groups of people who are affected by intracorporate pricing systems, but very few have direct access to information about them. Although this study will not help those interested in finding out about the intracorporate pricing system of a particular firm, it should help increase their knowledge of different systems in use, their different effects and their general trends.

Definitions

Before proceeding further, a few definitions and clarifications are needed. There has been some discussion among academicians in the international

business area about the need to distinguish a multinational firm from an international firm, and to show how these two entities are differentiated from one simply engaged in some degree of international business.[1] Because the term multinational firm is used throughout this study, clarification as to its meaning is essential.

Bruck and Lees differentiate on the basis of international sales.[2] Those corporations having over fifty percent of their sales abroad are classified as international, those with twenty-five to fifty percent as multinational, and those with ten to twenty-five percent as having significant operations.

Slightly more pejorative connotations have been given in the Task Force report Foreign Ownership and the Structure of Canadian Industry.

> There is the global corporation, with such pervasive operations that it is beyond the effective reach of national policies of any country, free to some extent to make decisions in the interest of corporate efficiency alone... The multinational corporation is, in a genuine sense, sensitive to local traditions and respecting local jurisdictions and policies... The national corporation insists on the primacy of the methods it uses as home, and even the laws of the home country.[3]

Kindleberger defines the three in a less pejorative way, and perhaps the most clearly for general use.

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[1]For excellent summaries of various definitions, see Rainer Hellmann, op. cit., pp. 22-27, and Stanley Rolfe and Walter Damm, op. cit., pp. 16-17.

[2]N. K. Bruck and F. A. Lees, "Foreign Content of U.S. Corporate Activities," Financial Analysts Journal, (September-October 1966).

[3]Foreign Ownership and the Structure of the Canadian Industry: Report of the Task Force on the Structure of the Canadian Industry (Ottawa, Queen's Printer, 1968), p. 3.

> The international corporation has no country to which it owes more loyalty than any other, nor any country where it feels completely at home. It equalizes the return on its invested capital in every country, after adjustment for risk which is free of the myopia that says home investment is automatically risk free and all foreign investments are risky. It is willing to speculate against the currency of the head office because it regards holdings of cash anywhere as subject to exchange risks which should be hedged.
>
> The multinational firm seeks to be a good citizen of each country where it has operations...hires local executives to more a token extent, possibly admits local capital. When efficiency and citizenship occasionally diverge, the requirements of citizenship are to take precedence.
>
> The national firm with foreign operations knows where it belongs. First and foremost it is a citizen of a particular country. Foreign operations are small in the total scheme of things... It may have substantial foreign ownership interests, but it feels at home only in one country, and substantially alien everywhere else.[1]

Most of the firms involved in this study best fit Kindleberger's definition of a multinational corporation, but there are many which are more national than multinational. As a result, the term multinational as used in this study does not correspond precisely to any of the definitions just cited. Instead, multinational is defined as a corporation which has a manufacturing subsidiary in at least one country other than the one in which the home office is located. In defining the term this way, multinational could include all the firms in both Kindleberger's and the Task Force's continua, but perhaps not all of those in Lee and Bruck's. The critical distinction rests in the manufacturing characteristic, rather than in percentage of sales or type of attitude. The major reason for this distinction is that only firms with manufacturing subsidiaries were involved in this study and therefore generalizations about multinational companies drawn from it possibly could be misconstrued or misinterpreted.

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[1]Charles P. Kindleberger, American Business Abroad, (New Haven: Yale University Press 1969), pp. 180-182.

The term "non-American" multinational company then refers to a multinational company whose home office is not located within the continental boundaries of the United States. The home office, also referred to as the "parent," is the headquarters for the entire operation and the center of the decision making process. Although some companies claim to be equally at home in many countries, like all others they have only one home office, and almost without exception it is the home office that has the final say in the intracorporate pricing decision.

Intracorporate pricing refers to the value determination process for transfers made within a corporate family, as between the parent and subsidiary, or among subsidiaries. It encompasses the transfer of loans and advances, services, and the uses and sales of tangible and intangible property. The term is also used synonymously with "transfer pricing."[1]

Tentative Hypotheses

The goal of this thesis was to add a new dimension to the field of study by investigating the non-American systems of international intracorporate pricing. As a result, hypotheses to be used for testing were limited. It was anticipated that the findings would generate hypotheses to be tested in future research. To narrow the scope of the field research, however, major emphasis was centered on the concepts covered by the following hypotheses.

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[1]Most writers have defined transfer pricing to include both intracorporate AND intercorporate sales, while others differentiate on some basis, usually percentage ownership of the subsidiary. The distinction is largely academic, and will not be discussed here. To avoid confusion however, "transfer pricing," as used in this study, takes on the larger connotation.

1. All multinational companies face the same environmental problems with respect to international transfer pricing.

2. Not all multinational corporations perceive the importance of problems in the same way.

3. Differences in perceived importance are a function of different cultural influences.

4. Cultural differences result in different international intracorporate pricing systems.

5. No single transfer pricing system is optimal for all multinational corporations.

Limitations and Delimitations

Intracorporate pricing is only one of several ways to maneuver liquid assets around the various parts of the corporation. Dividend remittances, for example, constitute a major alternative method and one that is frequently used. By limiting the study's focus to transfer pricing, some parts of the total decision making arena are necessarily excluded. However, transfer pricing broadly defined includes not only the vast majority of alternatives but also the most recurring ones and to a significant degree those that determine how much of a dividend can be declared (or even if one needs to be declared at all). Corroborating the significance of transfer pricing as a focus, Zenoff and Zwick comment:

> Although current data are unavailable, in 1963 U.S. companies sold approximately $5 billion worth of finished and unfinished goods, components and supplies to their affiliates in foreign countries, and probably many hundreds of millions of dollars worth in addition were sold by affiliates of the companies to their sister firms in their countries. Intracompany sales are the single most important method

of effecting a movement of capital between countries in which companies have operations.[1]

A second limitation evolves from the sensitivity of the topic from corporate management's position. Whereas dividends are essentially public information, intracorporate prices are not: they constitute one of the more secretive operations of the firm. The research was limited therefore to only those firms who were willing to participate, and had to be conducted largely on their terms. This undoubtedly contributed a bias to the information received and made for some problems in comparing responses as well. (More about these difficulties is discussed in Chapters III and V.) The method selected was the best available given the strictly voluntary nature of the companies' participation and the secretive nature of the topic. A check on the reliability of the information received and an additional view of the general problem was obtained from the eight major international accounting firms. Their knowledge and assistance greatly increased the reliability and scope of the study.

A third limitation stems from the nature and location of the corporate operations. Only non-American multinational firms are involved in this study, a limitation which thus excludes (a) firms with only sales offices or other forms of distributorship in the U.S., (b) firms with manufacturing subsidiaries and business operations in other countries but not in the U.S., and (c) all American multinational corporations. The American multinational firms are excluded because they have already been studied in various degrees by other researchers (see Chapter II) and an

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[1]David Zenoff and Jack Zwick, International Financial Management, (Englewood Cliffs: Prentice Hall), 1969, pp. 428.

additional study of their systems would not contribute substantially to existing knowledge. The exclusion of firms with only non-manufacturing operations is not really a restriction on information but one of numbers. That is, a typical manufacturing subsidiary may simultaneously buy and sell raw materials, semi-finished components and final goods from its parent, receive or make loans and advances to its parent, and even buy and sell management advice. In short, its operations and attendant problems encompass those of the sales office in addition to some unique problems that a sales office does not face. More information is obtained by dealing with the manufacturing subsidiaries at lower cost.

The reasons for limiting firms to those having American manufacturing subsidiaries are two fold. First, it provides an opportunity to compare how foreign companies with American subsidiaries view the transfer pricing problem in relation to American companies with foreign subsidiaries (and information on the latter is already available). Secondly, correspondence and follow-up interviews are facilitated by the firms' geographical proximity and their managements' command of the English language.

Last, there were financial and time limitations. It might have been preferable in some ways for the research to have been conducted at the corporate headquarters, rather than by correspondence and interviews with their American subsidiaries. To do this would have been beyond the financial resources of this researcher. In several instances, the American subsidiaries were larger and dominant over their non-American parents. In most cases, little information was lost by interviewing the American subsidiaries. The high concentration of subsidiaries with different parent nationalities in the New York area made for considerably less expense in time and money.

Summing up this section, the scope of any research requires realistic focusing. There are many firms who manuever liquid assets within their companies and many alternative ways of accomplishing shifts which, by design, are left out of this study. To investigate individually all of these firms and all of these alternatives clearly would require more money, time and access than was available. By focusing on the non-American systems of international intracorporate pricing a very important part of the total picture is added.

This section has set out what will and will not be included in this study. The following section gives an overview of what is included and where.

An Overview of the Study

Transfer pricing has its roots in accounting theory, but sprouts in many other disciplines. Anywhere from in-depth treatments to passing references can be found in most functional area textbooks dealing with the principles of finance, accounting, marketing, or management. Secondary and tertiary treatments, such as extensions to include the international dimension, can similarly be found in professional business literature.

Initial research for this study necessitated a literature search in many disciplines. The scattered characteristics of the information on transfer pricing does not facilitate drawing a tightly bounded search area, nor does it guarantee that the search will prove inclusive in all respects. In spite of this drawback, which is certainly not unique to

the particular problem being investigated, the main currents and developments in the transfer pricing area have been identified. The published information is put in historical perspective and grouped into works involving domestic and international systems. Each of these areas is in turn divided into theory and field research sections. The review of the literature, as contained in Chapter II, provides information on all related aspects for both the remotely curious and the highly interested.

Information gaps remain in several areas. The single largest one involves the role, systems, and ramifications of intracorporate pricing in international business. Within this single area, there is an even more noticeable lack of information on non-American intracorporate pricing systems, the area on which this study concentrates. As a result, some field research was mandatory. First, firms were asked to identify the major variables they consider when they formulate their transfer prices, and to rank them in order of importance. These preliminary results formed the basis for making industry and national comparisons, the outcome of which was submitted to the eight major international accounting firms for comments. The researcher incorporated the field data and comments with his own analysis to form the conclusions of the study.

The details of the entire research method are described and analyzed in Chapter III. The method employed may leave something to be desired from a statistical point of view but the nature of the problem and the size of the information gap interacted in such a way as to determine the specific research method. Information about the characteristics of the population and sample used in this study is also included in Chapter III. The individual

firms by necessity had to remain anonymous, which precluded the use of certain types of descriptive analysis.

The results from the application of the research techniques to the specific problem are described and discussed in Chapter IV. Included in this chapter are the findings obtained from the individual firms about their own systems and their impressions of the general problems and trends influencing other companies. Also included amidst the general comments by the firms are those made by the international accounting firms, who in large part substantiated the statements of the individual companies. In addition to the specific findings about the non-American systems of international intracorporate pricing, some related findings and comments on the parent-subsidiary relationships of these multinational firms are included. These secondary findings should be of interest to anyone studying the multinational corporation or comparative business operations.

Finally, Chapter V contains a synthesis of the entire study and comments about its successes, failures, significance and applicability. The last chapter closes traditionally with the identification of some unanswered questions to be taken up by future researchers.

CHAPTER II

SURVEY OF THE LITERATURE

Introduction

No specific studies could be found concerning the intracorporate pricing systems of non-American multinational firms, although there does exist a variety of related literature. Academically, transfer pricing is a cost accounting concept and it receives varying degrees of treatment in cost and managerial accounting texts.[1] None include the international dimension of the problem, but they do provide basic information on domestic systems.

Two of the better theoretical and applied treatments are not contained in accounting texts. An excellent theoretical discussion, both verbal and graphical, was done by David Solomon in his book Divisional

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[1]For excellent theoretical treatments and discussions, see Gordon Shillinglaw, Cost Accounting: Analysis and Control (Homewood, Illinois: Richard D. Irwin, 1967), Chapter 17; Charles Horngren, Cost Accounting (Englewood Cliffs, New Jersey: Prentice Hall, 1967), pp. 348-354; and Carl Moore and Robert Jaedicke, Managerial Accounting (Cincinnati, Ohio: South-Western, 1967), pp. 597-609.

For lesser treatments, see R. W. Schattke, H. G. Jensen, and V. L. Bean, Accounting: Concepts and Uses, (Boston: Allyn and Bacon, 1969) pp. 616-620; Adolph Matz, Curry Othel, and George Frank, Cost Accounting (Cincinnati, Ohio: South-Western, 1967) pp. 929-932; Robert Anthony, Management Accounting (Homewood, Illinois: Richard D. Irwin, 1970) pp. 428-429; Myron Gordon and Gordon Shilinglaw, Accounting: A Managerial Approach (Homewood, Illinois: Richard D. Irwin, 1967) pp. 656-657; R. L. Dixon, S. R. Hepworth, and W. A. Paton, Essentials of Accounting (New York: MacMillan, 1966) pp. 448-449; and M. Backer and L. Jacobsen, Cost Accounting (New York: McGraw Hill, 1964).

Performance, Management and Control.[1] Some of the best applied analysis is contained in the text, Management Control Systems by Anthony, Dearden and Vancil.[2] The thoroughness of both treatments is not surprising. Transfer pricing received more attention outside the cost accounting areas than inside them, at least in its earlier stages of development.

Extensions to include the international dimension were not found to have been done extensively, either theoretically or empirically. Graduate level texts in the international business area now include some discussion of the problem, but they propose no solutions nor attempt to modify the existing body of domestic theory.[3]

In addition to these textbook discussions, there is a myriad of treatments in professional business journals and accounting bulletins. Each concerns a specific aspect of the transfer pricing problem such as tax considerations, antitrust implications or effects on management performance. None of them involve the non-American systems of international intracorporate pricing, however.

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[1]David Solomons, Divisional Performance, Management and Control (New York: Research Foundation of Financial Executives Institute, 1965).

[2]R. N. Anthony, John Dearden, and R. F. Vancil, Management Control Systems (Homewood, Illinois: Richard D. Irwin, 1965) pp. 251-275.

[3]For the best discussions, see Endel Kolde, International Business Enterprise, (Englewood Cliffs, New Jersey: Prentice Hall, 1968), Chapter 27; John Hess and Philip Cateora, International Marketing, (Homewood, Illinois: Richard D. Irwin, 1966) Chapter 19; and David Zenoff and Jack Zwick, op. cit., pp. 424-430.

Other good treatments include those by Virgil Salera, Multinational Business (Boston: Houghton-Mifflin, 1969), Raymond Vernon, Manager in the International Economy (Englewood Cliffs, New Jersey: Prentice Hall, 1968) and Richard Robinson, International Management (New York: Holt, Rinehart, and Winston, 1967).

The plan for this chapter is as follows. First, to trace the historical development of the written works on transfer pricing, and secondly, to categorize and discuss them in greater detail on the basis of their orientation--domestic or international. The chapter concludes with a brief summary.

The Historical Development

Major works on intracorporate pricing did not begin to appear until after 1954, although discussion of the problem began as early as 1929.[1] The major question discussed at that time was whether costs or market prices should be used for pricing the goods transferred among departments. It is interesting to note that this central question of costs versus market prices still remains unanswered after four decades of research.

Between 1930 and 1955, one major article appeared on transfer pricing. H. N. Broom proposed a method for eliminating intracompany profits resulting from inventory transfers in an article published in 1948.[2] His article was limited to describing his method and giving examples of its application.

The definitive works on intracorporate pricing began to appear in the mid 1950's. Articles about decentralization and transfer pricing were among the first to emerge. In two remarkably similar but separate works,

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[1]See E. A. Camman, "Interdepartmental Profits," Journal of Accountancy, Volume 48 (1929), pp. 37-44; and National Association of Cost Accountants, "Interdepartment and Interbranch Transfers," 1930 Yearbook, p. 206.

[2]H. N. Brown, "Method of Accounting for Interdepartmental Profits," Accounting Review, Volume 23 (October, 1948), pp. 415-417.

Paul Cook and Joel Dean each highlighted the problems that arise when transfers occur within a decentralized firm.[1] Each author presented a concise description and analysis of the major types of systems: those using market based prices, those using cost-based prices, and those using some combination of the two. They both also came to essentially the same conclusion: to minimize the problems caused by intercompany pricing in a decentralized firm, decentralization should take place on a divisional basis, each division operating as a profit-center, and each using competitive market based prices for intracompany transfers.

It was Jack Hirschleifer, however, who was the first to theorize about the transfer pricing problem. He set out rigorous economic treatments of the intracorporate pricing problems in differing market situations in both his 1956 and 1957 articles.[2] Hirschleifer's major conclusion was that the market price approach recommended by Dean and Cook could correctly be used only where the commodity being transferred was produced in a purely competitive market. If the market was imperfectly competitive, or a market did not exist for the transferred good, then the correct procedure was to transfer the goods either at marginal cost or at some price between it and the market price. Disagreeing with Cook and Dean in another

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[1]See Paul Cook, "Decentralization and the Transfer Pricing Problem," Journal of Business, Volume 28, Number 2 (April, 1955), pp. 87-94; and Joel Dean, "Decentralization and Intracompany Pricing," Harvard Business Review, Volume 33, Number 4 (July-August, 1955), pp. 65-74.

[2]Jack Hirschleifer, "On the Economics of Transfer Pricing," Journal of Business, Volume 29, Number 3 (April, 1956), pp. 172-184, and "Economics of a Divisionalized Firm," Journal of Business, Volume 30, Number 3 (April 1957), pp. 96-108.

respect, Hirschleifer stated that the rule of pricing at market was the one most frequently adopted by business.

An article by Harold Bierman and a second article by Paul Cook brought to a close the pre-1960 treatments of intracorporate pricing.[1] Cook defended his ealier recommendation of market based prices, while Bierman beautifully walked a tightrope by stating that any alternative was reasonable so long as the selection was made after the firm had determined the purpose for using the information.

Five of these six pioneering articles appeared in non-accounting journals. This pattern of appeararance has not substantially decreased over the years, indicating the cross-disciplinary nature of the transfer pricing problem. It also suggests that the persons responsible for making the pricing decisions are higher level officers, rather than cost accountants.

The major onslaught of articles began in 1960. Forty-four articles were to appear in various professional journals in the subsequent ten year period. The majority of the articles up to 1966 involved the effects of intracorporate pricing on divisional performance, evaluation, and profit

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[1]Paul Cook, "New Techniques for Intracompany Pricing," Harvard Business Review, Volume 35, Number 4 (July-August, 1957), pp. 74-81; and Harold Bierman, "Pricing Intracompany Transfer," Accounting Review, Volume 34, Number 3 (July, 1959), pp. 429-432.

measurement.[1] This period also marked the entrance of the National Association of Accountants' Bulletins on the subject.[2]

There were several notable exceptions. Dopuch and Drake introduced the first mathematical approach for solving the transfer-pricing problem,[3] Gould extended Hirschleifer's economic analysis to include the case where there were costs of using an outside market,[4] and Stone introduced some of the legal implications of transfer pricing.[5]

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[1]See particularly John Dearden, "Interdivisional Pricing," Harvard Business Review, Volume 38 (January-February, 1960), pp. 117-125; Gordon Shillinglaw, "Toward a Theory of Income Measurement," Accounting Review, Volume 37 (April 1962), pp. 208-216; R. Boyd, "Transfer Prices and Profitability Measurement," The Controller, Volume 29 (February 1961); John Dearden, "The Case of the Disputing Divisions: How Should Decentralized Organizations Handle the Interdivisional Pricing Problem?" Harvard Business Review, Volume 42 (May 1965), pp. 158-159; John Boyer, "Intercompany Pricing's Effect on R.O.I. Analysis," Financial Executive, Volume 34 (December 1964), pp. 20-26; J. J. Mauriel and R. N. Anthony, "Misevaluation of Investment Center Performance," Harvard Business Review, Volume 44 (March-April 1966), pp. 98-105; James Fremgen, "Measuring the Profit of Part of a Firm," Management Accounting, Volume 47, Number 5, Section 1 (January 1966), pp. 26-29; Martin Cohen, "Intercorporate Transactions and Consolidated Returns," Journal of Accountancy, Volume 121 (April 1966), pp. 50-56; and Harold Bierman, Topics in Accounting (New York: McGraw Hill, 1963).

[2]See Howard Greer, "Divisional Profit Calculation-Notes on the Transfer Pricing Problem," NAA Bulletin, Volume 43, Number 1 (July 1962), pp. 5-12; Robert McLain, "Transfer Pricing Can Contribute to Divisional Profit Performance," NAA Bulletin, Volume 44, Number 1 (August 1963), pp. 29-32; W. J. Riley, "Processing Interunit Transfers," NAA Bulletin, Volume 46, Number 2 (August 1965), pp. 43-45; and D. H. Li, "International Pricing," NAA Bulletin, Volume 46, Number 2 (June 1965), pp. 51-54.

[3]Nicholas Dopuch and David Drake, "Accounting Problems of Mathematical Programming Approach to the Transfer Price Problem," Journal of Accounting Research, Volume 2 (Spring 1964), pp. 10-25.

[4]J. R. Gould, "Internal Pricing in a Firm Where There Are Costs of Using An Outside Market," Journal of Business, Volume 37 (January 1961), pp. 61-67.

[5]Willard Stone, "Legal Implications of Intracorporate Pricing," Accounting Review, Volume 39 (January 1964), pp. 38-42.

It was also during the early 1960's that discussions of transfer pricing began to appear in basic business textbooks. The earliest in-depth treatment was done by Charles Horngren in 1962[1] although some mention of the subject was found in other accounting texts as early as 1954.[2]

Of particular relevance to this research was the appearance of the first works on international intracorporate pricing. The pioneering efforts were James Shulman's doctoral dissertation[3] and a study conducted by Business International Corporation,[4] both circa 1965. Shulman discussed the problems peculiar to international business that complicate the transfer pricing decision and reached the conclusion that no single system can be optimal for all firms. He did not propose any solution or new theory. The Business International study was more thorough, included a much larger number of firms, but reached essentially the same conclusion as Shulman. Neither study involved non-American multinational companies, but they did lay the foundation for further research by identifying major problem areas for transfer pricing which had not yet been studied.

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[1]Charles Horngren, Cost Accounting (Englewood Cliffs, New Jersey: Prentice Hall, 1962).

[2]For earlier treatments, see C. B. Nickerson, Managerial Cost Accounting, (New York: McGraw Hill, 1954); R. N. Anthony, Managerial Accounting, (Homewood, Illinois, Richard D. Irwin, 1960); George Husband, Accounting: Administrative and Financial (Philadelphia, Chilton, 1960); and M. Gordon and G. Shillinglaw, Accounting: A Managerial Approach (Homewood, Illinois: Richard D. Irwin, 1962).

[3]James Shulman, Transfer Pricing in Multinational Business, Doctoral Dissertation, Harvard University, 1966.

[4]Solving International Pricing Problems (New York: Business International, 1965).

The major emphasis after 1965 was taxes and more specifically, the effect of changes in the Treasury Regulations on intracompany pricing.[1] The best single source of articles is the February, 1968, issue of the Journal of Taxation.[2] Other articles deal specifically with the Eli-Lilly case, which was the first major court victory for the government in intra-corporate pricing disputes.[3]

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[1]There were two pre-1965 articles involving taxes, one by H. Stitt and J. Conner, "International Intercompany Pricing," Canadian Tax Journal, (May 1962); and one by Willard Stone, "Tax Considerations in Intracompany Pricing," Accounting Review, Volume 35 (January 1960), pp. 45-50.

[2]These include Harry Mansfield, "The Proposed 482 Regs: The Problems with Which Practicioners Will Have to Contend;" Sheldon Cohen, "How the I.R.S. Intends to Administer the New Regulations Under Section 482;" and Stanley Surrey, "Treasury's Need to Curb Tax Avoidance in Foreign Business Through the Use of 482."

Other thorough treatments of the tax law change are those by Paul Seghers, "Pricing U.S. Manufactured Goods Sold to Subsidiaries for Sale to Customers Abroad," Taxes, Volume 44 (February 1966), pp. 97-101; Walter O'Conner, "Can Intercompany Pricing Arrangements Avoid Being Upset by Section 482?" Journal of Taxation, Volume 126 (May 1967), pp. 262-268; Robert Holzman, "IRS Amplifies the Rules for Intercompany Transactions," Management Review, Volume 57, (July 1968), pp. 37-41; and "A Critique of IRS Arm's-Length Concept," Journal of Accountancy, Volume 126, (November 1968), pp. 50-53; James Eustice, "Review of Section 482," Tax Review (Spring 1968); D. Cook, "Interunit Pricing and Your New Pricing Expert: IRS," Management Accounting, Volume 51, (August 1969), pp. 9-11; Paul Seghers, "Intercompany Pricing vs. Section 482," Business Abroad, Volume 94, (November 1969), pp. 49-50; and "How to Set and Defend Intercompany Prices under Section 482 Regulations," Taxes, Volume 47, (October 1969), pp. 606-612; and Warren Keegen, "Multinational Pricing: How Far is Arm's Length?" Columbia Journal of World Business, Volume 4, (May-June 1969), pp. 57-66.

[3]See in particular John Walter's article, "The Eli Lilly Decision," Taxes, Volume 44, (February 1966), pp. 622-624; and Paul Segher's article, "Eli Lilly Case points to a Defense Against IRS Intercompany Pricing Suits," Business Abroad, Volume 92, (May 15, 1967), p. 21. The Business International Study, op. cit., also has an excellent discussion of the Lilly Case.

The non-tax oriented articles were very diverse in their focus, ranging from general explanations to rigorous, highly theoretical, economic extensions.[1] Those with international orientation included James Shulman's "When the Price is Wrong by Design,"[2] James Green's "Intracompany Pricing Across National Frontiers,"[3] and H. M. Schoenfield's "Some Special Accounting Problems of Multinational Enterprises."[4] None involved non-American firms. None came up with any viable solution. This is where we stand at present.

DOMESTIC SYSTEMS

Theoretical Works

The underlying theory for domestic transfer pricing systems was best explained by Jack Hirschleifer in his article "On the Economics of Transfer Prices."[5] He arrived at definitive solutions for determining optimal transfer prices in four different market situations by using economic analysis. His conclusions were as follows.

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[1]Joseph Wodjak, "An Introduction to the External Aspects of Transfer Pricing," New York C.P.A., Volume 38 (May 1968), pp. 341-352; and Andrew Philippakas and Howard Thompson, "Reward Functions, Transfer Prices and Decentralization," Quarterly Review of Economics and Business, Volume 10 (September 1970), pp. 57-66.

[2]See James Shulman, "When the Price is Wrong by Design," Columbia Journal of World Business, Volume 2 (May-June 1967), pp. 69-77.

[3]James Green, "Intercompany Pricing Across National Frontiers: Conference Board Record, Volume 6, Number 10 (October 1969).

[4]H. M. Schoenfield, "Some Special Accounting Problems of Multinational Enterprises," Management International Review, Volume 4-5 (1969, pp. 3-11.

[5]Jack Hirschleifer, "On The Economics of Transfer Prices," op. cit.

(1) If there exists a single joint level of output to be determined, output should be such that the sum of divisional marginal costs equals the marginal revenue in the final market. Thus transfer prices must equal the marginal cost of the selling division.

(2) Given technological and demand independence and if there exists a perfectly competitive market, the transfer price should equal the market price.

(3) Where there exists technological dependence, no solution exists.

(4) Where there exists demand dependence, the solution lies between marginal cost and market price.

His second article derived the solution to the case where the demands are related (case four above) by introducing a series of bounties and taxes on the departments.

Two points are important. First, Hirschleifer's optimal rules for transfer prices lead to correct output adjustments only at the margin, even under ideal conditions. Second, his analysis applies only to domestic systems and cannot be applied to decisions involving international transfers.

Philippakas and Thompson added to the theoretical discussion of the use of internal rewards fourteen years later.[1] They developed special reward functions and a resultant system of transfer prices which lead to overall profit maximization or revenue maximization subject to a profit constraint. It works by rewarding departments on the basis of their output, subject to a departmental profit constraint, such that the sum of the required department profits equals the total required profit by the firm.

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[1]A. Philippakas and H. Thompson, op. cit.

Three points are worth noting. First, their model applies only to a single buying and selling department, a number of producing departments supplying one selling department, and to a series of producing departments each adding to and passing on a product toward a final selling department. Second, Philippakas and Thompson assume that in all cases production sells only internally and that the flow of product continues in only one direction. There are numerable exceptions to these restrictions, and the analysis is lessened accordingly. Third, the model is not applicable to the international environment, which they acknowledge.

The analysis presented by David Solomons brought together most of the work done by Hirschleifer.[1] Nothing more advanced was added, although a few more elementary cases were discussed.

J. R. Gould's article closed out the economic treatments by discussing the situation where there are costs of using an outside market.[2] He agreed with his predecessors that where perfectly competitive outside markets exist, transferring at market prices is the well established and optimal rule, so long as the divisions are free to sell inside and outside the firm. His desired contribution to theory was to solve the problem when the net prices that could be obtained outside the firm were different for the buying and selling divisions. Gould acknowledged that he was unable to devise a system which did not so significantly reduce the delegation which transfer pricing was supposed to foster as to make the institution of intracorporate pricing seem hardly worthwhile. He further stated

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[1]David Solomons, op. cit.

[2]J. Gould, op. cit.

that transfer pricing was an inappropriate method of decentralization if it was thought that divisional profits were an effective stimulus, that no great economies were to be had in information transmission and processing, and that serious losses arose from non-optimal levels of output.

Gould's analysis, although thorough, works only in two situations: the perfectly competitive outside market case and the centralized decision making case. It does not work in international business cases.

Dopuch and Drake went a step further than the economists by discussing the problems of employing a mathematical approach to intracorporate pricing. They specifically dealt with the use of shadow prices and the decomposition principle in both linear and non-linear programming applications.[1] Their conclusions were that shadow prices did not lead to optimal output decisions and the decomposition principle did not work in practice because it was too time consuming. Dopuch and Drake made no attempt to develop a better mathematical technique necessary to implement an optimal system of transfer pricing. Their purpose was to consolidate the material on transfer pricing in order to evaluate the basis for applying linear and non-linear programming techniques.[2]

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[1]For information on the decomposition principle, see G. B. Dantzig and P. Wolfe, "Decomposition Principle for Linear Programs," Operations Research, Volume 8 (January-February, 1960), pp. 101-111, and a related article in Econometrica, Volume 29 (October, 1961) pp. 767-778. For good treatments of shadow prices and linear programming applications, see R. Dorfman, P. Samuelson, and R. Solow, Linear Programming and Economic Analysis, (New York: McGraw Hill, 1958); George Hadley, Linear Programming (Reading, Mass: Addison-Wesley, 1962), particularly chapter 11; Philip Wolfe, "Recent Developments in Non-Linear Programming," the Rand Corp. R-401-Pr (May, 1962); and George Dantzig, Linear Programming and Extensions, (Princeton, New Jersey: Princeton University Press, 1963), particularly Chapter 23.

[2]N. Dopuch and D. Drake, op. cit.

Problems with Decentralization and Profit Centers

Decentralization based on departmental or divisional profit maximization has inherent motivational inadequacies in terms of overall optimality for the firm. When separate parts of a corporation are judged on profit and at the same time have a hand in determining transfer prices, there is both the incentive and motivation to violate overall optimality for the sake of individual benefit.[1] This point is well illustrated in the writings of Dean, Gould, Philippakas and Andrews, Cook, Dearden, and Boyer. They agree that intracompany pricing and accountability should be geared to maximizing the cooperative effort of the entire organization, but disagree on which type of system is best.

Joel Dean opts for negotiated arm's-length prices after reviewing the advantages and disadvantages of all other types.[2] John Dearden prefers the use of incremental costs because arm's-length prices tend to be irrelevant and lead to a lack of goal congruence.[3] His marginal approach considers how much the total cost of the firm will increase if the contemplated activity is added, or how much the total cost will decrease if the activity is discontinued. Wodjak and Cook both feel that the use of market prices is optimal because it best meets the needs of the total organization and is the one acceptable to tax authorities.[4] Frederick

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[1] Hirschleifer and Cook have both shown instances when rational action of divisional managers was not consistent with company profit maximization even though it was consistent with divisional profit maximization.

[2] Joel Dean, op. cit., p. 73.

[3] John Dearden, op. cit., p. 124.

[4] Paul Cook, "Decentralization and the Transfer Pricing Problem," op. cit., p. 94; and J. Wodjak, op. cit., p. 51.

Finney comes full circle in recommending actual manufacturing cost, although he admits that it does not provide a good measure of operating efficiency.[1]

Several writers have divided opinions. Hirschleifer qualifies his recommendation of market prices by stating that under less than perfectly competitive conditions, marginal cost is best.[2] James Fremgen feels that the appropriate transfer price depends on the purpose for which the price is sought: full production cost when the object is to produce financial statements in conformity to generally accepted accounting principles, market price when the goal is to evaluate individual divisions as unique, operating entities, and avoidable cost when the objective is to afford a basis for company-wide decision making.[3] Harold Bierman reaches the similar conclusion that all system orientations are reasonable and that a choice should be made only after the proposed use of the information has been determined.[4] His recommendations coincide with Fremgen's except that he prefers marginal cost to avoidable cost for general decision making.

The characteristics, advantages and disadvantages of all these orientations have been discussed at considerable length by all of these writers. Nothing has been resolved, nothing material has been added. The prospects for either are dim. All that can be said is that two conditions must hold to prevent profit centers from increasing their profits at the expense of the company's overall profit. First, transfers must be made if they

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[1]Frederick Finney, op. cit., p. 19.

[2]Jack Hirschleifer, "On the Economics of Transfer Pricing," op. cit., p. 172.

[3]James Fremgen, op. cit., p. 28.

[4]Harold Bierman, op. cit., p. 430.

increase the profit of the company, and second, these transfers must not be forced on profit centers if they decrease the profit of the company.[1]

Neither theory nor its application seems capable of proving which type of system orientation is best for all firms. An outside force will probably be required to settle the issue. Such an exogenous force could be the Internal Revenue Service.

Taxation

By the inclusion or omission of an element of profit in a transfer price, net income can be retained in one corporation or shifted from subsidiary to parent, from parent to subsidiary, or from one subsidiary to another. The decision to use one type of system has a definite effect upon the amount of net income and consequently upon the amount of tax paid by a "family" of corporations. It is this manipulation of income that continues to trigger the interest and attention of the Internal Revenue Service.

Section 482 of the 1954 U.S. Internal Revenue Service Code deals specifically with intracompany pricing. There were two basic reasons for its adoption: (a) to prevent tax evasion by firms from splitting income such that no division has income of more than $25,000 or from operating in a country whose tax rate is less than the United States, and (b) to insure that the U.S. government gets its fair share of taxes on income earned by a multinational company. Many experts felt the precedent-setting requirement that transfer-pricing be the equivalent of fair market value for tax

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[1] Curiously enough, these conditions were initially laid down in the first article on transfer pricing (Paul Cook's article in 1955, "Decentralization and the Transfer Pricing Problem," op. cit., p. 88.)

purposes would restrict intracorporate pricing to this one method. The only contingencies were whether or not the Director of the Internal Revenue Service would strictly apply the rule and whether his rulings would be upheld by the courts.[1]

The writings of Keegen, D. E. Cook, Holtzman, Mansfield, Surrey, and Tax Commissioner, Sheldon Cohen were all explanatory. They described the four methods for determining market price acceptable to the I.R.S. and explained the tests of "reasonableness" for determining taxable income.

Other writers began to point out that the specification of market prices was not as inflexible nor critical as had originally appeared. It was becoming evident that the reasonableness of the division of net income within a corporate family was the most important factor considered by the I.R.S., and not any particular method of transfer pricing. This major point was made by Walter, O'Conner, Keegen, and Seghers (in his 1967 article) particularly in reference to the Eli Lilly decision. The specific ruling of the Court was that Eli Lilly was guilty under the second purpose of Sect. 482: not clearly reflecting net income, rather than evading taxes.[2]

The Lilly case emphasized that even sound business reasons for adopting a price on intracorporate transfers would not insulate a firm from Section 482 reallocation. The Court also set the criteria for determining how the I.R.S. was to reflect income by indicating that any measure

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[1]See Willard Stone, "Tax Consideration in Intracompany Pricing," op. cit., p. 47.

[2]Court of Claims, February 17, 1967:67-1 USTC 372F 2d 990.

such as "fair and reasonable" or "fairly arrived at" must be defined within the framework of "fair and reasonable as among unrelated parties."

The I.R.S. and the Court both failed to decide the issue on the type of transfer price to be used. If other than market prices are used, the burden of proof does fall on the taxpayer. If the resultant division of income is reasonable, however, it appears that firm will not have to fear intervention, at least from the U.S. Internal Revenue Service.

The Use of Multiple Systems and Prices

No single transfer pricing orientation works equally well for all firms at all times. This is true even for an individual firm. If circumstances change, it may be desirable (profitable) for a firm to change its system. Even if conditions do not change, no single transfer pricing system satisfies all internal and external purposes. No one has actually recommended adoption of a multiple system, although some have discussed it.

The major drawbacks to a multiple system are that it creates a mountain of book work, confusion and antitrust problems.[1] If a firm desires to use marginal cost for decision making purposes, market prices for profit center evaluation and/or tax purposes, and full cost for consolidated financial statements, it would have to keep separate accounts for intracompany transfers, intracompany payables and receivables, and intracompany inventories on hand at both cost and transfer price value. The resultant confusion on the divisional level would be considerable.

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[1]See Joseph Wojdack, op. cit., pp. 346-349.

The firm further has the risk of antitrust violation even if it sticks to one orientation but varies the price to different buyers. The extraterritorial reach of the American antitrust law extends to intra-company pricing in cases where the parent sells to its subsidiaries at lower prices than it would sell to non-related companies (provided that the subsidiaries do not perform services that would not be performed by the non-related firms).[1]

Summary

The domestic theory does not provide a clear answer to the transfer pricing problem. No single system emerges as appropriate for all cases and multiple systems do not appear feasible. If it does not work well in theory, how well can it work in practice? To answer this question, we now turn to actual studies of systems in use.

Domestic Studies

The most comprehensive study of domestic systems was conducted by the National Industrial Conference Board.[2] One half of the firms interviewed used cost in some form as the basis for their intracorporate prices, one third used market prices, and the remainder used some combination of the two. Transfers were made at cost when the selling division was a cost center, but with some profit allowance if the selling division was a profit center.

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[1]See Willard Stone, "Legal Implication of Intracompany Pricing," op. cit., p. 41.

[2]National Industrial Conference Board, "Interdivisional Transfer-Pricing," Studies in Business Policy, No. 122, 1967.

Advantages cited by the users of the cost basis were that the system was simple and easy to administer and understand, the data was more readily available, and it met the requirement of government contracts and regulatory agencies. The disadvantages were that the system tended to weaken managerial authority, reduced the incentive for cost reduction, interfered with the evaluation of divisional performance, and induced opposition by divisional managers.

Those employing market prices for intracompany transfers felt the advantages of their orientation were that it was consistent with decentralized profit responsibility, permitted a valid appraisal of divisional performance, identified unprofitable or inefficient operations, and provided greater incentive for cost reduction. The disadvantages were that it was often difficult to determine a market price, product cost information was lost as goods flowed from one division to another, and inadequate margins of profit often resulted at the last division in competitive markets. Most companies in the study allowed outside purchases, but only within limitations. Permission was usually granted in cases where the internal supply was inadequate and where better outside prices existed.

A very extensive study of management practices with respect to internal transfer pricing was done by Willard Stone in 1957.[1] His sample of 350 companies was taken from the Federal Trade Commission's list of the 1000 largest manufacturing companies. Stone placed emphasis on those corporations with assets exceeding $50 million. He found both market and cost

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[1]Willard Stone, Management Practices with Respect to Internal Transfer Pricing in Large Manufacturing Companies, Doctoral Dissertation, University of Pennsylvania, 1957.

based prices widely used while negotiated prices were used infrequently and only in supplemental ways. He also found that the majority of companies had more than one pricing method.

Stone's conclusions were that the income tax regulations should not seriously restrict the use of a transfer pricing method chosen for business purposes and in the absence of restraint of trade, antitrust laws should have little influence upon the selection. He did point out that foreign custom laws required the use of specific pricing methods where applicable, however.

Other writers have made statements about systems in use, although most of them are not statistically supported. Warren Keegen reported that the "cost-plus" method was easily the most relied on.[1] Paul Cook commented that direct cost and market prices were the two most widely used.[2] Neither author supplied information about the size or characteristics of their samples, or on what basis they made their statements. The studies by the National Industrial Conference Board and Willard Stone thus remain the most comprehensive and reliable sources on in-use domestic transfer pricing systems.

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[1]By "cost-plus," he refers to full manufactured cost plus an allowance for profit. See Warren Keegen, op. cit., p. 66.

[2]See Paul Cook, "New Techniques for Intracompany," op. cit., p. 75.

INTERNATIONAL SYSTEMS

Theoretical Studies

There is no theory of international intracorporate pricing. No one has attempted to extend the body of domestic theory to include the international dimension. No one has developed a complete theory solely for international transfer pricing.

The only theoretical work in this area has been done by David Rutenberg.[1] The subject of his research was the optimal use of tax havens, bilateral tax treaties, non-uniform treatments of income received from abroad, and national differences in income tax rates, import duties and border taxes. In his model, liquid assets are maneuvered among subsidiaries to minimize taxes paid to the world minus interest received. The movement is accomplished by manipulating transfer prices, managerial fees and royalties, dividends and intersubsidiary loans.[2]

Recognizing that headquarters intervention is destructive to incentive systems built upon profit centers, Rutenberg comments:

> Whether maneuvering is worth the effort can be determined only by building a model; the difference between current costs and model optimal costs provides a benchmark against which to judge the behavioral costs of headquarters intervention.[3]

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[1]David P. Rutenberg, "Manuevering Liquid Assets in a Multinational Company: Formulation and Deterministic Solution Procedures," Management Science, Vol. 16, No. 10, (June, 1970), pp. 671-684.

[2]Rutenberg restricts "transfer pricing" to the pricing of goods, which is a more narrow definition than the one used in this study. His decision-making framework is similar though, because he does include the pricing of management services and intracorporate loans (these latter items are included in the definition of "transfer pricing" as used in this study).

[3]Rutenberg, op. cit., p. 672.

Rutenberg's is only a partial analysis for strategic planning because it assumes as given the planned operations of each subsidiary and, in particular, which subsidiaries will be net sources or recipients of corporate funds. Because his is a deterministic model, it does not handle anticipated risks such as currency controls, exchange fluctuations, and expropriations. It is the risk factor that often determines the transfer pricing system in international business, and Rutenberg's model is accordingly less applicable. His point is well taken though that "formally" plannining for optimal flexibility in the face of risk had better wait until there is more data and experience with a deterministic model.[1]

Rutenberg's model has provided an excellent beginning, but until the model is modified to handle the inherent risks in international business, it will remain of little use to actual multinational business operations.

International Studies

There have been three major studies of American systems of international transfer pricing. The most comprehensive one was done by Business International.[2] The overall report was concerned with "how international companies can approach the task of establishing unified corporate pricing policies and procedures for foreign operations, and what success or failure

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[1] Ibid.

[2] Business International, Solving International Pricing Problems, (New York, 1965).

other firms have met in trying to resolve the problems that are common to all firms."[1]

The participant firms in the study set out seven essentials for an effective system.[2]

The transfer pricing system must:

1) provide a fair profit to the producing unit;

2) enable the purchasing unit to meet profit targets despite the pressure of competitive prices;

3) permit top management to compare and evaluate the performance of corporate units;

4) reduce executive time spent on pricing decisions and mediation of intercorporate pricing disputes;

5) establish a transfer price acceptable to national tax authorities;

6) set a transfer price acceptable to national customs officials for duty valuation purposes;

7) provide control over the pricing practices of foreign subsidiaries to insure that profit goals are met.

The firms also agreed that there were essentially only four system orientations, and that the choice was a function of a firm's product line, distribution channels, sales margins, degree of ownership in foreign operations, and the scope of the foreign operations.

The four orientations were:

1) Transfers at arm's-length or established market prices to independent customers.

2) Transfers at negotiated prices between corporate units.

3) Transfers at local manufacturing cost plus a standard markup.

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[1] Ibid., p. 1.

[2] Ibid., p. 18.

4) Transfers at the local manufacturing cost of the most efficient corporate unit plus a standard markup.

The researchers pointed out that no single system seemed capable of meeting all possible difficulties, which had resulted in the use of multiple systems by most firms. The enormous complexity of administering such a system, coupled with much greater attention paid by U.S. tax officials to intracorporate prices, was leading many multinational firms to adopt a single pricing formula to cover all intracorporate transfers.[1] The study reported a distinct preference for transfer prices based on methods #3 and #4 cited above.

Advantages mentioned by those using the local-cost-plus-fixed percentage method were that it placed all units on the same profit basis when they sold to related units and boosted morale by putting the same margin on intracorporate sales by any producing subsidiary. Disadvantages were that it did not create an incentive to reduce costs and often left too slim a profit margin for the final selling unit.

More control was cited as the big advantage by those firms basing transfer prices on the cost of the most efficient producer in the corporate group. Such a system also placed great pressure on managers to reduce production costs because any reduction automatically resulted in additional profit on intracorporate sales.

Neither system solved the basic problem of determining what should constitute cost or what the fixed percentage mark-up should be, i.e., should

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[1]Other factors cited as influencing this trend were (a) the movement toward rationalization of production and interchange of parts, components, and finished goods among subsidiaries in regional trade blocks, and (b) the shift toward distribution through sales subsidiaries rather than independent subsidiaries.

research and development costs be allocated, should overhead variances be charged, and how much of a profit mark-up is optimal.

One conclusion of the study was that the division of net income approach might replace these cost plus formulae as the most acceptable pricing basis to national revenue services, and that it would eliminate (a) the greatest weakness of the cost plus systems (failure to relate the transfer price to the final price in the market place) and (b) the need to determine cost allocations.

Based on the experiences of the thirty firms interviewed by Business International, the final analysis was reduced to the following generalizations.[1]

1) When transfers are made between wholly owned subsidiaries and between the parent company and these subsidiaries, a formula pricing arrangement based on a fixed mark-up from either local production costs or the cost of the most efficient producer in the corporate group seems to be the best answer.

2) When joint venture companies are involved, an arm's-length pricing formula seems best, since it preserves a maximum of profit on export sales by the U.S. parent to these companies, and reduces the area of conflict over pricing that may arise with the local partner.

3) Arm's-length prices are difficult to estimate in many cases, but they can be based on the distributor price with an adjustment for the marketing and service functions performed by the joint venture company.

4) Cost is a difficult concept to define, but generally inter-corporate transfers are based on factory costs (standard cost plus variation) with a burden rate for factory overhead applied. General corporate expenses are picked up in most cases through management contracts, and R & D costs are recaptured through licensing agreements with the subsidiaries.

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[1] Ibid., p. 31.

5) The mark-up from cost for wholly owned subsidiaries is normally based on the domestic industry average or on the total manufacturing sales margin for all firms. However, this may not be satisfactory for international sales, and some adjustment may be necessary to maximize the profit opportunities of all producing and selling units in all markets. One simple alternative is to establish a very low mark-up, allowing all selling units to work with a reasonable margin. This may result in tax and customs difficulties, however.

6) A division of net income approach eliminates the need to justify many cost, mark-up, and allocation of overhead and R&D determinations used by the firm to the national revenue service, since profit rather than the component parts of profit becomes the determining factor. The net income approach has the added advantage of recognizing the necessity of leaving a reasonable profit in the marketing company for competitive manuevering.

7) Tax considerations in pricing are important, but should not be valued above sound business practice and the needs of the manufacturing and marketing organizations, including the need to preserve high morale in all corporate units by giving them profit recognition for the efforts.

8) One corporate group may find it necessary to utilize several pricing arrangements depending on the ownership patterns of its foreign units, the type of customer to which the final product will be sold, and whether the corporate customer is a sales or manufacturing unit. And in some cases, there may be unusual product characteristics that will call for the use of differing pricing structures.

The Business International Study did not solve the problem. It only presented alternatives to consider, the strengths and weaknesses of each alternative, and the experiences of firms in following these possible courses of action. Their report strongly suggested that there is no general solution--only a rational framework of analysis.

The identification and analysis of the major environmental variables unique to transfer pricing in international business was the contribution of James Shulman.[1] He discussed at length the problems caused by differential income taxes, customs duties, currency fluctuations, economic restrictions,

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[1]James Shulman, Transfer Pricing in Multinational Business, op. cit.

government and economic instability, expropriation, foreign financial standings, competition, foreign partners and antitrust laws.

These problem areas and the various methods used to circumvent them were generated from interviews Shulman conducted with eight American multinational firms. Only a few firms considered all of them when formulating their transfer prices. The tax area received the most attention and was considered the most important factor.

Shulman's criteria for transfer pricing stemmed from two basic premises.[1]

1) The need of a multinational corporation for a feasible control system is rendered more urgent by the additional complexities of a larger environment.

2) Any actions which affect the control mechanism are likely to be more dangerous to the firm engaged in multinational business. When new adaptations to new conditions cause alterations to an existing system, management must be careful not merely to substitute one problem for another.

Based on these premises, Shulman's criteria were as follows.[2]

1) Transfer pricing should not cause alterations to an existing system of control unless adequate adjustments compensate for the changes and keep the system operational.

2) Transfer pricing systems must be compatible with the operational goals of the control system and must reinforce its regulatory functions.

3) When external conditions are of such substance that they either expose the firm to grave threats or make available opportunities for material gains, the transfer pricing system must be capable of being revamped or the control system altered.

Shulman characterized the actual transfer pricing systems of his firms as having either a cost or market orientation. His sample was too

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[1] Ibid., p. 138.

[2] Ibid., p. 139.

small to draw any significance from the breakdown. His argument was well stated though that where a true external market for the product does not exist or where strong central control is desirable, a cost-based system will more closely fulfill corporate goals.[1]

The Conference Board Record conducted a survey of their panel of senior American international executives, representing 130 corporations, on policies and procedures used in conducting commercial relations with foreign subsidiaries and other controlled units abroad.[2] For the majority of respondents, the transfer of goods to controlled units overseas was the most important aspect of their commercial relations with these units. United States tax policies were listed as a major determinant of transfer prices, but the paramount consideration was the overall impact on the consolidated profit, and therefore profit was taken where it was best for the total corporation.

Transfer prices were most commonly established either on a "cost-plus" basis or by negotiation. The deciding factor appeared to be the availability from an outside source of the product being transferred. They carefully pointed out that definitions of "cost" varied considerably. Some included administrative expenses, other included these plus an allocation of profit, and some at full cost (research and development, overhead, all expenses, but no profit).

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[1]Conversely, he argued where profit centers are utilized and are accompanied by real delegation of authority over access to markets, sources and over production decisions, and where a true market environment exists, a market-oriented transfer pricing system will be better. See pp. 143-144 in Shulman's dissertation.

[2]See James Green, "Intercorporate Pricing Across National Frontiers," Conference Board Record, Vol. 6, No. 10, (October, 1969), pp. 43-48.

None of the three studies just mentioned established a definitive case for a particular orientation or even suggested that one exists. They did provide a background to be used for comparison, however, by identifying the major variables and parameters considered by American multinational firms when they formulate their transfer prices. It was against their background that this present study was conducted and contrasted.

SUMMARY

After four decades of research, the international transfer pricing problem has not yet been solved. Prospects for a solution are dim. The corporate goals of firms are so diverse and the international environment so complex and metamorphic that no single system works equally well for all firms at all times, or even for one firm over time.

Neither domestic theory nor its application provides an answer. No one has developed an international theory. No consensus exists among the multinational firms. One can only allude to a potential resolution being forced upon firms by an exogenous force such as local governments.

By investigating the non-American systems of international in transfer pricing, some new information and experience have been added which point to a solution. It is to the method of this investigation that we now turn.

CHAPTER III

RESEARCH DESIGN AND EVALUATION

Research designs differ depending on the purpose of the study. Claire Selltiz et. al. place research purposes into four broad groupings:[1]

> (1) to gain familiarity with a phenonomon or to achieve new insights into it, often in order to formulate a more precise research problem or to develop further hypothesis; (2) to portray accurately the characteristics of a particular individual, situation, or group; (3) to determine the frequency with which something occurs or with which it is associated with something else; and (4) to test a hypothesis of a causal relationship between variables.

The major emphasis is on the discovery of ideas and insights for studies that have the first purpose listed above. These are generally called "formulative," "exploratory," or "pioneering" studies. They require a research design "flexible enough to permit the consideration of many different aspects of a phenomenon."[2] They are particularly appropriate in the investigation of problems about which little or no knowledge is available.

Studies with the second and third purposes present similar requirements for research design. In these types of descriptive studies, the major emphasis is on accuracy. A design is needed that will minimize bias and maximize the reliability of the evidence collected.

Studies testing causal hypothesis require a research design which not only reduces bias and maximizes reliability but also permits inferences

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[1]Claire Selltiz, Marie Jahoda, Morton Deutsch, and Stuart Cook, Research Methods in Social Relations, (New York: Holt, Rinehart and Winston, 1962), p. 50.

[2]Ibid.

about causality. Experiments are especially suited to meeting this criteria, although many studies testing causal hypothesis do not take this form.

As Selltiz et. al. point out, different types of studies are not always sharply distinguishable, and any given piece of research may contain elements of two or more of the purposes described as characterizing different types of study. The primary emphasis of any single study is usually on only one function, however, and research design and evaluation should be considered accordingly.

Certain research techniques have been developed for each type of study. The more precisely defined the problem, the more sophisticated are the available tools. For testing causal hypotheses for example, use can be made of parametric or non-parametric tests, "t-tests," "F-tests," Spearman rank order correlation tests, X^2 tests, test of auto and serial correlation, Pearsonian "r" tests to measure linear correlation between two variables, and many others.[1] There are also many sociometric scales and indexes for use in attitudinal studies of all types.[2]

Most of these techniques, although excellent, are not applicable to exploratory studies such as this particular one. Formulative types must rely on more biased observations, less quantifiable measures, and more unstructured design. This does not imply that they are any less valuable--only less precise. Research in international business to date has largely been either exploratory or descriptive. Past contributions

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[1]For an excellent discussion of these techniques, see Delbert Miller, Handbook of Research Design and Social Measurement, (New York: David McKay, 1970).

[2]Delbert Miller's book also contains excellent descriptions and analysis of these methods.

have been of considerable importance, even though many of their conclusions are not statistically supportable, because they have dealt with highly complex and important problems. If the research design and techniques of this present study are imprecise, it is because the nature of the problem being studied does not lend itself to greater precision.

Transfer pricing is not only an extremely complex area, but a very secretive one as well. Sizeable voluntary participation in an outsider's study of a confidential area cannot be expected. A less than statistically significant degree of response does not lessen the importance of the topic--it only requires additional flexibility in the research design and increases the degree of caution that must be used when making inferences for the study's findings. This chapter contains the specific information about the research method utilized for this study and an evaluation of its appropriateness and success.

The major objectives of this research were to make a pioneering study of non-American systems of international intracorporate pricing and to compare their systems, attitudes, and experiences with those of their American counterparts. The American side of the problem was obtained solely from available literature. No first-hand information gathering was done by this researcher. Information about the non-American side, however, required considerable field research because no research had been done in the area. Both correspondence and interviews were used to obtain the needed information.[1]

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[1]Correspondence and interviews are the two most commonly used techniques in making exploratory and descriptive studies.

The general procedure was as follows. A literature search was undertaken to identify the major types of systems, viewpoints, and problems related to international transfer pricing. This information was to provide a background for comparison. A list of non-American corporations with interest or control in American manufacturing companies was then obtained from the U.S. Department of Commerce.[1] This list provided the names of the parents, those of their American subsidiaries, the degree of ownership, and the types of products being produced. From the 412 non-American corporations listed, only those with wholly owned subsidiaries were selected. The addresses of the subsidiaries and the names of their executives were obtained largely from the industrial and financial indexes. Information on those firms not listed in the indexes was supplied by their respective embassies when possible. Direct correspondence was then initiated with the American subsidiaries. Their replies were analyzed and subsequently discussed with partners of eight international accounting firms. The partners were also asked to comment on national similarities and differences based on their own personal experience.

The literature search, the interviews and correspondence with the firms, and the discussions with the international accountants provided the majority of information used in this study. Other inputs were obtained from past study and research by this researcher and his colleagues on related topics.

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[1]Thomas Pierpoint and Frank Sheaffer, "List of Foreign Firms with Some Interest/Control in American Manufacturing Companies," Office of International Investment, Bureau of International Commerce, U.S. Department of Commerce, February, 1970.

Field Research

Population

The population consisted of 412 non-American firms, representing fourteen different countries, with a total of 646 American subsidiaries.[1] Table I shows the country-company-subsidiary breakdown for both the population and the sample.

Foreign investment in the U.S. is predominantly Western European and Canadian. Three-fourths of the subsidiaries are at least partially owned by these geographic groups. The biggest single investors are the U.K., Canada, and West Germany, whose American subsidiaries comprise 63% of the total. The only representative of the non-Western world is Japan, whose twenty-one companies control twenty-two American manufacturing subsidiaries. Most of the other Japanese investments have been in natural resource areas, such as lumbering and fisheries.

By the end of 1968, manufacturing and petroleum interests comprised nearly two-thirds of the total value of foreign direct investment in the U.S.[2] More than eighty percent of the earnings in 1968 were concentrated in companies with owners in the U.K., Canada, the Netherlands, and Switzerland.[3]

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[1] This total does not include the gasoline stations owned by the non-American oil companies.

[2] Survey of Current Business, Volume 49, No. 10, (October, 1969), p. 36. Of the $10,815 million of investments, manufacturing contributed $4,475 million and petroleum $2,261 million. Finance and insurance investments comprised $2,305 million and "other" $1,774 million.

[3] Ibid., p. 34.

TABLE I

POPULATION AND SAMPLE BREAKDOWN
BY COUNTRIES AND COMPANIES

	Population		Sample	
Country	# of Foreign Companies	# of American Subsidiaries	# of Foreign Companies	# of Wholly Owned Subsidiaries
1. Australia	2	3	2	3
2. Belgium	9	17	8	14
3. Canada	114	150	27	137
4. Denmark	6	6	6	6
5. England	107	169	39	136
6. Finland	1	1	1	1
7. France	25	38	6	25
8. W. Germany	62	100	17	77
9. Italy	5	6	3	6
10. Japan	21	22	6	15
11. Netherlands	19	67	8	55
12. Netherlands Antilles	1	8	1	7
13. Norway	1	1	1	1
14. Sweden	20	26	10	24
15. Switzerland	19	32	10	25
Total	412	646	145	532

The Sample

The Department of Commerce publication listed firms with any interest or control in American manufacturing companies. The sample used in this research included only those firms having wholly owned subsidiaries in the U.S. One hundred forty-five non-American firms were selected on this basis, having a total of five hundred thirty-two American subsidiaries.[1] Their subsidiaries manufactured products in eighteen different standard industrial classification categories. The breakdown, by category, of their manufacturing operations is contained in Table II. Table III shows a similar breakdown for each of the fifteen countries represented.

A personal letter was sent to an executive in each firm asking for a list of the environmental variables considered when intracompany prices are formulated. Each executive was asked to rank each variable in terms of its importance and frequency of consideration. Finally, each executive was asked to comment generally about other systems of which he was aware and about frequently encountered problems and methods used to solve them. A sample copy of the letter is contained in Appendix I.

Direct follow-up interviews were conducted with sixteen of the respondents. The basis for interviewing was a written invitation from the firms to discuss the topic in greater detail at a time of mutual convenience. All of the interviews were conducted with corporate officials at the offices of the American subsidiaries. Each executive received a second letter prior to the interview with a list of topics to be discussed during the meeting. The topics were specified to permit the executives

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[1] See Table I. In those cases where a parent had more than one American subsidiary, the largest or most representative one was selected for correspondence.

TABLE II

SAMPLE BREAKDOWN BY STANDARD INDUSTRIAL CLASSIFICATION

(145 firms queried, 60 responding)

	Food and Kindred Product	Tobacco	Textile Mill Products
Queried	14	5	2
Responded	9	2	0
	Apparel	**Lumber & Wood Products except Furniture**	**Furniture & Fixtures**
Queried	2	3	2
Responded	0	0	1
	Paper & Allied Products	**Chemicals & Allied Products**	**Petroleum Refining & Related Industries**
Queried	9	27	5
Responded	4	10	1
	Rubber & Misc. Products	**Stone, Clay, Glass and Concrete Products**	**Primary Metal Industries**
Queried	5	2	7
Responded	3	0	4
	Fabricated Metal Products	**Machinery Except Electrical**	**Electrician Machinery, Equipment & Supplies**
Queried	11	27	16
Responded	5	11	5
	Transportation Equipment	**Professional, Scientific, & Controlling Instruments, Photographic & Optical Goods, Watches and Clocks**	**Miscellaneous Manufacturing Industries**
Queried	4	7	5
Responded	4	2	3

TABLE III

SAMPLE BREAKDOWN BY COUNTRY AND PRODUCT CLASSIFICATION

AUSTRALIA
2 firms

	Apparel	Miscellaneous
Queried	1	1
Responded	0	0

BELGIUM
8 firms

	Petroleum	Rubber & Plastics	Primary Metals
Queried	1	2	1
Responded	0	1	0

	Fabricated Metals	Machinery (Non-electrical)	Electrical Machinery
Queried	2	1	1
Responded	1	1	0

CANADA
27 firms

	Food	Textiles	Wood
Queried	6	1	1
Responded	5	0	0

	Furniture	Paper	Petroleum
Queried	1	6	2
Responded	1	2	1

	Primary Metals	Fabricated Metals	(Non-electrical) Machinery
Queried	4	1	5
Responded	2	1	3

	Electrical Machinery
Queried	4
Responded	2

TABLE III-Continued

DENMARK
6 firms

	Food	Chemicals	(Non-electrical) Machinery
Queried	2	1	1
Responded	1	0	1

	Transportation	Miscellaneous
Queried	1	1
Responded	1	0

ENGLAND
39 firms

	Food	Tobacco	Textiles
Queried	3	2	4
Responded	1	2	0

	Apparel	Paper	Chemicals
Queried	1	3	6
Responded	0	2	3

	Wood	Petroleum	Rubber & Plastics
Queried	1	1	1
Responded	0	0	1

	Stone, Clay, Glass, Concrete	Fabricated Metals	Primary Metal
Queried	1	2	1
Responded	0	1	1

	(Non-electrical) Machinery	Electrical Machinery	Scientific Professional Equipment
Queried	7	3	1
Responded	2	1	1

	Miscellaneous
Queried	2
Responded	1

TABLE III-Continued

FINLAND
1 firm

	(Non-electrical) Machinery
Queried	1
Responded	0

FRANCE
6 firms

	Chemicals	Stone, Clay Glass, Concrete	Electrical Machinery
Queried	3	1	2
Responded	3	0	1

WEST GERMANY
17 firms

	Wood	Chemicals	Plastics
Queried	1	5	1
Responded	0	3	0

	Fabricated Metals	(Non-electrical) Machinery	Electrical Machinery
Queried	3	3	1
Responded	2	1	0

	Transportation	Scientific Equipment
Queried	1	2
Responded	1	0

ITALY
3 firms

	(Non-electrical) Machinery	Food	Electrical Machinery
Queried	1	1	1
Responded	1	1	0

TABLE III--Continued

JAPAN
6 firms

	Furniture	(Non-electrical) Machinery	Electrical Machinery
Queried	1	1	1
Responded	0	0	0

	Scientific Equipment	Miscellaneous
Queried	2	1
Responded	0	0

NETHERLANDS
8 firms

	Chemicals	Petroleum	Fabricated Metals
Queried	4	1	2
Responded	0	0	0

	Miscellaneous
Queried	1
Responded	1

NETHERLANDS ANTILLES
1 firm

	Scientific Equipment
Queried	1
Responded	0

SWEDEN
10 firms

	Chemicals	Fabricated Metals	(Non-electrical) Machinery
Queried	2	1	5
Responded	2	0	2

TABLE III--Continued

SWEDEN--Continued

	Primary Metals	Transportation
Queried	1	1
Responded	1	1

SWITZERLAND
10 firms

	Food	Chemicals	Fabricated Metals
Queried	2	6	1
Responded	1	1	0

	(Non-electrical) Machinery
Queried	1
Responded	0

to organize their thoughts and formulate their answers. The letter also included a synthesis of the American side of the problem, i.e., the variables and constraints considered important by American firms as suggested in the literature. Its inclusion was designed to elicit comparisons with respect to national differences and similarities. The executives were also asked to comment on general trends in international transfer pricing in terms of such variables as complexity, orientation, and relative importance. Appendix II contains a copy of this second letter.

Essentially the same techniques were used for the interviews with the international accounting partners. The major difference was that they also received some preliminary findings from the research involving the American subsidiaries. It was left up to each international accounting firm to decide which partner would participate in the research. In most cases the senior international partner participated. When he was not available, his assistant usually replaced him.

Finally, the inputs received from the subsidiary executives and the accounting firms' partners were combined, analyzed, and re-submitted to the partners for final comments.

EVALUATION

Quantity of Information Received

Written replies were received from 60 of the 145 companies; a response rate of 41 percent. This percentage, although not high, was not totally unexpected, and was in fact somewhat higher than anticipated.

Transfer pricing is an extremely sensitive and secretive area for all firms, and particularly for multinational firms. Investigations and

litigations by national government agencies have markedly increased. Concern by other groups, both internal and external to the firm, has also increased. These negative developments from the management's viewpoint did not create a favorable environment for open discussions with an outsider about transfer pricing. Some persons felt that this study was doomed to failure from the outset due to an almost certain lack of cooperation from the firms for this very reason. Fortunately, this did not prove to be the case. The desire for secrecy was overcome by the extreme importance of the transfer pricing decision area, a desire for help through research, and the pledge of anonymity.[1]

Certain geographic and industrial groups were less cooperative than others. None of the oil companies made any response, nor did any of the Japanese or Swiss firms. Their lack of participation was disappointing, although not surprising. The international oil companies have historically encountered the most trouble with transfer pricing and are popularly construed to be the biggest abusers. The Japanese have recently come under investigation for alleged dumping violations (made possible at least in principle by underpricing intracompany transfers), while the Swiss are traditionally secretive about the financial part of their business operations.

Conclusions made about cultural and industrial patterns would have been strengthened if more firms had participated. However, the participation of the international accounting firms provided information on a global scale, and most of them had as clients those firms who did not respond. Their experience and knowledge strengthened generalizations about industrial

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[1]These were the factors most often cited by the participants.

and cultural patterns which otherwise would have been difficult to justify statistically.

Quality of the Responses

The quality of the written responses varied considerably. Some firms wrote several pages of comments; others only a few sentences. Several firms ventured comments about other companies' systems, and many related stories of experiences encountered by other firms. The length of the letter was largely a function of the firm's transfer pricing system. Those who employed market-oriented systems wrote very short letters; those with cost-based systems wrote rather lengthy letters. This was probably due to the fact that very little justification is needed for using market prices, while considerably more is needed for cost-based systems.

In general, the written responses were very straight-forward and helpful. Any ambiguities were cleared up by additional correspondence or telephone conversations. Eight firms indicated that they were unable to discuss transfer pricing with outsiders. No further correspondence was conducted with them.

Information generated by the personal interviews was the most helpful and enlightening. The executives and partners were extremely candid in their views and provided several times the amount of information obtained from the correspondence. Their professional caliber, overall knowledge and cooperation was excellent.

Reliability of the Information Received

The reliability of information obtained about a secretive area is usually subject to question, particularly when there is no coercive or

legal force involved. If a firm indicated that it used only arm's-length prices for intracompany transfers, the researcher had no certain way of checking the validity of their statement. There may have been a bias to report the use of the most uniformly accepted basis and to avoid indicating the use of manipulated cost-based prices.

The inclusion of the international accounting firms in the study was done specifically to provide a partial check on the reliability of the firms' replies, in addition to providing an additional information source. These accounting firms could not verify specific statements made by individual firms, for the firms' identities were never revealed, but they could make comments about industry and cultural patterns. Their comments and observations largely substantiated the responses of the individual firms.

The participating firms' interest in the study and its potential findings was substantial, which should have contributed favorably to the reliability of their responses. If the findings of the study were to be of help to them, truthful replies were necessary from all participants.

Completeness of the Coverage

The findings of this research do not speak for all non-American multinational firms, nor for all non-American firms with manufacturing subsidiaries in the U.S. Those firms not having American subsidiaries were excluded because of time and financial limitations. Those firms having American subsidiaries but not choosing to participate excluded themselves.

Several other firms may have been left out unintentionally. The list of companies published by the Department of Commerce contained errors of both commission and omission. Several companies replied that they did

not have a non-American parent at all; and several companies replied that while they did have a foreign parent, it was not the one listed. There were undoubtedly other American firms with foreign parents whose names did not even appear on the list.

The compilers of the list acknowledged these possibilities. They drew their information from various public sources of business and corporate data and did not attempt to verify the information with the companies. In spite of these shortcomings, the list was an extremely valuable source, and, on balance, the most complete and up to date available.

Appropriateness of the Method

A great deal of deliberation took place concerning the particular research method to be used. Some consideration was given to conducting additional research with American multinational companies to provide a better match of information, but the past research was considered adequate. Constraints of time and money were additional factors.

The use of an open-ended letter rather than a questionnaire was selected for several reasons. First, structuring a questionnaire tends to end-up structuring the answers, i.e., the answers received are largely determined by the questions asked. Secondly, an open-ended letter appears less formal and mechanistic. Dealing with a subject as personal as pricing, a more personal letter stood a better chance of generating a useable response. Third, the nature of the topic calls for some rather free thinking--a type not easily elicited by a questionnaire. The major disadvantage to the open letter lies in comparing replies, because a less structured question generates considerably more diverse answers. Nevertheless, the advantages of the open letter outweighed the disadvantages.

The question of where to send the letter created an additional problem. The reasons for selecting the American subsidiaries have already been discussed earlier[1] and will not be repeated here. It is possible that some global perspective was lost by not corresponding with the parent office, but the American subsidiaries' executives were usually very familiar with the global operating procedures of their parents, and were careful to point out differences in procedures and problems where applicable.

Where to send the letter within the firm was another problem. It was decided to personally address the letter to the top financial officer whenever possible. The American research had shown that this class of executive was the one most responsible for the transfer pricing decisions. In several instances, the replies came from company presidents, and in a few cases, from the home offices after the letter had been forwarded to them. In all cases the replies confirmed the fact that transfer pricing was a high level executive problem.

The inclusion of the international accounting firm partners proved to be particularly appropriate. It became evident from the interviews that they had often discussed transfer pricing not only with the American subsidiaries but with their parents as well. Because they were frequently called in for advice on transfer pricing, they were very cognizant of different problems, systems, and viewpoints.

Drawing Conclusions, Making Inferences

Very few of the conclusions based on the data gathered are statistically significant. The letter response rate was low and the number of

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[1]See Chapter I, p. 11.

firms interviewed small. Possible biases in replies and sampling have already been mentioned as cautions. Care should be exercised in making inferences from the conclusions of this study for considerably more information needs to be obtained. The virtually uniform agreement reached on this study's conclusions by the international accounting partners does add credibility.

CHAPTER IV

FINDINGS

Up to this point, the basic nature of the international transfer pricing problem, the scope of this research, and the past research efforts of others have been discussed. The previous chapter contains both an explanation and evaluation of the research method used for this study. The major findings resulting from its application are described in the following pages.

Trade Flows

The flow pattern of goods and services between the non-American parents and their American subsidiaries can be characterized as a one-way street. Subsidiary imports from parents are substantial while exports to parents are minimal. This is the case for virtually all firms responding. The skewed trade pattern is in marked contrast to the predominantly two-way pattern of American multinational firms. It is also different from the trade pattern of the non-American parents with their other (non-American) subsidiaries, which American subsidiary managers feel is distinctly more reciprocal than their own. Only three firms indicate that they regularly export goods and services to their non-American parents, while nearly all of them mention that their sister subsidiaries in other countries are heavy exporters to the parent.

The most often cited reason for the one-way trade pattern is that American operations are initiated to serve the American market, and only in rare instances is it anticipated that they would export to the parent. Putting it somewhat differently, the American subsidiaries are largely market seekers rather than resource or cost-efficiency seekers.[1] The relative production cost disadvantage in the U.S., also frequently cited as a reason for the one-way trade flow, adds support to this hypothesis. Additional support comes from an analysis by standard industrial classification, which shows only 26 firms in primary metal, petroleum, and food product industries.[2]

Six subsidiaries indicate that parent exports to them are related to parent plant capacity utilization. When capacity utilization is low, exports tend to increase; when high, exports decrease. None of the managers are pleased with this type of "warehouse" relationship, and particularly those who are not free to buy outside the corporate family. In periods of simultaneous business expansion, the arrangement often leaves them short in supply, while they have to accept increases in inventories in slack periods. All six of these subsidiaries deal in intermediate or industrial goods and have either German or English parents.

Twelve subsidiaries indicate that virtually no trade is conducted with their parent in either direction. No clear pattern emerges by

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[1]This terminology and classification system was developed by W. D. Hogue of Indiana University's Department of International Business. Mr. Hogue feels that operating characteristics will be different for each type because each makes different demands on local environments, is exposed to different risks, and performs different functions in overall corporate operations.

[2]26 out of 145; see Table II.

industrial classification or by nationality. If one characteristic could be used to describe their products, it would be "speciality items." This classification encompasses products primarily made to order for a particular market, such as differentially seasoned foods, custom designed equipment, and culturally attuned cosmetics and toiletries. The "no-trade" pattern is also characteristic of the parent's relationship with its non-American subsidiaries.

The largest volume of trade is conducted by subsidiaries who purchase production inputs from their parents, and those who serve as sales outlets for company products in addition to being a manufacturing concern. The latter group often import more finished goods than manufacturing inputs. An example is a French cosmetics firm which manufactures a perfume in the U.S. specifically for the American market and also imports the full line of company products produced elsewhere. This arrangement allows them to market the entire product mix to a U.S. buyer.

The most unusual trade pattern belongs to the firms in the aluminum industry. Their trade pattern is analogous to a Soviet bilateral trade agreement based on material balances. The arrangement works as follows. An American subsidiary of a European aluminum company needs a particular type of aluminum for use in fabrication. Upon notification by the subsidiary, the European parent arranges for a non-affiliated American owned and based aluminum company to supply the needed aluminum. In return, the European parent agrees to supply a similar quantity of aluminum to one of the European subsidiaries of the American corporation. In this manner transportation costs and delays are minimized, but not the transfer pricing problem because the American subsidiary pays its European parent rather

than the American supplier. Thus the European parent still controls the price (and profit) that its American subsidiary can obtain. This entire trade arrangement is diagrammed in Chart I. Often times no money changes hands between the two parent companies until the year's end, while money flows between the subsidiaries and parents throughout the year.[1] In any case, the parent retains control even though it does not directly supply the goods.

The accounting firms pointed out that a similar "swap" arrangement exists among firms in the petroleum industry, although none of the petroleum firms participated in this study. A local outlet buys from a local refinery, (the arrangements being made between the distant parents) but payments are made between each parent and its subsidiary.

Degree of Independence

As a group, American subsidiaries of non-American firms are the most independent in the world. This was the unanimous consensus of the participant firms and international accountants, and it substantiates the findings of earlier research by Jean-Luc Rocour.[2] In his study of 59 American subsidiaries of European firms, Rocour concluded that

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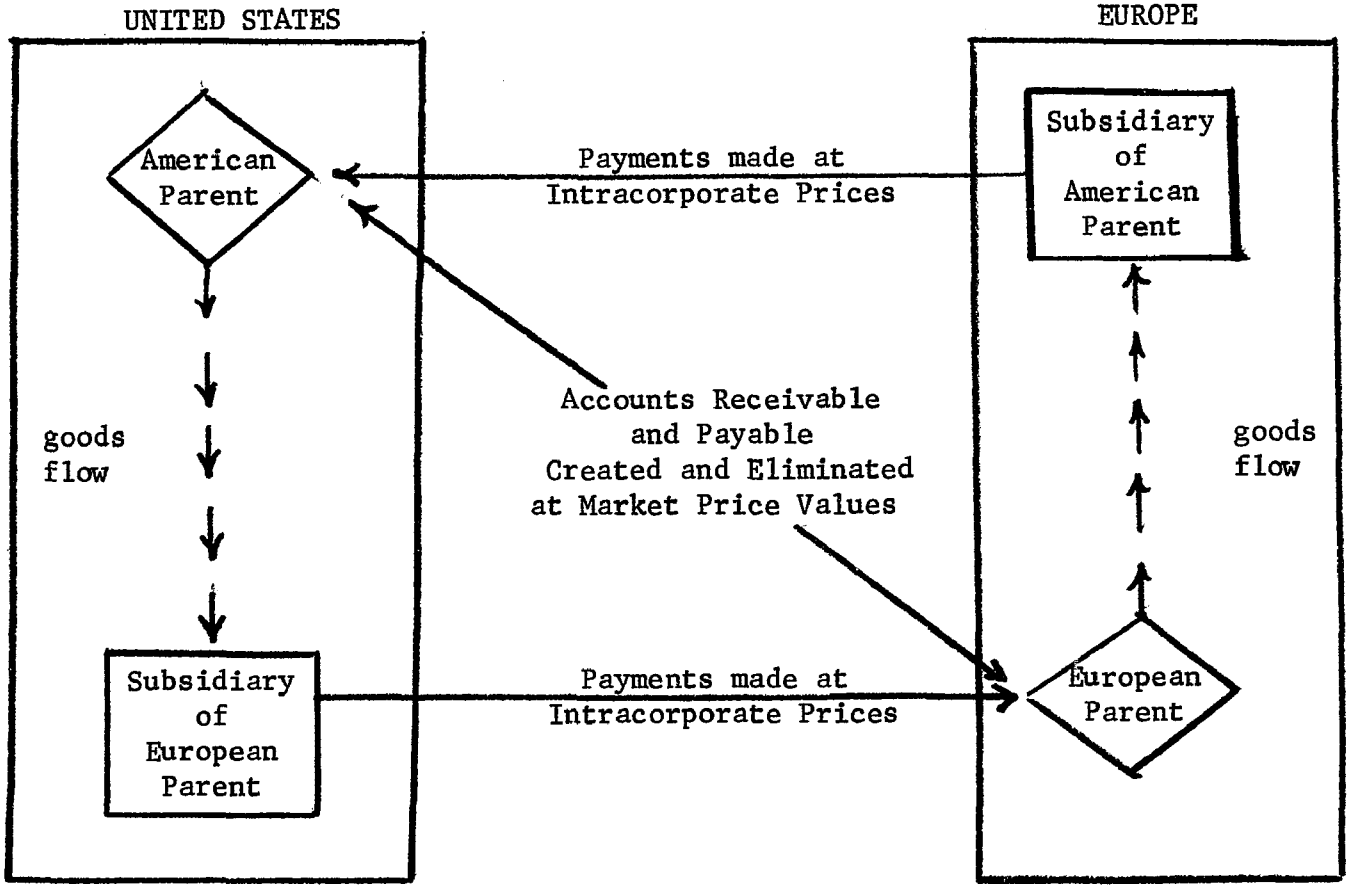
[1]If the materials exchanged exactly balance at the year's end, no money changes hands at all between the two parents.

[2]Jean-Luc Rocour, "Management of European Subsidiaries in the United States," Management International, Vol. 6, No. 1, 1966, pp. 13-27.

CHART I

"The Trade Pattern of International Aluminum Companies"



> they represent a unique type of subsidiary and...they experience such a degree of independence that many are almost or completely out of the line structure of the parent organization.[1]

Explanations for their high degree of autonomy have to do with relative differences rather than absolutes: the relatively larger size of the American subsidiaries, the relatively higher degree of competition, the relatively faster rate of change, and the relatively tougher legal restrictions in the U.S.[2] Not all subsidiaries are equally autonomous, however; differences exist on a parent-nationality basis.[3] British and German owned subsidiaries are not as independent as the French, Dutch, Canadian, and Belgian, while the Italian and Scandinavian owned subsidiaries are the most independent of all. These national differences are felt to be a function of a relative size variable and culturally-tied managerial philosophies.

The relative size hypothesis suggests that the larger the size of the subsidiary relative to its parent, the more operationally independent it will be. The higher degree of autonomy possessed by Italian and Scandinavian owned subsidiaries is thus due to their size vis-à-vis their parents. The management philosophy hypothesis suggests that some cultures are more conservative than others, and that subsidiary autonomy will be a function of the parent country's philosophy. Some interesting ethno-stereotypes emerge from this type of analysis. British and German managers are viewed as highly conservative and control oriented, Italian managers as

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[1] Ibid., p. 14. His measures of control were the amount of control exercised by the parent in general policies and functional operations, the amount of information exchanged and the amount of useful advice provided by the parent.

[2] These variables were also mentioned by the firms in Rocour's study.

[3] Rocour did not identify any national differences.

free-wheeling, and the other managers somewhere in between. Self-perceptions of independence coincide with others' perceptions to a considerable degree, although not always for the alleged reasons. The executives of the British and German owned subsidiaries conceed and often bemoan the tighter degree of control by their parents, while Italian and Scandinavian managers take great pride in their independence. All the executives agree that they have considerably more freedom than their counterparts in sister subsidiaries.

In sum, the subsidiary managements feel very independent, and as a group, the most independent of subsidiary managers anywhere. They indicate that they make the daily and short run decisions and have a voice in long range planning, although they exert considerably less influence on the latter. The major exception to this pattern in every case is the transfer price determination process.

Locus of the Transfer Price Determination Decisions

The setting of transfer prices remains the prerogative of parent company executives. Degrees of subsidiary participation in their determination vary, but the bargaining power and final say belong to the parent.[1] Fifteen of the sixteen firms interviewed feel that their participation is insignificant. Five of the firms corresponded with reply that they are totally unaware of how their parent arrives at transfer prices.

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[1]Only for one firm is this not the case. In this particular instance, the size of the American subsidiary is double that of its parent, and the comptroller of the American subsidiary determines the transfer prices.

The specific persons responsible for setting intracompany prices are all high level executives, regardless of the degree of subsidiary participation or parent nationality. In no firms are the prices set by an officer lower than a treasurer, and in many cases, the company presidents are directly involved. In most cases, it is the chief financial officer of the firm: a vice-president of finance or a comptroller. The predominant pattern is one officer, although several firms have staffs of up to seven people. Guidelines and policies are set during executive staff meetings, but within the resultant guidelines and procedures, the chief financial officer is left free to operate.

When intracompany sales are infrequent but large in value, considerably more negotiation is involved between the executives of the buying and selling firms. The two major financial officers attempt to work out a mutually satisfactory price in such cases. When disputes arise, the parent company executives decide the issue. Conflicts are settled in favor of the subsidiary only in cases where its competitive position will be adversely affected to a significant degree.

The firms that are least dissatisfied with the one-sidedness of the price determination process are the ones who can buy outside the corporate family. Three firms mention that they are free to buy from non-affiliated sources if the internal transfer price is too high.[1] These firms are expected to buy internally in all other cases. Their owners are Italian, French, and Swedish.

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[1]This figure is probably too low as an indicator of the practice of permitting outside purchases. The specific question of whether or not they were allowed to purchase outside was not asked in the letter, and may not have appeared important to respondant subsidiary managers.

Environmental Variables Considered

The nature of competition and differences in taxes are cited as the two most important variables considered when intracompany prices are formulated. Other variables receiving mention are custom duties, export subsidies and tax credits, price controls, inflation, and devaluation.

The Nature of the Competition

The degree of competition in the host country always receives consideration, regardless of how the initial transfer price is calculated. Usually no adjustments are made as long as the transfer price is low enough to keep the subsidiary competitive. A downward adjustment is often made if the initially proposed price is too high. Exceptions to this general pattern are two firms which indicate that their companies always charge the maximum price the market will bear.

Competition in the final selling market is not the only competition considered. Competition in the raw materials market, intermediate goods market, and in the parent company's markets are also factors. The widest price range for the good or service being transferred is perceived when there is virtually no competition in any of these markets. The smallest price range exists for those goods which are sold in highly competitive world markets. In the latter case, the market largely determines the transfer price. The competitive position of the parent becomes important particularly when its profits are falling and in need of bolstering. Parent profits can be increased by taking the profit on the intracompany sale in the parent's country, rather than abroad. This can be done by charging the subsidiary at market prices for the goods it buys from the parent.

Tax Considerations

Corporate income tax rates, bases, and laws are the second most frequently cited variables. Once a competitive position is attained, many of the companies seek to maximize net world income by maneuvering their profits to the lowest tax areas. They exercise considerable care with respect to particular national tax legislation such as Section 482, however. No non-American company has been caught in violation of Section 482 to date, but more of them are now facing the threat. Germany and Canada have recently adopted similar regulations, and several German and Canadian owned subsidiaries report changes in corporate transfer pricing policies since their adoption.

Opportunities for tax avoidance or deferral are also decreasing as national tax rate differentials decrease. The awareness and sophistication of tax officials has also increased, making it more difficult to use manipulated transfer prices to lessen tax liabilities. The tax consideration is decreasing in importance primarily because of these developments.

Customs Duties

Customs duties are no longer considered major variables by many firms. Duties are not material enough in most cases to warrant manipulation of transfer prices and the resultant risk exposure to litigation. Getting away with manipulation is becoming even more difficult. Customs officials in several countries are now assessing duties on equivalent market prices whenever available, regardless of the invoiced transfer price.[1]

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[1]This was also a finding of the study conducted by Business International.

High duties are often cited as a reason for initiating production in a particular host country, but they lessen in importance after manufacturing is under way. Three firms in the chemical and pharmaceutical industry indicate that the volume of their imports from their parents would increase substantially if American duties are lowered, but that the transfer prices would not be affected materially because most of the tariffs are based on American selling prices rather than on the value of the goods transferred.

The recent litigation by the United States against several Japanese firms for alleged dumping violations is cited by several firms as ample proof that it is increasingly difficult to get away with pricing intra-company transfers too low, and hardly worth the risk.

Export Subsidies

Export subsidies are important to several firms, but unimportant to the point of being non-existent for most. The effect on transfer prices depends on the form of the subsidy. Transfer prices are set high when a rebate is given on the value of exports (or the amount of foreign currency earned), and low if the resulting export profits are not taxed or taxed at a lower rate than other income. These types of export subsidization are decreasing in importance as they are being phased out by countries in the European Economic Community. They remain strongest in the lesser developed countries where hard currencies are at a premium.

Inflation, Exchange Restrictions, and Devaluation

American subsidiaries do not cite these factors as major considerations for transactions with their parent companies. They are considered

by the parents for internal trading with their non-American subsidiaries, but the persistently high rates of inflation in the U.S. are beginning to change this pattern. With the relatively higher rate of inflation in the U.S., European firms find that they can be more competitive in American markets by increasing the amount of goods shipped from Europe to the U.S., unless the U.S. tariffs are based on American selling prices. Several firms report substantial inroads into American markets because of cheaper input prices obtained from their parents.

Exchange restrictions are also a more important consideration for non-American trade. If a Brazilian subsidiary can import only a given value amount of material from the "outside," the parent often underprices the material. When there are dividend restrictions in the host country, the parent often uses artificially inflated transfer prices to get the money out. In these respects, non-American companies view the problems in the same manner and utilize the same techniques to circumvent them as their American counterparts.

Price controls are a factor in applicable countries, but not in trade with American subsidiaries. A large British pharmaceutical and sundries manufacturer remarks that once an import price from the parent is established, it is virtually impossible to get it changed upward. Transfer prices tend to be on the high side as a result.

Devaluation and revaluation are important considerations for all firms, but seldom enter into normal transfer pricing decisions. Those companies whose home country's currency is in danger of devaluation often build up hard currency reserves by shipping goods to hard currency country subsidiaries at high hard currency prices. Several British and French owned

subsidiaries report this procedure. Conversely, several German parents manipulate transfers and transfer prices to build up Deutsche Marke balances and decrease other currency balances.

The use of intracompany transfers to hedge often causes unfavorable and disfunctional consequences for the entire firm. Changes in pricing policies are likely to be noticed by governments, may not be defendable or reversible from the government's standpoint, may create conflict within the organization, and may result in suboptimization of global operations. Using the forward market is a far better solution to protect against devaluation or provide for revaluation.[1]

Nationalization and Expropriation

No one mentioned nationalization nor expropriation as considerations for transfer price determination.[2] The variables are cited as factors only in pre-investment decisions. Intracorporate transfers can be used to minimize subsidiary holdings of liquid assets by selling to the family everything moveable at the lowest possible prices (thereby decreasing stocks), and minimizing cash holdings by overpaying for real and/or fictitious services rendered by the parent. The probable success of such action is not great, however, because the specific firms are usually under close surveillance by the government for these and other reasons.

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[1]This is the consensus of this study's participants.

[2]They are mentioned by American multinational firms in the Business International study.

Parameters Considered

Profit centers are used to a much lesser degree by non-American multinational companies. As a result, these companies seldom regard transfer pricing as a technique for motivating and evaluating divisional management performance. Transfer pricing is viewed more as a means of control over subsidiary operations. Repeated below are the parameters considered essential by American multinational firms for an optimally integrated transfer pricing system.[1]

1. providing a fair profit to the producing unit,
2. permitting top management to compare and evaluate the performance of various corporate units,
3. being acceptable to national customs officials for the purpose of duty valuation,
4. being acceptable to national tax authorities and anti-trust officials,
5. enabling the purchasing unit to meet profit targets despite the pressure of competitive prices,
6. resulting in a reduction of executive time spent on pricing decisions and mediation of intercorporate pricing disputes,
7. providing control over the pricing practices of foreign subsidiaries to insure that profit goals are met,
8. providing management with incentives in both the product divisions and in the marketing divisions,
9. insuring that there is a regular and sufficient flow of goods and product information,
10. giving a basis for reflecting actual profits (and costs) to the divisions involved in order to maintain the control facets of operating against a budget, and preserve the

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[1]These are the parameters cited by the participant firms in the Business International Study.

> psychological factor of forcing a manager to meet or exceed profit goals with a wider latitude of action than that which is afforded when operating solely against a set budget.

Only half of these ten parameters are mentioned by non-American firms as being major considerations (numbers, 3, 4, 5, 6, 7, and 9). The parameters receiving mention are concerned with acceptability, competition, and control.

Acceptability

Possible conflicts with both host and parent country governments over transfer prices are major considerations for all companies. No one desires a court fight with any government, for in such conflicts the company loses either way. Should a court decision uphold the governments' position, the company clearly suffers either in the form of punitive damages, loss of privileges, or in a cease and decist order. Even in the rare case where the company wins, it may find some of its other activities being investigated, its property taxes increased, or its requests for import permits and foreign exchange denied or delayed.[1] Firms also stand to lose in the area of consumer support via boycotts or brand switching.[2]

The desire to maintain good government relations is also important to the firms from a long run standpoint, a consideration most participant firms acknowledge. Their desire is to make successful long-term investments

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[1]These latter forms of government action are not uncommon in lesser developed countries, although rare in the United States.

[2]Contrary to foreign subsidiaries of American companies, American subsidiaries of non-American multinational firms favor a low visibility profile and try to minimize public identification with their parents. Public conflicts with governments increase the visibility of the link, and are therefore regarded as undesirable.

in the host countries, and favorable government attitudes toward their conduct are viewed as essential.

Competition

Insuring that profit goals are met despite competitive price pressures is a normal policy for most firms. Undervaluing intracompany transfers is a commonly used method for meeting profit goals under competitive situations. A different method is often used when there is also competition in the transferred good's market. Year end reconciliations between parents and subsidiaries take place when equivalent market prices for the transferred good or service prevent direct transfer price manipulation with the shipment. Yearly adjustments are made by manipulating the charge for an item whose price is less standardized, such as management services.

The importance of this "profit under competition" parameter is consistent with the importance given general levels and types of competition as a variable.

Control

Transfer pricing is regarded by most non-American firms as a control device: control over pricing practices, profits, and flows of goods, services, and information. It is the major area in which the parents maintain virtually absolute control. Control over global financial operations and results is regarded as essential by the parents, and the most common way employed to achieve it is through intracompany pricing. Preoccupation with control is particularly evident in German and British multinational firms.

Because the control rests with the parents, it also reduces the executive time needed to be spent on pricing decisions and mediating intra-corporate disputes. Less time can be spent in decision making when fewer people have to be considered and the power division is onesided (although admittedly at some price).[1]

Performance Evaluation

Several firms mention that there are rumblings of forthcoming changes in the use of their transfer pricing systems. Word has filtered down that profit centers are on the way in, and that the existing transfer pricing system may be overhauled to prevent it from distorting profit center evaluation. All of these firms presently have cost oriented systems, the implication being that their transfer pricing systems will become market oriented.

Orientation

No overwhelmingly dominant pattern emerged from the sample, as only thirty firms classified their system's orientation. Seventeen firms report an arm's-length (market price) method, three claim a market-price-less-commission system, four indicate a cost-plus arrangement, and six term their arrangement as a combination system.[2] There is probably a tendency of those firms responding to state the use of market orientation (because it is the one most legally accepted), and a tendency for those firms using cost orientations not to reply.. The general feeling of the accounting firms is

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[1]Subsidiary managers' dissatisfaction, the loss of possibly constructive comments and insights, and a lack of motivation because of the lack of participation are several possible unfavorable results.

[2]One firm says that it receives management services at no charge.

that no single orientation is clearly dominant but that the division is approximately 50% market price oriented, 30% cost oriented, and 20% combination. If their analysis is correct, then the non-American systems of international transfer pricing are distinctly more market oriented than American systems.[1]

Several distinct patterns of orientation are evident, even though a single orientation preference does not exist. The size of the firm, the nature of the product, and the nationality of the parent all influence the choice of system orientation.

Size of the Firm

There is substantial correlation between firm size and transfer pricing system orientation: the bigger the parent firm, the more likely is the use of a cost oriented system. The ability to differentiate its products, to supply highly complex cost formula, and to have a significant influence on the market price are major reasons given by participants in this study.

If a firm can differentiate its product to such an extent that there is no close market equivalent (and hence no market established price), then the firm's own cost figures become the most identifiable measure of value for the good being transferred. Product differentiation is not necessarily restricted to large companies, but their number of differentiated products tends to be higher.

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[1]Both the Business International and Conference Board Record studies report a predominance of cost-oriented systems in American multinational businesses.

Cost systems of larger companies tend to be more complex than those of smaller companies. The existence of joint costs and more indirect cost allocations allows them more discretion in cost determination procedures. Edith Penrose's argument that all costs are arbitrary is well taken, but the degree of arbitrariness is greater for a large firm. Furthermore, the greater sophistication of large corporations' accountants relative to government agency accountants is cited as a factor influencing the choice of a cost orientation. The object in this situation is to dazzle the government agent by presenting highly complex and confusing cost formula, leaving him little alternative but to accept the company's determination of value.

Differences Related to Products

Market-price-based transfer pricing systems are characteristic of firms whose products compete in highly competitive markets. The existence of a recognized market price or price range is the major determinant, rather than the position of the buyer in the economic distribution scheme or the classification of the good being transferred. It cannot be said that firms who transfer final products use market prices and those who transfer raw materials or intermediate goods use cost-oriented prices. Of the twenty firms reporting the use of a market oriented system, eight produce final goods, six deal in intermediate goods, and six manufacture industrial equipment. Of the three firms reporting straight cost systems, one produces final goods, one firm intermediate goods, and the other industrial goods. The six firms using combination systems are also equally divided among these categories. Their use of a combination system is to allow for the differing degrees of competition for their various products: those

without much competition are transferred at cost, while those in more competitive markets are transferred at market prices.[1]

The ease with which an equivalent arm's-length price can be found by a government agency appears to be the determinant factor, although the reliability of the market price is also important. An example of the reliability problem involves world oil prices. The international oil companies for years have claimed operating losses because competition forces them to sell oil below the established, posted world prices. They have argued for the use of discounted prices as a basis for taxable income determination, rather than the posted prices. They feel that the discounted market prices represent the real market prices, and that the posted prices are no longer reliable as a true measure of value. The conflict arises because host governments compute taxes on what company profits would be using posted prices, resulting in higher profits and tax liabilities for oil companies in producing countries. The justification used by the host governments is that the discounted prices are fictitious because the discounted-price sales are made to down stream subsidiaries of the same company, rather than on an open market.

National Differences

Several distinct cultural patterns are discernable when there is some degree of choice regarding the orientation of a transfer pricing system.

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[1]An example of a combination system is one utilized by a European owned company manufacturing pharmaceutical drugs and chemicals. Basic chemicals such as hydrochloric acid are transferred at market prices, while patented medicines are transferred at cost.

The opportunity to choose is largely determined by a lack of reliable, equivalent market prices for the goods being transferred, as discussed in the previous section. In such a situation, a firm can transfer at either cost or market, or somewhere in between. A hypothesis of this study was that there would be national preferences for specific orientations based on different culturally based business goals, objectives, and expectations. These differences do exist, and are discussed below by parent company nationality. The peculiarities are highly generalized and do not speak for all firms of each country. What they do represent is a caricature of several nations' preferences and systems.

France

The over-riding goal of French management is income tax minimization. It is no secret that in France, neither individuals nor corporations are fond of paying income taxes. If they must pay taxes, they want to pay as little as possible. The general attitude does not distinguish the French from other national groups, but perhaps their fervor does.[1] It is not surprising to find that the French consider the income tax variable as the most important consideration for transfer price determination, and use their transfer pricing systems to minimize world tax payments.

Low transfer prices (cost oriented) are used by those firms whose export profits are either tax free or taxed at lower rates. Firms who receive a tax credit on the franc value of their exports (or the amount of foreign currency earned) use high transfer prices. Those firms whose exports are not subject to subsidization or involved in a tax credit arrangement

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[1]See Robert Ball, "The Declining Art of Concealing the Figures," Fortune, September 1967.

use transfer prices to maximize profit in countries with the lowest income tax rates.

Several of the accounting partners mentioned that French authorities do not closely examine transfer prices between French corporations and their subsidiaries. This de facto neglect creates additional opportunities and incentives to manipulate transfer prices and optimally arrange corporate taxable income.

None of the respondant French firms use arm's-length prices, although the response rate is too low to use this finding as statistical support for the pattern identified above. One firm uses market prices less commissions, and two firms use "cost-plus" prices. Their choice of orientation permits transfer price manipulation to a considerable degree. Profits can be moved around by changing the amount of commission, changing the cost allocation procedures, or changing the amount of profit taken by the selling unit (i.e., the "plus" in the "cost-plus").

Italy

Tax minimization also emerges as the major consideration of Italian multinational firms. Unlike the French, Italian companies seek to maximize parent company profits rather than profits of operations in countries with low tax rates. Most of the difference in procedure is attributable to income tax determination and collection procedures in Italy. The sentiment is that procedures are so confused and subject to interpretation that maximum opportunities for tax avoidance or deferral exist in Italy. If this is really the case, it can be expected that market prices will be used for intracompany transfers from parents to subsidiaries because they place the transaction's profit in the selling unit (the Italian parent). Conversely,

transfers priced at cost can be expected for goods purchased by the parent from its subsidiaries. Confirmation of this pattern comes from several accounting partners, one Italian firm, and several non-Italian firms.[1]

A comptroller of an Italian owned subsidiary initially cited competition as the major reason for the use of market prices. The competitive pricing of the "American giants" of the industry in both input and output markets was cited as a condition leaving no other alternative. It became evident after further questioning that market prices are also used for tax minimization purposes. The American operation is not evaluated on its own profits, but rather on its contribution to parent profits. Purchasing at arm's-length prices is considered such a contribution because by paying arm's-length prices the subsidiary allows all the transaction's profit to accrue to the parent.

The notoriety of the Italian tax system is well known, if not well documented. All of the international accounting firm partners are in agreement on this point, and most of them continue to experience client problems in Italy. Their insistance on the use of American standard accounting principles in Italy remains a business volume constraint for many of them. Italian firms prefer the considerably more flexible Italian standards and practices which afford greater opportunities for tax minimization.

Japan

The Japanese have a preference for cost-oriented systems, primarily for price-competitive reasons. No statistical support can be given for this

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[1]Confirmation of the Italian pattern by non-Italian firms took the form of "Pedro stories," and are hence subject to considerable empirical question. Several firms mentioned similar stories though, and their impressions of the Italian tax system were very consistently negative.

preference because none of the Japanese firms directly participated in this study. The international accountants perceive this pattern, however, and the recent U.S. "dumping" suits brought against the Japanese seem to bear it out.

The intense price-competitiveness of the Japanese in world markets can be partially attributed to low transfer pricing. Sometimes dumping violations can be avoided by under-invoicing manufacturing inputs to subsidiaries. This procedure allows the final product to be produced and sold at a price close to what would have been considered dumping if the final product itself had been directly exported to the country.[1] It is possibly for this reason that the Japanese subsidiaries in the U.S. did not choose to participate in the study.

The United Kingdom

The major consideration of British firms is return on investment. Yearly target rates are set for subsidiary operations and transfer price manipulation is used to ensure that they are attained. Even those companies using market prices for intracorporate transfers of goods make year end profit adjustments, customarily in the form of payments for services. British parents often pay inflated prices for technological information supplied by their subsidiaries when the subsidiaries' returns on investment will be lower than acceptable. A parents' favorable capacity variance may similarly result in a year-end cost reduction adjustment for the goods already purchased by its subsidiaries. On the other hand, the parent will often make adjustments in its favor if the subsidiary's return on investment

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[1] Two of the international accounting firms' partners report such procedures.

is too high. One electrical machinery manufacturer moves income among the "surplus" and "deficit" subsidiaries until each attains its target return on investment.

Only three British owned subsidiaries report the use of straight market prices for intracorporate transfers, the least flexible orientation. Eight others report the use of either cost, market-price-less-commission, or combination systems (the more flexible types). Two of the firms using a combination system transfer goods at market prices but services at cost.

Subsidiary managers feel that the major reason for emphasizing return on investment is a peculiarity of the British banking system. It is their opinion that British bankers demand a steady and predictable return on investment before a loan will be approved. The British parent thus promises an acceptable rate of return for its subsidiary in order to obtain funds to initiate or refinance its operation. The parent company's executives watch the subsidiary rate of return closely because they know that the British bank loan officer is doing so too.

Canada

Transfer pricing systems of Canadian firms are distinctly market oriented. Canadian-U.S. trade is subject to both Canadian and American tax regulations specifying arm's-length prices, making it doubly difficult to use other than market prices. Only one firm of the eight which classified their system does not use market prices. This particular company's American subsidiary is twice the size of its Canadian parent, and the transfer pricing decisions are made by the American subsidiary's

comptroller. The products sold are highly differentiated, which makes a cost-oriented system more feasible.

The long history of good economic and political relations between the U.S. and Canada is cited as an additional factor influencing the choice of system orientation. Market prices elicit the least hostility and are generally construed to be the most equitable. Cost orientations are generally regarded by host countries as the more devious types and the ones most likely to harm local competition. Market prices are thus a sound choice because of the size of the intercountry trade and the geographical proximity of the two nations.

An interesting example of the one-way trade pattern mentioned earlier in this chapter is provided by a Canadian paper product company. Wood pulp, the major input of the subsidiary, is transferred from the Canadian parent via pipeline over a distance of one-and-a-half miles. Nothing is ever sent back through the pipeline, nor is anything else shipped from the subsidiary to the parent. No arguments have taken place over the value of the pulp transferred (because market prices are used), but disputes have arisen between Canadian and American tax officials over the ownership of the pulp in the pipeline. The company would often change ownership of the pipeline (rather than transfer prices) to its tax advantage. The issue is now resolved: the parent owns the pipeline and its contents.

Germany

The Germans are among the least concerned with transfer pricing. This is surprising because they exercise the closest control over subsidiary

operations of any non-American group.[1] One might expect that German companies would show the most concern because transfer pricing is the one area over which even highly decentralized companies exercise considerable control.

The most often cited reason for this attitude is the German emphasis on the fixed asset position of operations and long run stability. German management is not as concerned with such criteria as return on investment or yearly profitability, and managers are not evaluated or rewarded on these bases. Prudent plant expansion and overall production efficiency are the two major criteria for performance evaluation.

Several of the accounting partners cite unfavorable past experiences with inflation and wars as major reasons for the German preoccupation with fixed assets and long run stability. The increased value of fixed assets during and after such periods apparently has had a strong carry-over effect to the present. German emphasis on fixed assets can also be seen in their corporate financial reports. Their reports center on the balance sheet rather than the income statement, and fixed assets precede current assets on the balance sheet.[2] Transfer pricing is of less importance and receives less attention when short run profitability and return on investment are not major considerations.

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[1]Their closeness of control and relative lack of concern over transfer pricing are cited by both subsidiary managers and accounting firm partners.

[2]Financial reports of American corporations place major emphasis on the income statement, and place current assets before fixed assets on the balance sheet.

Consistent with this cultural attitude, no clear pattern of orientation can be distinguished for German multinational firms. Two firms report the use of market prices, one reports the use of cost, one states a combination system, and two others are unaware of what orientation their parents use. The accounting partners are similarly unable to identify any dominant pattern.

A characteristic pattern which does emerge is the closeness of control retained by German parents over their subsidiary operations, both in short and long run periods. Two of the firms interviewed are not free to buy from other than their parent company. Their managers feel that this restrictive arrangement is more the rule than the exception for German companies. Final pricing policies, subsidiary operation financing, make or buy decisions, and marketing strategies are some of the major areas over which their German parents retain substantial control. Plant expansion and long run capital committments are areas of absolute parent control. In short, German owned subsidiaries are very restricted in the number of decisions they alone can make, and their managers somewhat dejectedly acknowledge this situation. The most unhappy of all are the American born officers of the subsidiaries who feel enormously constrained and frustrated by their German owners' different philosophies and management practices.

Scandinavia

Scandinavian multinational corporations place their major emphasis on a single parameter: acceptability to host governments. Transfer prices are based on the method least likely to cause trouble with host governments. Consequently, transactions with American subsidiaries are made at arm's-length

prices, the method prescribed by Section 482 of the American Internal Revenue Service Code. Arm's-length prices are also used for intracompany transfers with non-American subsidiaries, even though specific laws requiring market prices do not exist. Government consensus on arm's-length prices being the least manipulative and the most fair is again the reason. The American subsidiary president of a Swedish equipment manufacturer interviewed for this study remarks:

> It is difficult for host countries' firms to obtain government sanctions against a multinational company making competitive inroads if all of its transfers are made at prices it would sell to any non-affiliated company. Where market prices exist, they are used, and considerable effort is made to approximate a fair market price if one does not already exist. This is the normal Scandinavian pattern.

The importance of host country acceptability is due to the importance of subsidiary operations in Scandinavian corporations' global operations. Scandinavian markets are small relative to other world markets, making foreign subsidiary operations of Scandinavian firms large relative to domestic operations. A major portion of corporate family profits comes from non-Scandinavian operations as a result. Corporate long run success is thus largely contingent upon the long run success of their foreign operations, and Scandinavian managers identify good host government relationships with ensuring long run success.

Acceptability to host countries is also an explanation given for the high degree of autonomy characteristic of Scandinavian owned subsidiaries. Local managers are viewed as being in the best position to evaluate both public and government sentiment and their implications for future corporate operations. The local managers are given the authority to make decisions on the basis of being in this position. Secondly, governments

prefer lesser controlled subsidiaries because they are less likely to be influenced by factors operating outside the country (and over which the local government has little or no control).

Australia, Belgium, the Netherlands, and Switzerland

No discernible patterns or attitudes could be identified for multinational firms of these countries. None of the Australian or Swiss firms participated, and none of the letters received from the few respondent Belgian and Dutch firms ventured any generalizations. The international accounting firm partners are also unable to generalize about the transfer pricing systems of these national groups. It remains for future research to discover cultural patterns for these countries, if any exist.

Trends

Identifiable trends in non-American systems of international transfer pricing are movements toward greater use of market prices, less price manipulation, and greater importance for firms. These trends were mentioned in both the correspondence and interviews with corporate executives and accounting firm partners. The first two trends are closely related: market prices do not permit as much manipulation as cost based prices. They are discussed separately however, for different pressures underlie them. Forces causing greater importance of transfer pricing for the firms are increased awareness and surveillance by groups external to the firm, the increased volume of transfers due to economic expansion, and greater integration of international production operations.

Design

There is a definite trend toward the use of market prices for intra-corporate transfers. Cost based systems are either being phased out or altered significantly enough that they approach market oriented systems.[1] Increased adoption of tax regulations similar to the American Section 482 is cited as the major reason, but several other factors are also mentioned. A shift toward greater use of profit centers and return on investment for evaluating subsidiary performance are two such influential developments. Arm's-length prices are generally recognized both in the literature and by practitioners as being the best orientation for use with these criteria.

In terms of profit centers, the assumption is that each unit is independent of all others and acts accordingly--both buying and selling at market prices. The use of other than market prices is inconsistent with this assumption. Profit center evaluation becomes much less meaningful if the profit each unit earns is a function of arbitrary profit allocation.[2]

Return on investment analysis is similarly rendered less meaningful when other than market prices are used. The true value of both the investment and the return can be substantially altered by changing the price of goods and services sold internally. Straight cost transfers lower the real value of investment goods while they increase the profit (and hence the returns) on all other goods. For return on investment figures to be of value, real cost and sales figures must be used.

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[1]An example of this alteration is adding a profit margin for the selling unit to the "cost" such that the "cost plus profit" price is equivalent to the market price.

[2]Arbitrary profit allocation refers to the decision of how much profit (if any) is added to the cost price of the transferred good before sale.

Price Manipulation

The use of market prices for intracompany transfers does not eliminate the possibilities for manipulation; it only lessens the potential magnitude. When the volume of a company's output affects world market prices, the ability to manipulate transfer prices still exists. The use of market-prices-less-commissions also allows for profit allocation, as the size of the commission discount determines how much of the profit accrues to the buyer. The existence of real market equivalents only provides a benchmark for price comparisons, and makes substantial price manipulation more readily noticeable. As more companies use market prices, equivalents will increase in number.

The market price also provides the best measure of product value. Even though the intracompany transaction does not take place within a real market, the best measure of its worth is still an arm's-length price: the price at which a non-affiliated buyer and seller would arrive. Thus the shift toward the use of market prices not only lessens the ability to manipulate prices, but also provides a more meaningful measure of value.

When cost is the basis, comparisons become more difficult. Product costs are seldom widely available or easily obtained. The same product produced in two separate firms may appear to have different costs because of different accounting procedures, even though neither firm can produce the good more cheaply than the other.[1] The arbitrary exclusion or inclusion of certain cost allocations is another source of apparent

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[1]One firm may use direct costing while the other one uses absorption costing, for example.

cost differences, and one which permits considerable cost (and hence transfer price) manipulation.

Long run considerations are also factors influencing the degree of price manipulation. Many firms are taking the Scandinavian position that long run success is contingent upon the acceptibility of its operating procedures by both parent and host country governments. These governments are taking second and closer looks at multinational companies, and the use of non-manipulated transfer prices creates less suspicion and distrust.

Importance to the Firm

Increased awareness and concern by groups external to the firm about transfer prices makes their determination more important for the firm. Greater care must be exercised to minimize negative (unfavorable) repercussions. The volume of intracompany transfers is also of importance: the greater the volume, the greater the possible distortion of profits. A company with substantial intracorporate transfers is more likely to be investigated than one with smaller amounts.

The volume of internal transfers, however, is largely a function of the degree of integration in international operations. Several of the international accounting firm partners contend that intracorporate transfers are increasing in importance for this integrative reason. For example, a Canadian firm specializing in transportation equipment combines French made transmissions, British made engines, Mexican made axles, and American made sheet metal parts to produce in Detroit a tractor for sale in Canada. Their pattern of international specialization and subsequent

product integration is by no means unique. Transfer pricing inevitably becomes more important as such production and logistic patterns develop.

Increases in the volume of intracompany transfers may also result just from business prosperity and expansion. The rapid rates of growth exhibited by several of the American subsidiaries have resulted in substantial increases in imports from both their non-American parents and sister subsidiaries. This growth pattern is not restricted to American subsidiaries; it is also the pattern for most of the parents' subsidiaries in the European Economic Community.

Summary

As a group, American subsidiaries of non-American firms are singularly independent. They are free to operate largely on their own with a minimum of advice and control for their parents. National differences in their degree of autonomy exist, however. German and British firms maintain the closest control, while Italian and Scandinavian parents maintain the least. The nature of the American market is the major reason, although differences in culturally tied management philosophies are also important influences.

Non-American parents retain absolute control over transfer pricing, regardless of the closeness of control otherwise exercised. The prices are set at the home office by the top financial executives with little (if any) participation by subsidiary managements. The bias in power can be partially attributed to the unique one-way flow of goods and services from the parents to their subsidiaries, but the major reason lies elsewhere. Parent company executives are uniformly unwilling to relinquish control over transfer pricing because it can so significantly alter the financial results of

global operations. The executives all share a considerable interest in seeing that the results come out as planned.

Different methods of transfer pricing are used to achieve different results. Cost based transfer prices are used by parents to keep subsidiaries competitive, to take advantage of various types of export-profit credits, to maximize income in countries with low tax rates, and to lessen ad valorum custom duties. Market oriented systems are used to maximize parent company earnings, to protect against inflation, and to minimize conflicts with governments and other external parties. Year end adjustments are made in many cases to see that profit goals or return on investment targets are met.

Cultural preferences exist and are reflected in transfer pricing systems when some degree of orientation choice is permitted. Scandinavian, Canadian, and Italian firms use predominantly market oriented systems. French, British, and Japanese firms use largely cost oriented or combination systems. National preferences result from different managerial objectives and attitudes.

The opportunity to choose a particular system is primarily determined by the nature of the competition in both final selling markets and transferred good markets. Different legal restrictions are also important considerations. The actual system selected is a function of these legal constraints, the nature of competition in the various markets, and the particular management objectives and expectations alluded to above.

Present trends are toward greater use of market prices, less manipulation and greater importance to the firm. Pressures behind these

trends are coming from groups external to the firm and continue to increase as subsidiary operations (and intracorporate transfers) increase in value.

CHAPTER V

COMPARISONS AND CONCLUSIONS

Internal transfers of goods and services are characteristic of multinational firms. It is the integration of world operations that gives them their strength, and non-American multinational firms are not different from their American counterparts in this respect. They are often different in the way they view international transfer pricing problems, however. The first part of this chapter contains a summary of the similarities and differences between American and non-American views and intracorporate pricing systems. The second part contains the major conclusions to be drawn from this study and a discussion of some of their broader implications for international business. Related areas in which further research is needed are also described.

Comparisons With American Multinational Firms

Topics discussed in this section closely follow the order of the previous chapter: the organizational structure of the company, the locus of decision making for transfer price determination, the sophistication of the system, the major variables and parameters considered, the orientations of the systems, and present trends.

Organizational Structure

It is difficult to say whether American or non-American multinational firms are more centralized. The largest firms on both sides appear to be

similarly organized. Operationally, however, non-American multinational firms take on a more fragmented appearance.[1] Their subsidiaries assume a lower visibility profile and make more efforts at accommodation than innovation.[2]

One thing that can be said is that their American subsidiaries are the least controlled of any group of subsidiaries. G. P. Lauter, in his article "Sociological-Cultural and Legal Factors Impeding Decentralization of Authority in Developing Countries," concluded that the view toward authority in the host country is the most important impediment to decentralization.[3] If the converse of this hypothesis is true, then it could be anticipated that firms operating in those countries where there is a favorable view toward authority would be more decentralized. This could account for American national companies and American subsidiaries of non-American multinational companies having such high degrees of autonomy. It could also account for the similarly higher degrees of control exercised by all multinational firms over subsidiary operations in developing countries.

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[1]John Fayerweather, in his book, International Business Management (New York: McGraw Hill, 1970), delineates two opposing operational strategies for global operations: unification vs. fragmentation. The fragmented approach is where subsidiaries accommodate to national practices, policies, and customs rather than operate on the basis of a single, world wide modus operandi.

[2]Accommodation is a sister strategy to fragmentation. See Chapter IV in Fayerweather, ibid.

[3]Lauter used the Delphi technique to determine which of the constraints set forth by Farmer and Richman were the most critical. For a list of the constraints, see Richard Farmer and Barry Richman, International Business: An Operational Theory (Homewood, Illinois: Richard D. Irwin, 1966). Lauter's article appeared in the Academy of Management Journal, September, 1969.

Other plausible explanations exist: the relatively higher sophistication of the U.S. market, the relatively larger size of American subsidiaries, the relatively higher degree of competition and change in the U.S., and the relatively tougher legal restrictions. These explanations were the ones suggested by firms both in this study and Jean-Luc Rocour's, and have been discussed in Chapter IV. They are all equally plausible and, combined with the view toward authority in the U.S., offer a reasonable explanation for the high degree of autonomy of the subsidiaries in the U.S.

National differences in the degree of decentralization are less easily explained. The relatively larger size of Italian and Scandinavian owned subsidiaries vis à vis their parents is a possible explanation. Several studies have portrayed German and British managers as being more conservative and often less advanced than their European counterparts, and have pointed out other differences.[1] Participants in this study also had consistent stereotypes of national management groups. Thus the higher degrees of control exercised by German and British parents, and lesser degrees of control by Italian and Scandinavian parents can be reasonably well explained.

Locus of Transfer Price Decision Making

No differences are apparent. Transfer prices are set by parent company financial executives regardless of firm nationality. The size of

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[1]See D. G. Clark and T. M. Mosson, "Industrial Managers in Belgium, France, and the U.K.," Management International, Volume 7 (2-3), 1967, pp. 95-100; David Grannick, The European Executive (London: Wiedenfield and Nicholson, 1962); and Mason Haire, Edwin Ghiselli, and Lyman Porter, Managerial Thinking (New York: John Wiley and Sons, 1966).

the staff involved varies but cannot be correlated with any specific corporate characteristic. In no case does the person responsible for setting prices have a rank lower than treasurer, and in most cases he is the financial vice-president or comptroller. Disputes are settled by parent company executives, usually all of the vice-presidents and the president. This same group sets the broad guidelines for transfer prices and approves major changes in orientation or policy.

Subsidiary participation is minimal to non-existent. Subsidiary managers have virtually no voice in transfer price determination, and often are not free even to reject the price or buy elsewhere. Their greatest participation occurs when intracorporate transfers are infrequent but high in value, or when their operations are larger than the parent's.

Sophistication of the Transfer Pricing System

Non-American systems are generally less sophisticated than American systems. This is true for all but the largest of non-American multinational firms. In an extremely candid letter from the comptroller of a German chemical company, "expediency" is cited as the basis for establishing most transfer prices. The comptroller further indicates that their somewhat lack of scientific approach to the problem is common among non-American firms.

Sophistication is associated also with system orientation. Market oriented systems are less sophisticated because they do not rely on complex cost determination formula. Hence the relatively greater use of market oriented systems by non-American multinational firms is an additional explanation for their lower degree of system sophistication.

Variables Considered

All multinational companies seemingly consider the same variables when they formulate their guidelines for transfer prices. The only major variables mentioned as being considered uniquely by non-American firms are export subsidies and tax credits. These latter variables are important primarily for French, British, and Italian firms. A straight comparison of the relative importance of variables considered by American and non-American firms cannot be made because of national variances on the non-American side. Country by country comparisons can be made, however, and the national differences which emerge from this research are summarized in Table IV.

National differences in the importance placed on these variables are a function of different management objectives and philosophies. These differences were discussed in Chapter V, and are reiterated in a later section of this chapter.

Parameters Considered

Non-American multinational firms do not consider as many parameters as their American counterparts. As mentioned in Chapter IV, only roughly half of the ten parameters considered by American firms receive attention.[1] The parameters which are not considered have to do with transfer pricing's relation to management performance evaluation. Uses of profit centers and return on investment analysis are not as widespread among non-American companies, and therefore problems caused by transfer pricing in these areas are

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[1]See p. 78 above.

TABLE IV

NATIONAL DIFFERENCES IN RELATIVE IMPORTANCE
GIVEN TO VARIABLES IN TRANSFER
PRICE DETERMINATION

Variables	Parent's Nationality						
	U.S.	Canada	France	Germany	Italy	Scandinavia	U.K.
Income Tax	1	1	1	3	1	3	3
Customs Duties	2	2	2	3	3	3	3
Inflation	1	2	2	2	2	3	2
Changes in Currency Exchange Rates	3	3	2	2	3	3	2
Exchange Controls	2	3	5	5	5	5	5
Improving Financial Appearance of Subsidiary	3	3	3	4	4	4	1
Expropriation	3	3	5	5	5	5	5
Export Subsidies and Tax Credits	4	2	2	4	2	4	2
Level of Competition	4	2	2	3	2	3	3

Weighting Scale

1 = high importance
2 = medium importance
3 = low importance
4 = not mentioned
5 = mentioned only with respect to non-American operations

Sources: U.S.: Interviews with International Accounting Firm Partners.

non-U.S.: Correspondance and interviews with subsidiary executives and International Accounting Firm Partners.

not regarded as important. The British are the only national group which rate these considerations as important.

Different managerial philosophies are again a major reason for national differences. The American emphasis on yearly profits and return on investment is in marked contrast to the Scandinavian emphasis on acceptability to host governments and long run profitability. German emphasis on fixed assets, cost efficiency, and prudent plant expansion is noticeably different from the French desire to minimize world tax payments. Table V contains a summary of these and other national differences.

System Orientation

Similarities and differences are discernable in terms of company size, competition in the product markets, and national preferences. Generally speaking, however, American systems of international intracorporate pricing are more cost oriented, while non-American systems are more market oriented.

The greatest similarity in systems is found among the large multinational firms. These firms have highly sophisticated cost-oriented systems regardless of parent nationality. They usually maintain additional records using market price equivalents for subsequent management performance evaluations, and do considerable maneuvering of liquid assets. The smallest multinational firms also have similar systems. Theirs tend to be market-oriented systems and there is considerably less maneuvering of income. Their degree of production integration is smaller, and their volume of intracompany transfers is less. These smaller firms are less concerned with intracompany pricing as a result.

TABLE V

NATIONAL DIFFERENCES IN RELATIVE IMPORTANCE
GIVEN TO PARAMETERS IN TRANSFER
PRICE DETERMINATION

Parameters	Parent Nationality							
	U.S.*	Non-U.S.	Canada	France	Germany	Italy	Scandi-navia	U.S.
1. provide a fair profit to the producing unit,	1	2	2	2	2	2	2	2
2. permit top management to compare and evaluate the performance of various corporate units,	1	2	2	2	2	2	2	2
3. be acceptable to national customs officials for the purpose of duty valuation,	1	1	1	2	1	2	1	1
4. be acceptable to national tax authorities and anti-trust officials,	1	1	1	2	1	2	1	1
5. enable the purchasing unit to meet profit targets despite the pressure of competitive prices,	1	1	1	1	2	1	2	1
6. result in a reduction of executive time spent on pricing decisions and mediation of intercorporate pricing disputes,	1	1	2	1	1	1	2	1
7. provide control over the pricing practices of foreign subsidiaries to insure that profit goals are met,	1	1	1	1	1	1	2	1

TABLE V--Continued

Parameters	Parent Nationality							
	U.S.*	Non-U.S.	Canada	France	Germany	Italy	Scandi-navia	U.K.
8. provide management with incentives in both the product divisions and in the marketing divisions,	1	2	2	2	2	2	2	2
9. insure that there is a regular and sufficient flow of goods and product information,	1	2	1	2	2	2	2	2
10. given a basis for reflecting actual profits (and costs) to maintain the control facets of operating against a budget, and preserving the psychological factor of forcing a manager to meet or exceed profit goals with a wider latitude of action than that which is afforded when operating solely against a set budget.	1	2	2	2	2	2	2	2

*No relative weightings are identifiable for American multinational firms

Weighting Scale
1 = important
2 = not as important

Sources: Correspondance and interviews with subsidiary executives and international accounting firm partners

The biggest differences are found between the medium to large size multinational firms whose products or environments permit them some choice over system orientation. The degree of competition in the product markets is the major differentiating factor. Firms which operate with a degree of monopoly power in their product markets use cost oriented systems, while those who cannot, do not. The corporate size factor is perhaps what underlies the small differences in systems of very large multinational firms. Their size gives them degrees of monopoly power in the markets in which they operate and results in their viewing the intracorporate pricing problem in the same perspective. This similarity in perspective may also support the hypothesized existence of James Burnham's "third culture" in which managers of the large companies of highly industrialized societies tend to become a distinct class, regardless of the political systems in which they operate.[1]

Apart from these very large multinational firms, differences in national preferences do exist. The French prefer non-market-oriented systems because they enable them to minimize world tax payments. British firms have a similar cost-orientation preference, but their goal is to successfully achieve target return on investment rates. The Italians use market oriented systems to maximize corporate income in Italy, which is equivalent to minimizing their tax liability. Canadians also employ market oriented systems, but essentially because of specific government regulations and a desire to maintain good relations with governments.

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[1]This type of management is required for the operation of what Kindelberger defines as the international corporations. See page 6 above.

Scandinavian firms view only this latter consideration as paramount, and consequently are the biggest supporters and users of market-oriented systems. Germans are the least concerned with transfer pricing, do not seem to prefer one orientation over any other, nor exhibit any dominant pattern. New German regulations will probably force a shift to more market oriented systems, however. Additional similarities and differences on specific areas can be seen in Tables IV and V.

Trends

Several major trends are evident in all systems of international intracorporate pricing. The use of market oriented systems is increasing significantly, as is the importance of transfer pricing for firms. Increases in the volume of international transfers due to economic expansion and greater integration of global operations heightens the amount of potential profit distortion. This increase in potential brings with it increased concern and surveillance by local groups external to the firm, results in greater pressure for the use of market prices, and in several cases specific government regulations. Internal pressures are also increasing due to more widespread use of profit centers to evaluate subsidiary performance, a concept which requires the use of market prices.

Neither the external nor internal pressures are restricted to particular nationalities. They are both global and increasing in importance. Their continuation will result in greater uniformity in system orientation and eliminate many of the national differences.

Conclusions Pertaining to the Hypotheses

Hypotheses formulated for this study were designed to serve as a means of narrowing the scope of the research and as a basis for drawing conclusions. It was not anticipated that they would be statistically valid in all cases or in all respects. The size of the multinational corporation emerged as the major differentiating factor in terms of their applicability.

HYPOTHESIS ONE states that all multinational firms face the same environmental problems with respect to international intracorporate pricing. The conclusion of this research is that the hypothesis is correct for the very large multinational firms, but incorrect for others. Problems encountered are largely a function of the number of different environments in which a company operates, and the smaller multinational firms do not operate in as many. Some firms operate only in relatively stable political and economic environments, while others operate in environments of varying degrees of stability. Many companies do not encounter problems with exchange controls, devaluation and expropriation as a result. Most of the non-American firms do not employ profit centers or return on investment analysis, and therefore they do not perceive transfer pricing as causing problems in these areas either.

Multinational firms operating in the same countries do face essentially the same environmental problems, however. Differences that may exist result from product differences, such as specific laws covering certain products but not others (a tariff for example).

HYPOTHESIS TWO states that not all multinational corporations perceive the importance of the transfer pricing problems in the same way.

This hypothesis appears to be correct because differences in importance perception exist for even the larger multinational companies. Relative importance varies with the diversity of international operations, degrees of competition, the nature of the product, and parent company nationality. For example, customs duties are not as important a problem for intracorporate transfers within the Common Market as they are for German-U.S. trade. Similarly, value determination and justification are not perceived as important problems for firms which have to use market prices because highly competitive markets establish recognizeable equivalents, while these problems are important for firms using cost-based transfer prices. Profit center performance evaluation and return on investment analysis are not important for most non-American multinational firms because they are not widely employed, while these considerations are cited as being important by American multinational firms.

HYPOTHESIS THREE considers differences in importance perception to be a function of differing cultural influences. While cultural differences in philosophy and objectives are a major cause, they are not the only ones as the conclusion to hypothesis two indicates. They do help explain differences in importance perception when different nationality firms operate in identical environments, however. A Scandinavian, a German, and British equipment manufacturer all place different emphasis on environmental problems and operational parameters even though all of them produce similar equipment in the U.S. The Scandinavian firm views acceptability to the host government as the most important consideration, the British firms views return on investment as the most important, and the German firm does not consider either of them important. Tables IV

and V show that these cultural differences exist, even though they are not the only cause of differences in relative importance perception.

HYPOTHESIS FOUR is that cultural differences result in different international intracorporate pricing systems. Like the conclusion to hypothesis three, cultural differences are found to be only one influential factor. Differences in international operation size and diversity, degrees of competition, legal laws, and product types are all important influences. Differing types of transfer pricing systems used by firms of differing nationality can be often explained by cultural difference. A Scandinavian firm uses market prices because they are the most acceptable to host governments, the British firm uses cost based prices because they permit the necessary manipulation often required to ensure that return on investment targets are met, and the German firm uses a combination system because it allows it to use market prices when they are available and costs when they are not.

Cultural differences in management philosophy and objectives are often subjugated to other environmental considerations, however. The big international aluminum and petroleum companies have similar systems and viewpoints irrespective of parent company nationality. The smaller firms operating in markets where there are recognized market prices and legal regulations specifying their use employ market oriented intracorporate pricing systems. So although cultural differences influence the actual transfer pricing systems in use, they are certainly not the only important factor.

HYPOTHESIS FIVE is that no single transfer pricing system is optimal for all multinational corporations. The findings of this study

strongly indicate that this hypothesis is correct. The different philosophies, objectives, environments, products, degrees of production integration, and sizes of multinational firms do not permit any existing type of transfer pricing system to be universally optimal. A corollary is that no single quantifiable solution procedure exists which is uniformly applicable for deriving optimal international intracorporate prices. An optimal system could possibly be developed for the truly international corporation envisioned by Kindleberger[1] in which business philosophies, objectives, and operations are supra-national, but neither this system nor this type of international corporation presently exist.

Second Order Conclusions

Other major conclusions of this study are as follows.

1. International intracorporate pricing represents one of the most closely controlled corporate operations, regardless of parent nationality.

2. The high degree of control over transfer pricing is invariant with respect to the company's degree of authority centralization over other areas of corporate decision making.

3. The degree of subsidiary participation and influence are minimal, despite their power and independence in other areas. This is true even for the most autonomous subsidiary group, the American subsidiaries of non-American multinational corporations.

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[1]See p. 6 above.

4. Transfer pricing policy is determined by parent company executives, and executed by the top ranking financial officer.

5. American systems of international intracorporate pricing are distinctly more cost oriented and more complex than non-American systems.

6. The very large multinational companies of all nationalities exhibit the smallest differences in system orientation and views of attendant problems. They consider essentially the same variables and parameters, and utilize similar techniques.

7. Pressures for uniformity are pervasive and increasing. These pressures are eminating from sources both external and internal to the firms, and underlie the trends toward greater use of market oriented systems and the increasing importance given transfer pricing by corporate management.

Implications

The major implication of this study concerns the conclusion to the fifth hypothesis that there does not exist a universally optimal system of international intracorporate pricing. One only has to consider the problems of a single multinational firm: buying, producing and selling hundreds of different raw materials, semi-finished, and finished goods in several constantly changing economic, social and political environments to appreciate the magnitude of the problem.[1] There is considerable doubt that any single transfer pricing system can be always optimal for even one firm under these circumstances and given diverse management objectives. When

[1]See Appendixes III and IV for greater elaboration on this point.

additional firms with differing objectives, products, and environments are added, the determination of a uniform solution becomes gargantuan. In fact, it is impossible given existing quantitative and qualitative models.

It may well turn out to be that the "optimal" system is one that minimizes conflicts with external groups, such as governments. If so, then multinational firms have much to learn from the Scandinavian companies whose systems are designed to meet this criteria. Concern by external groups over transfer pricing is increasing rapidly and this development portends trouble for those firms whose systems are not market oriented and which result in considerable profit distortion.

A second implication concerns the effect of widespread use of other than market prices on the analysis of corporate financial reports and international trade statistics. The potential distortion of reported corporate income becomes increasingly great as the volume of intracompany transfers increases. This is true for any multinational company, but particularly so for non-American companies whose methods and degrees of disclosure confuse and befuddle even the experts.[1] Investing in corporations which do not report the volume and value of intracorporate transfers and their effect on the reported financial position can be very hazardous. The use of other than market prices for intracorporate transfers can similarly distort international trade figures. The value of a country's imports from another country may be understated if the exporting firms consistently sell at undervalued transfer prices to their importing

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[1]See Robert Ball, "The Declining Art of Concealing Figures," op. cit., and "Lifting Corporate Curtains," Fortune, March, 1966.

subsidiaries. Changes in balances of trade would not only be possible but probable if all mutlinational firms used market prices for all of their intracorporate transactions. The use of "swap" arrangements such as those in the aluminum and petroleum industries may also be distorting balance of trade statistics. Creation of the accounts receivable and payable between the two non-affiliated parent companies shows up as short term direct investments rather than as entries in the trade sector (the current account).

A third implication involves the different emphasis placed on transfer pricing by corporate executives and academicians. Executives consider transfer pricing an extremely important area of decision making, and many of them regard it as the most critical of short run decisions. The fact that only top ranking executives are involved in their determination is indicative of its importance. Secondly, it is the top financial executives who have the responsibility for setting and administering transfer prices, rather than cost or management accountants. Academicians, on the other hand, do not accord similarly high importance to transfer pricing either domestically or internationally. Only very superficial treatments exist in business school texts or collections of readings, and the vast majority of them treat intracorporate pricing only as a peculiar accounting problem for domestic operations. The result is that even graduate business students know little or nothing about one of the most important on-going financial decision areas of a firm. Its lack of proper treatment by academicians is probably in large part responsible for the lack of scientific approaches to the problem in practice.

The fourth implication has to do with the benefits of cross-cultural research. There is much to be learned from studying how other cultures view

a given problem and how they go about solving it. Such research not only forces one to clarify and re-examine his own conceptions and solutions but may also point to better alternatives. The implication of this study is that non-American corporations do view the international transfer pricing problems differently and have developed their own methods to solve or circumvent them. Some of their views and solutions are better (in some sense) than American ones, and some are not as good, but they do present viable alternatives. One thing this study has shown is that problems American multinational firms experience are not unique because non-American firms encounter them too. The tremendous diversity in transfer pricing systems further shows that there is neither national nor international agreement on what constitutes the optimal system. Perhaps greater interchange of views and information on the relative successes of similar systems under different circumstances and different systems under similar circumstances will provide more useful answers to the problem.

A fifth implication is that corporate size may exert a harmonizing influence on different national management philosophies. The larger multinational firms can take better advantage of unified global operations and hence they exhibit closer control and more centralization than smaller multinational firms. They perceive the same basic problems of operation because they themselves or their executives have encountered similar ones. If national differences in views and systems decrease as corporate size increases, then perhaps the behavior of large corporations will become less difficult to predict. The substantial differences in intranational management philosophies discovered by Haire, Ghiselli and Porter may have resulted

from this type of corporate size factor.[1] That is, the differences in philosophies within nations may be attributable to differences in the size of the corporations for which the managers work. If so, then James Burnham's prediction about the emerging "third culture" may be coming true.[2]

A final implication is that it is still of considerable importance for groups external to the firm to increase their knowledge about international intracorporate pricing. If the potential income distortion is increasing as it appears to be, then groups who will be affected should take counterveiling measures to lessen the opportunities for, and possible magnitudes of, distortion. The new regulations in the U.S., Canada, and Germany, and the joint action taken by the Middle Eastern oil producing countries (O.P.E.C.) are good examples of such measures. The non-governmental groups should also increase their awareness, although specific disclosure of intracorporate pricing systems will probably result only from government legislation

Areas Needing Further Research

This study was an exploratory one in addition to being a continuation of past research on international transfer pricing. Several major areas remain either unexplored or in need of further study. There is still a great deal to be learned about non-American system systems, in particular, how successful they have been vis a vis each other and American

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[1]They report greater differences in managers within countries than between them.

[2]See p. above.

systems. Such research could focus on the relative successfulness of different systems in terms of profit maximization, security of capital, competitive position maintenance, or intracorporate conflict avoidance, goal congruence, and interpersonal behavior. Discovering the extent to which specific systems have been successful in minimizing firm-environment interface conflicts would also be of value.

Additional and potentially different information about non-American systems and viewpoints could be obtained by utilizing the non-American parents as the source for the research information. Often times subsidiary managers have different perspectives of what business operations are designed to achieve and how they are determined or influenced by environmental factors. They are also less qualified to speak on global policies and operations. Conducting future on-location research with parent company executives would involve considerably more money and time, but could prove worth it.

Enlarging the sample and changing the information-generating technique always offer means for gaining additional insights which permit broader, more valid generalizations, and provide a better base from which to make inferences and predictions. Further research could involve the non-American multinational companies which do not have American subsidiaries or which are not involved in manufacturing. Specific questionnaires could be used to verify more specifically the findings of this present research. More executives could also be interviewed, as this method proved to be the most effective for generating useable information.

A study of a particular industry could also be of value.[1] A fully integrated industry, such as the petroleum industry, offers the most complex system and series of interrelationships. It is also the industry which appears to do the most transfer price manipulation and maneuvering of income, but about which the least amount of information is publically known. Concentrating on a specific industry would also offer an opportunity to examine the extent of cultural differences in transfer pricing systems and views within a given industry-environment. In addition, it would provide an opportunity to check the importance of corporate size with respect to transfer pricing philosophies and systems.

A study of patterns of transfer pricing and dividend policies would also be interesting. This research could disclose which of the two major methods of maneuvering liquid assets is the most important and how well they work together to attain corporate objectives.

Finally, additional research is needed to determine a feasible quantitative approach. David Rutenberg's model is admittedly a deterministic solution procedure, but a step in the right direction. As he points out, stochastic programming with recourse permits flexibility in planning for risk so long as updated information can be inputted at only one instant in time.[2] Rutenberg also alludes to the possible use of the maximum principle of the caconical equations of Pontrygin as extended to stochastic

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[1]James Shulman also mentioned this area as one which further research should be beneficial.

[2]See D. W. Walkup and R. J. B. Wets, "Stochastic Programming with Recourse," S.I.A.M. Journal of Applied Mathematics, Volume 15, Number 5 (September, 1967) pp. 1299-1314, and David Rutenberg, op. cit., p. 672.

control systems by Kushner and Shweppe.[1] It would be interesting to see if such quantitative methods could be used to determine optimal transfer prices for international operations, even though it appears doubtful.

SUMMARY

> Occasionally there is a tendency to underestimate the importance of exploratory research and to regard only experimental work as 'scientific.' However, if experimental work is to have either theoretical or social value, it must be relevant to broader issues than those posed in the experiment. Such relevance can result only from adequate exploration of the dimensions of the problem with which the research is attempting to deal...The most careful methods during the later stages of an investigation are of little value if an incorrect or irrelevant start has been made.[2]

The alleged importance of international transfer pricing was well substantiated by the participants in this study, as it comprises one of the most crucial areas of both short-run and long-run corporate decision making. This research set out to explore non-American systems of international intracorporate pricing and to compare them with those of American multinational corporations, and has been successful in achieving these objectives. Conclusions were reached in terms of explaining differences in both the problems perceived and encountered, and the methods that are used to solve or circumvent them. There is much additional work to be done, however, both in further verifying the conclusions of this study and in exploring related areas which have been described. Hopefully both this researcher and others will be able to carry on.

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[1]See Harold Kushner and F. C. Shweppe, "A Maximum Principle for Stochastic Control Systems," Journal of Mathematical Analysis and Applications, Volume 8 (March, 1964), pp. 287-302, and Rutenberg, op. cit., p. 672.

[2]Selltiz et. al., op. cit., p. 52.

APPENDIX I

Dear Sir:

By way of introduction, I am a graduate student at Indiana University, working towards a doctoral degree in international business administration. My specific purpose in writing to you is to ask for your cooperation in an important research project. I would like to know the variables which you and your parent company consider when you formulate the prices for the goods and services that you sell to each other. Let me emphasize that I am not interested in your inter-corporate pricing system, but only in the environmental conditions that you consider when you make the pricing decisions.

Your reply will be kept strictly confidential, and your answer may be in the form of either general or specific remarks. Any additional comments and observations you would care to make about the problems encountered in general when international firms sell to their subsidiaries (and vice versa) would also be appreciated.

It is my intention to publish the results of my research in article and monograph form, copies of which would be available. In any event, the completed study will be available to the business community through the University library system.

Whether the results are published or not, the most important aspect is that this seems to be an area for pioneering research on a problem that puzzles most executives of international firms. The difficulties are not solved by the initial decision on pricing, but persist as discussions continue on such matters as profit-centers, allocation of overhead, differences in corporate income tax, degrees of inflation, exchange controls, and other items which you can think of faster than I can list. My goal is to formulate some guidelines which will be helpful to you and others in your position.

In order to make the results of this research valuable to international businessmen, I feel that it is very important to have someone with your unique experience participate and reply as fully and as frankly as possible. Therefore I hope that you will give this letter some thought and will take the time to reply to it. I would appreciate receiving your response before August 1, 1970, if possible. I would also like to have the opportunity to talk with you personally, perhaps sometime during this year, if you would consent.

Your cooperation in this study, be it by correspondance and/or by personal contact, would be very much appreciated.

APPENDIX II

Dear Sir:

I have enclosed with this note a series of questions I would like to discuss with you during our forthcoming meeting. In addition, I have included a brief summation of what others have found to be the variables and parameters of American international intracorporate pricing systems. I would like very much to hear your thoughts on it too, particularly in regard to its completeness and authenticity (based on your experience). I would also be interested in what you consider to be their rank of importance. Finally, I would like to have your suggestions as to the possible additions and deletions to this list that would convert it to a "non-American" one (perhaps only the relative importance of the components would be different).

I hope this note and its enclosures will help you better understand the type of information I am seeking.

Sincerely yours,

Jeffrey S. Arpan
Department of International
Business Administration
Graduate School of Business
Indiana University

Enclosures

APPENDIX II--Continued

Questions for Discussion

1. What is the percentage of your business involved in international business?

2. Where are the transfer pricing decisions made, and who makes them? Are they the same as those involved in making the regular pricing decisions?

3. What is the frequency with which the subject matter of transfer pricing arises, and its relative importance?

4. What are the conditions which, in your mind, are usually responsible for the subject arising (e.g., tax considerations, profit-center evaluation problems, etc.)?

5. What is the orientation of your transfer-pricing system, or others that you are aware of (i.e., market oriented vs. cost oriented)? What are the reasons behind, and relative successfulness of, the above types of orientation? Have the unequal rates of inflation in Europe and Latin American countries and the U.S. complicated pricing decisions and systems?

6. Have your routines of shipment and modes of transport been altered in light of more modern logistics or more prosaic factors to control costs and ease pricing problems?

7. Are your products involved in the current quota and tariff maneuvering of the U.S.? If so, are you keeping abreast of the ebb and flow in relation to both operations and pricing? Will this factor be of high importance? (Will third country origin, for example, be a solution to the transfer pricing problem?)

8. What do you see as present trends in international intracorporate pricing systems: more vs. less complexity, more vs. less flexibility, more vs. less emphasis, more vs. less importance?

9. What are your own views on the international transfer pricing problem, both generally and specifically?

APPENDIX II--Continued

THE AMERICAN SIDE

Variables Considered Are:

1. Corporate Income Taxes
2. National Import Duties
3. Exchange Restrictions
4. Subsidizing High Cost Plants
5. Price Competition
6. Inflation
7. Devaluation
8. Expropriation

Subject to These Parameters:

1. Proving a fair profit to the producing unit,

2. Permitting top management to compare and evaluate the performance of various corporate units,

3. Being acceptable to national customs officials for the purpose of duty valuation,

4. Being acceptable to national tax authorities and anit-trust officials,

5. Enabling the purchasing unit to meet profit targets despite the pressure of competitive prices,

6. Resulting in a reduction of executive time spent on pricing decisions and mediation of intercorporate pricing disputes,

7. Providing control over the pricing practices of foreign subsidiaries to insure that profit goals are met,

8. Providing management with incentives in both the product divisions and in the marketing divisions,

9. Insuring that there is a regular and sufficient flow of goods and product information,

10. Giving a basis for reflecting actual profits (and costs) to the divisions involved in order to maintain the control facets of operating against a budget, and preserve the psychological factor of forcing a manager to meet or exceed profit goals with a wiser latitude of action than that which is afforded when operating solely against a set budget.

APPENDIX III

The Complexity of the Transfer Pricing Problem

Consider the problems of a large European multinational firm. The principle activities of the corporate family consist of the manufacture and sale of pharmaceutical products, veterinary products and animal feedstuff concentrates, toiletries, cosmetics, home remedies and food and drink products. The company is organized into four major divisions: the pharmaceutical division, the products division, the European division, and the Western Hemisphere division which handles operations for the U.S., Canada, Latin America, Australia and New Zealand. The parent operates 62 subsidiaries in all, but not all of them are wholly owned. Eight of them fall into this latter category. Several of the subsidiaries themselves have ownership in other subsidiaries. The parent's subsidiaries are located in 24 different countries and in all four quadraspheres.[1] Sales in 1970 totaled £161 million, over half of which were made outside the parent's country, and of the reported group trading profit of £30 million, two-thirds were attributable to international operations.

Intracorporate transfers comprise nearly one-half of group sales, but the transfer prices are not uniformly based. Sales of toiletries, cosmetics, food and drink products and home remedies are customarily made at arm's-length prices. The availability of market equivalents is the major reason given, although governmental concern and surveillance is

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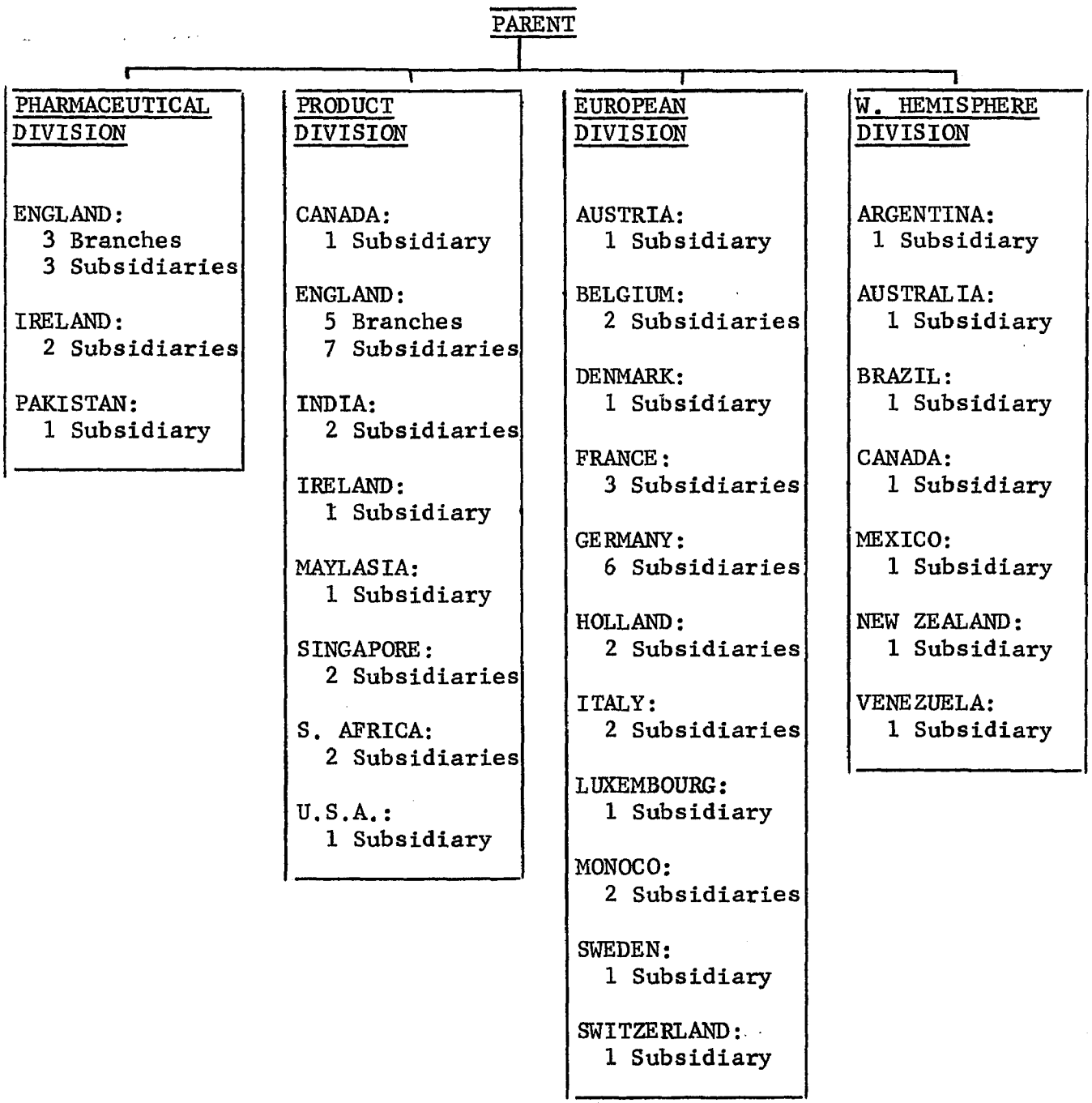
[1] See Chart II.

CHART II

A EUROPEAN FIRM'S INTERNATIONAL
ORGANIZATIONAL CHART



APPENDIX III--Continued

becoming increasingly important. Sales in these areas account for 62% of the total group sales, but only 40% of the total group profit. They are also the areas in which the least amount of internal trading is conducted.

Cost is the basis for all other intracorporate sales. The two largest product groups are pharmaceuticals and veterinary products and animal feedstuff concentrates. They comprise 36% of sales but 50% of total group profits. The cost base is full input cost plus an overhead recovery allocation. A profit margin is added to the base cost: usually 15% for bulk goods and 25% for finished goods. The mark-up varies considerably from time to time and from country to country, however. The stated goal is to conform to legal requirements of host countries, but where there are none, variations occur in transfer prices. They use a very high landed cost with a full profit recovery in most developing countries. Getting the money out of these areas and protecting against price controls are the two major reasons. Intracorporate transfers to subsidiaries in more stable environments are made at much lower prices, particularly to those countries with lower tax rates. Any of these prices are subject to change, however, because return on investment and profit center performance are of major importance, and often require transfer price manipulation and adjustments.

The point to be made is that the different objectives, products, environments and operations of this company do not permit a single transfer price orientation to be optimal at all times, or even at a given point in time. No single system orientation can be optimal for all firms at all times if it cannot be optimal for even one firm at a given point in time.

APPENDIX IV

Problems of a Single Environment

The size of the international operation and the number of environments are not always the causes of system orientation problems. The characteristics of a single particular environment can also cause difficulties in the selection of an optimal system orientation. Consider the table below. All the environmental characteristics on the left side call for the use of market prices, while those on the right call for cost based prices, ceteris paribus, and given the basic corporate objectives of profit maximization, security of capital, and competitive position maintenance. Seldom do the characteristics of a real world environment all line up as nicely as those on the chart. When characteristics from both sides are present, then picking an optimal orientation becomes difficult.

Suppose a country has high income tax rates, high customs duties, intense price competition in the company's product market, restrictions on dividend remittances and on the value of goods that can be imported, high rates of inflation, and a banking community which makes loans on the basis of subsidiary financial position. If market prices are used for transfers to the subsidiary, then higher duties will have to be paid, the competitive position of the subsidiary may suffer, fewer goods can be imported and the subsidiary will not appear to be as profitable. By using market prices however, the parent will succeed in paying lower taxes, in getting the most amount of liquid funds out, and in obtaining the most control over pricing practices. The use of cost-based transfer prices

APPENDIX IV--Continued

would reverse the above results. Thus either system orientation would cause both favorable and unfavorable results.

If the environmental characteristics did not change, then a weighting scale could be devised to maximize the possible gains or to minimize the possible losses. But the characteristics do change in importance and in number, and if the changes are material enough, they may dictate a change in system orientation. Additional complications are added when the firm operates in more than one environment, each with different characteristics and different rates of change. All of these differences make it virtually impossible for a single system orientation to be always optimal: it may work in one environment for one period of time, but cause problems in other environments at the same time or at later times.

Conditions in Foreign Country Calling for Specific Transfer Pricing Policy from the Domestic Parent to its Foreign Subsidiary.

Low Transfer Price	High Transfer Price
(1) Existence of restrictions on investment dollar outflows from the U.S.	(1) Low import duties
(2) Existence of need to improve the profit picture of the subsidiary	(2) Higher income tax
(3) Existence of intense price competition	(3) High rates of inflation
(4) Existence of exchange restrictions on the value of the amount of goods the subsidiary can import	(4) High danger of devaluation
(5) Existence of a desire to circumvent parts of the I.R.S. code	(5) Unstable and unfriendly government (danger of expro-
(6) Existence of a desire to subsidize inefficient subsidiaries	(6) Existence of exchange restrictions on dividend remittances or other profit repatriations
	(7) Less than a 50% owned subsidiary

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