Strategic Management

in a Global Economy

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Strategic Management in the Global Economy

Third Edition

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JOHN WILEY & SONS, INC.

New York Chichester Brisbane Toronto Singapore

Lawrence H. Wortzel died in February 1996, shortly after this book was completed. He will be remembered for his deep devotion to family, students, and colleagues, his prodigious intellect, his amazingly eclectic range of interests, and for his uniquely clever sense of humor.

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This book was set in Times Roman by Achorn Graphics and printed and bound by Donnelley/Crawfordsville. The cover was printed by Lehigh Press.

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Library of Congress Cataloging in Publication Data:

Strategic management in the global economy / [compiled] by Heidi Vernon-Wortzel, Lawrence H. Wortzel. — 3rd ed.
p. cm.
Rev. ed. of: Global strategic management. c1990.
Includes bibliographical references.
ISBN 0-471-15873-9 (pbk. : alk. paper)
1. International business enterprises—Management. 2. International business enterprises—Planning. 3. Strategic planning. 4. International economic relations. I. Vernon-Wortzel, Heidi, 1938- II. Wortzel, Lawrence H. III. Global strategic management.
HD62.4.V483 1997
658.4'012—dc20 96-8695
CIP

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

PREFACE

Managers no longer think the boundaries of their business world begin and end in their own home country. Whether based in New York, Washington, D.C., Sao Paolo, Paris, or Tokyo, over the last decade managers have become increasingly sophisticated in assessing worldwide opportunities and threats. Foreign competition inside home markets has steadily increased as has foreign investment through mergers, joint ventures, and greenfield startups.

Observing the U.S. situation, Robert B. Reich predicted that by the year 2010 a majority of Americans would be working directly or indirectly for global entities that have no particular nationality. The issue of nationality continues to be less and less important. Companies of all nationalities serve global customers. In the mid-1990s, Unilever PLC, the Anglo-Dutch consumer products giant, sold its ice cream, detergent, and beauty aids all over the industrialized world and did extremely well in developing countries such as Brazil, China, and India. Moet Hennessy Louis Vuitton, the French champagne, perfume, and luggage company, recorded huge profits from its exports. Asian consumers snapped up the company's expensive luxury products. Samsung, the South Korean conglomerate, became a highly significant force in the global market for microprocessor chips.

Reflecting this global view, Coca Cola Company was the first major U.S. business to eliminate the concept of "domestic" and "international." In January 1996, Coke announced a basic shift in its world view by downgrading its U.S. business to just one of six international business units in the company's geographical regions. As an analyst noted, Coke could now adopt the song "We Are the World" as its corporate motto.[1]

American managers, like their European and Japanese counterparts, have become more and more sophisticated in searching for, identifying, and capitalizing on overseas ventures. Restrictive national legislation at home and abroad is diminishing. National borders and protectionist legislation provide few barriers to investments, mergers, acquisitions, and takeovers.

Companies are looking to global markets and even undertaking dramatic reorganization to become globally more competitive. U.S. telecommunications giant AT&T, for example, announced its plan to split into three parts: a communications services company; a computer company; and a communications equipment company. To be sure, there were domestically competitive reasons for this dramatic move but increasing the

[1] Glenn Collins, "Coke Drops 'Domestic' and Goes One World," *New York Times*, January 13, 1996, p. 35.

company's global competitiveness was a key factor in the split-up. The new entities would allow AT&T to offer products to the entire global communications industry. Under the new structure AT&T proposed to build and launch a multibillion-dollar global satellite network. This move would take the Internet into outer space. AT&T's traditional use of fiber optics, undersea cable, copper wires, and land-based communication switches would be augmented by a network of satellites relying on spacecraft positioned around the earth. Each of the 12 satellites would have a data-carrying capacity of 1 billion bits of information per second and could serve 10 million customers worldwide.

U.S. firms and foreign subsidiaries based in the United States are recognized global opportunities and experiencing substantial growth. In 1994, these companies increased their combined overseas shipments 8 percent to $151 billion. The largest portion of exports, about 55 percent, went to the industrialized markets in Europe, Canada, and Japan. Other Asian markets are booming as consumer demand increases for a wide variety of products and services. DRI/McGraw-Hill forecasts that Asia's market for imports will reach $564 billion in 1995 and growth will average 12 percent annually over the next five years.[2]

Asia continues to make substantial progress in slashing tariffs, deregulating financial sectors, and opening former monopolies to foreign and local investors. The members of the Association of South East Asia Nations (ASEAN) are making progress toward a common market of 420 million people. Indonesia, Singapore, Thailand, the Philippines, Malaysia, Vietnam, and Brunei have already agreed to push for the year 2003 as their deadline for slashing tariffs on manufactured goods to no more than 5 percent.

The 18 members of Asia-Pacific Economic Cooperation (APEC) include the world's three largest national economies: the United States, Japan, and China. Talks among members have resulted in a commitment to substantial trade facilitation and liberalization. Although members have different political and ideological agendas, plans to implement liberalization measures will begin in January 1997. No doubt problems and difficulties will occur, but most observers think there is good reason to believe that Asian regional trade organizations will be successful.

Asian businesses, taking advantage of the new environment, are becoming global players. Many Japanese companies and some Korean companies are already industrial giants. The new Asian entrants into the global marketplace are overseas Chinese conglomerates. Many are forming strategic alliances with global companies to gain access to higher levels of technology and expertise. In the near future, these traditional family-run companies will need huge numbers of professional managers who can straddle the Asian and Western cultures. Many of the new managers will be U.S.-educated family members who know the value of professionalizing management, sticking with core businesses, and remaining entrepreneurial.

European companies will take advantage of continued European integration and incorporation of new members into the European Union (EU). The move toward a single currency, while still difficult and moving forward in fits and starts, should be resolved by the year 2000. Eastern European integration is likely to continue as free market principles are pursued.

[2] James Aley, "New Life for the U.S. Export Boom," *Fortune,* November 13, 1995, p. 73.

European officials are taking aggressive steps to forge new alliances. In November 1995, they approved initial work leading to a new Trans-Atlantic Free Trade Agreement with the United States. The EU already provides more than half of all foreign direct investment in the United States, while more than 40 percent of U.S. overseas investment is in Europe.[3] Europeans are looking to develop new global markets wherever opportunities occur.

The Mexican monetary crisis and peso devaluation put a temporary damper on enthusiasm for NAFTA. But by 1996, U.S. companies found that they had suffered very little, if at all. Most companies managed to find other markets for products that would have been sold in Mexico. A few companies were even able to take advantage of the weak peso that made their products cheaper abroad. Before the devaluation, Eastman Kodak had exported nearly two-thirds of the film, floppy disks, cameras, and camera parts it made in Guadalajara. After the devaluation, Kodak increased exports to 85 percent. Compaq Computer offset a decline in Mexican sales with gains in other Latin American markets.[4]

Almost no one feels that NAFTA has lived up to the expectations of its most vocal supporters. Although tariffs between the United States and Mexico have been slashed, large numbers of jobs in the United States and Mexico have not materialized. However, Mexico has accelerated the sale of government-owned railroads, airports, and the oil monopoly. Mexico has also liberalized its foreign investment law so that U.S. companies are now major players in banking, telecommunications, and other important parts of the economy.[5]

New Latin American players have emerged. Brazil, Argentina, Uruguay, and Paraguay together account for 70 percent of South America's total gross domestic product. Their new trade agreement, Mercosur, is working toward eliminating most tariffs. The European Union, hoping to offset sluggish demand at home, is pressing for a free trade agreement with Mercosur by 2005. Chile, whose incorporation into NAFTA is still pending, signed a separate free trade agreement with Mexico and is wooing Japanese investors. Some observers worry that U.S. businesses will lose opportunities in an environment where others are taking a more active role.

The challenges for global managers are immense as the next millenium approaches. The development of the World Trade Organization and the reduction of trade barriers creates a new trade environment for everyone. Advances in telecommunication and global information integration offer unlimited and currently unforeseeable opportunities. Mergers and acquisitions across national boundaries reduce national cultures and identities. New global competitors merge as former competitors decline.

In the last edition of this book we focused on U.S. corporations and competitiveness. We noted that global corporate restructuring and a ferociously competitive international environment made it imperative that managers develop new skills and new global per-

[3] Kyle Pope and Robert S. Greenberger, "Europe Seeks Trade Pact with U.S. Similar to Nafta," *Wall Street Journal,* November 27, 1995, p. A14.

[4] "Many U.S. Companies in Mexico Escape Serious Damage from Economic Woes," *The Wall Street Journal,* September 22, 1995, p. A10.

[5] Anthony DePalma, "For Mexico, Nafta's Promise of Jobs Is Still Just a Promise," *New York Times,* October 10, 1995, p. A1.

spectives. We observed that the business functions—marketing, production, finance, and R&D—would be more complex to manage and more difficult to control.

Today's global managers are concerned with *multiculturalism.* The notion is that as the world's centers of economic activity are becoming more dispersed, global companies should choose board members and senior managers who broaden their perspective. Multiculturalism includes more than awareness of other cultures. It incorporates global standards of diversity, ethics, environmentalism, and quality. It requires global managers to acquire new perspectives and skills.

We have changed the title of this edition of the book to reflect its global orientation. We have tried to eliminate ethnocentricity in the readings and introductory essays. Although the two previous editions have had some carryover in readings, we decided to keep only three selections from the previous edition. We have responded to the comments of faculty and students who told us what was valuable and what we could do better. The readings in this edition are very current. They reflect our commitment to application and to helping students develop real global management skills for the remaining years of this century.

We designed this book to give upper-level undergraduates and M.B.A. students a firm grasp of issues central to the management of global corporations and new ventures. Instructors will find they can use these readings in lieu of a textbook or in combination with internationally focused cases. We are grateful to our editors Petra Sellers and Ellen Ford, production editor Melanie Henick, illustration coordinator Anna Melhorn, marketing manager Leslie Hines, and to colleagues who reviewed the previous edition and this manuscript and who provided valuable comments in the development of the third edition. These include: Douglas Ross, Towson State University, Bruce McKern, Carnegie Mellon University, Len Trevino, University of Miami, Charles Toftoy, George Washington University, Elizabeth Rozell, Missouri Southern State University, Mingfang Li, California State University Northridge, and Stanley Slater, University of Colorado.

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SECTION 1

GLOBAL FIRMS AND THE GLOBAL ENVIRONMENT

Multinational and global firms have been part of the world economic landscape for some years. They have been increasing in numbers, in diversity of industry, and in countries of origin. Foreign, multinational, and global corporations affect the prospects of domestic firms and industries and, increasingly, the prospects of nation-states. Events and competitors in the Taiwanese personal computer industry, the Italian pasta industry, and the Brazilian shoe industry can have a significant impact on the fortunes of those countries and their counterpart industries in many other countries. In this section of the book, we will look at the history and growth of multinationals and their relations with governments.

READING SELECTIONS

Raymond Vernon (who prefers to use *multinational* rather than *global* in labeling these firms) points out that in the 1950s they were primarily of American origin. By the mid-1990s every industrialized country and many industrializing countries as well had spawned their own multinationals. Multinationals had become dominant in many industries.

In his article, Vernon traces the history of the multinationals, identifying key changes in their behavior as they have grown and matured. Vernon's analysis compares and contrasts American, European, and Japanese firms on several dimensions, for example: the headquarters–subsidiary relationship typical of firms from each of the three countries; their growth paths, such as the extent to which growth came from mergers versus the establishment of greenfield subsidiaries; and the motivations for expanding outside their home countries.

Vernon observes that the characteristics of product markets have become more important in shaping these firms' behavior, while national origin has become a less powerful factor. He notes the differences evident in firms of various national origins in their earlier years as multinationals. These differences seem to diminish in importance as firms gain experience in the global market. We might well ask whether competing in the same markets makes disparate firms more alike. Is the world economy a melting pot in which national origin is a matter of diminishing importance in understanding a firm's behavior? Or, on the contrary, will a firm's national origin continue to influence its behavior?

Vernon identifies key factors that should affect the future of the multinationals. He notes that, whether through alliances or through their own networks, multinationals will continue to grow in importance. He is especially interested in the responses national governments can make to firms that are attuned primarily to market opportunities and that are less concerned about the national interests of the countries in which they operate. The power of national governments to control multinational firms, he believes, has been declining.

Henry Wai-Chung Yeung introduces us to some important new players in the global environment: transnational firms from Asian developing countries. He argues that the usual label for these firms, *Third-world multinationals,* is ideologically biased. Yeung prefers to call these new players *transnational corporations* (TNCs). TNCs, Yeung points out, are a very diverse group, encompassing both public and private-sector firms. They are becoming the largest foreign investors in other developing countries.

Yeung goes on to analyze TNCs on several important dimensions, *inter alia,* market entry form and ownership patterns, parent–subsidiary relationships, capital and funding sources, choice of technology, methods of production and marketing, foreign trade orientation, and locational choice. It would be a worthwhile exercise for readers to compare the developing countries' TNCs on as many dimensions as possible with the multinationals from the United States, Europe, and Japan as analyzed in Vernon's article.

Yeung also points out the important role of Asian national governments in influencing the behavior of their firms. In both South Korea and Taiwan, the government targeted specific ''strategic'' industries for development, designing and implementing policies aimed at enhancing their development as global competitors rather than domestic industries. The article concludes with some speculation about the future of these developing-country TNCs. It is interesting to compare Yeung's and Vernon's predictions to try and develop some sense of how an increasingly diverse group of multinational firms will fare into the next century.

Morss and Stopford each examine the role of nation states in a new environment populated by myriad multinational firms, international organizations, and special-interest groups that transcend national borders. Morss sees a trend from collaboration between national entities within national borders to a variety of collaborative arrangements that transcend borders. He presents several examples of such collaborations and concludes that firms are losing their national identities and nation states are losing their ability to control world events. He argues that the power lost by nation states will be taken up by international organizations that are increasingly independent of the countries that may have spawned them. Special-interest groups, he also argues, will exert their influence globally rather than nationally.

Stopford believes partnerships between nations and firms are possible, with potential benefits to both sides. He notes the increasing economic interdependence among nation-states resulting from foreign direct investment. He sees a world in which three forces determine how the benefits of economic activity are allocated: firms competing for a share of the global market; governments competing for the perceived benefits that firms' activities can bring to their nations; and bargaining between firms and national governments. In Stopford's world, the nation-state is very much alive and, together with its business firms, can forge policies that are of benefit to both.

As readers study subsequent sections on corporate strategies and national government strategies, they should keep in mind the analyses presented in these four articles. Readers should develop an understanding of the content of business and government strategies. They should build, at the same time, an understanding of the areas in which there may be opportunities for confluence and where conflicts are likely to arise.

1

WHERE ARE THE MULTINATIONALS HEADED?

RAYMOND VERNON

Four decades ago, the multinational enterprise was widely regarded as a peculiarly American form of business organization, a manifestation of the existence of a pax Americana. Today, every industrialized country provides a base for a considerable number of multinationals, which collectively are becoming the dominant form of organization responsible for the international exchange of goods and services. Indeed, by the end of the 1980s, even the larger firms in some of the rapidly industrializing countries of Asia and Latin America had joined the trend (UN Commission on Transnational Corporations 1990; Lall 1991).

For scholars who want to understand the factors affecting international trade in goods and services, these changes are of consummate importance. In the past, whenever the international behavior of multinationals appeared at odds with a world regulated by comparative advantage and capital market theory, the deviation could be treated as idiosyncratic, the basis for a footnote in passing. But today, with multinationals dominating the international traffic in goods and services, the question of what determines their behavior takes on considerable significance.

I cannot pretend to provide a definitive answer to this central question in the pages that follow; that is a labor which will take many minds over an extended period of time. But I have two goals in mind which contribute to that central task. The first is to persuade the reader that explanations of the behavior of multinational enterprise which draw on the national origins of the enterprise as a major explanatory variable are rapidly losing their value, to be replaced by an increased emphasis on the characteristics of the product markets in which the enterprises participate. The second is to plant a few ideas regarding the motivations and responses of the multinational enterprise that I believe must figure in any rounded explanation of the behavior of these enterprises in the various product markets they face.

U.S. FIRMS ASCENDANT

The sudden growth of U.S.-based multinational networks after World War II was in fact some time in the making. Many decades earlier, the first signs that

The author is indebted to Ernest Chung and Subramanian Rangan for their research support in preparing this paper and to Richard Caves and Lawrence H. Wortzel for their incisive comments on an earlier draft.

large enterprises might find themselves pushed to develop a multinational structure were already beginning to appear. Setting the stage for the development of these multinational networks were the dramatic improvements in the technologies of transportation and communication, coupled with the vastly increased opportunities for scale economies in industrial production. Operating with high fixed costs and low variable costs, a new crop of industrial giants felt especially vulnerable to the risks of price competition. And by the beginning of the twentieth century, these risks were beginning to be realized; the country's industrial leaders, including firms in machinery, metalworking, and chemicals, were coming into bruising contact not only with rivals from the United States but also with some from Europe.

Facing what they perceived to be dangerous and destructive competition, the leaders in many U.S. industries went on the defensive. By the beginning of the century, many of the new industries of the country had organized themselves in restrictive market-sharing arrangements and were reaching out to their European competitors to join agreements that were global in scope.

From the first, however, it was apparent that these restrictive arrangements were fragile responses to the threat of competition, especially for firms based in the United States (Hexner 1945; Stocking and Watkins 1946; 1948). The diversity and scope of the U.S. economy, coupled with a hostile legal environment, made it difficult for U.S. leaders to stifle the appearance of new firms inside the country; those same factors put a brake on the leaders' engaging in overt collusion with European rivals. Nevertheless, global market-sharing agreements persisted at times, especially when patents and trademarks provided a fig leaf for the participants. By and large, though, the role of U.S. firms in these restrictive arrangements was cautious and restrained.

While participating in the international division of markets in a number of products before World War II, many large firms also established the first of their subsidiaries in foreign locations during that period. Commonly, however, large firms used these subsidiaries to implement their restrictive agreements with other firms, as in the case of the Du Pont–ICI subsidiaries located in Latin America. Often, too, firms established such subsidiaries as cautionary moves against the possibility that competitors might be in a position to cut them off from raw materials in times of shortage or from markets in times of glut. U.S. firms that were engaged in extracting and processing raw materials, for instance, typically developed vertically integrated structures that covered the chain from wellhead or mine shaft to the final distribution of processed products; and because other leading firms shared the same fear, partnerships among rivals commonly appeared at various points in these vertical chains, in the form of jointly owned oil fields, mines, and processing facilities. Meanwhile, other U.S. firms, such as General Motors, Ford, and General Electric, established subsidiaries in Europe, to serve as bridgeheads in the event of warfare among industry leaders. Such bridgeheads, consistent with their function, were usually allowed to operate with considerable independence and autonomy (Chandler 1990, 38–45, 205–33; Wilkins and Hill 1964, 360–79; Wilkins 1970, 93–96).

For a decade or two after World War II, the defensive responses of U.S.-based firms to their perceived risks in world markets were a little less in evidence. The reasons were too obvious to require much comment. The proverbial "animal spirits" of U.S. business were already at an elevated level as a result of the technological lead and financial advantages that U.S. firms enjoyed over their European rivals. Dramatic advances in communication and transportation were enlarging the stage on which those spirits could be released. The real cost of those services was rapidly declining; and with the introduction of containerized freight, airborne deliveries, and the telex, the range of those services was widening. These improvements expanded the business horizons of U.S.-based firms, allowing them to incorporate more distant locations in the marketing of their products and the sourcing of their needed inputs.

The first reaction of most U.S. firms to their expanding product markets was to meet demands by increasing exports from the home base. But, as numerous case studies attest, the establishment of local producing subsidiaries soon followed. Almost all of the first wave of manufacturing subsidiaries established in foreign countries after World War II were dedicated principally to serving the local markets in which they were placed.[1] As a consequence, about four-fifths of the sales of such subsidiaries during the 1960s were directed to local markets (Lipsey and Kravis 1982, 3).

The motives of the firms in serving local markets through producing subsidiaries rather than through exports were usually complex. In some cases, for instance, the establishment of a producing subsidiary was simply perceived as a more efficient means for serving the foreign market, a consequence of the fact that sales in the market had achieved a level sufficient to exploit the existing economies of scale in production. But other factors contributed to the scope and timing of these decisions as well. There were indications, for instance, that the decisions taken to establish subsidiaries abroad, whether for the marketing of products or for the production of required materials and components, were often reactive measures, stimulated by and intended as a hedge against some perceived threat. Once a U.S. firm lost its unique technological or marketing lead, as seemed inevitable in most products over the course of time, governments might be tempted to restrict imports in order to encourage domestic production. In that case, the foreign subsidiary served to protect existing market access.

But even without the threat of action by governments, U.S.-based firms frequently faced threats posed by rivals in the product markets in which they operated. And some rich anecdotal evidence strongly suggests that foreign subsidiaries were often created as a hedge against such threats.

That hypothesis may help to explain why, in the first few decades after World War II, U.S.-based firms were engaged in follow-the-leader behavior in the establishment of new producing subsidiaries abroad. Once a U.S.-based firm in an oligopolistically structured industry set up a producing subsidiary in a given country, the propensity of other U.S.-based firms in the oligopoly to establish a subsidiary in the same country was visibly heightened (Knickerbocker 1973, 22–27; Yu and Ito 1988, 449–60). Such a pattern, of course, does not conclusively demonstrate that the follower is responding defensively to the behavior of the leader. Alternative hypotheses also need to be entertained, such as the possibility that both follower and leader were responding to a common outside stimulus or that the follower was responding in the belief that the leader had done a rational analysis equally applicable to both their situations.

However, stimulated by my reading of various individual cases, I am strongly inclined to attribute such follow-the-leader behavior in many cases to the follower's desire to hedge a threat posed by the leader. Although the follower may be unsure whether the leader has properly analyzed the costs and benefits of its move in establishing a foreign subsidiary, the follower is understandably fearful of allowing a rival to enjoy the benefits of undisturbed exploitation of its foreign opportunities. As long as the number of rival producers in the market is small, therefore, following the leader often seems to entail smaller downside risks than failing to follow. Failing to follow a leader that was right in making its move would give that leader an unrivaled opportunity to increase its competitive strength, whether by increasing its marketing opportunities or by reducing its production costs; if the leader was wrong, the follower's risks from committing the same error would be limited by the leader's having shared in it.

If the hedging of a threat was sometimes necessary for the growth of U.S.-based multinational enterprises, however, it was certainly not sufficient for such growth. Still to be explained was why in so many cases U.S.-based firms chose to establish producing subsidiaries rather than to exploit their strengths through licensing or other contractual arrangements with a local firm. In some cases, the high transaction costs associated with searching out and dealing with local firms may provide an adequate explanation. But here too, I am inclined to put heavy weight on explanations that see the establishment of a subsidiary in part as a hedge against various risks. Whenever licensing agreements are negotiated, both

[1] Even as late as 1975, about two-thirds of the manufacturing subsidiaries of U.S.-based firms were engaged almost exclusively in serving their local markets (Curhan, Davidson, and Suri, 1977, 393).

parties face the uncertainties generated by asymmetrical information; the licensee is uncertain of the value of the information it is to receive, while the licenser is uncertain of the use to which the licensee proposes to put the information. Moreover, enforcing the provisions of any licensing agreement carries both parties into areas of major uncertainty, based partly on the difficulties of monitoring the agreement and partly on the difficulties of enforcing its provisions.

In any event, the late 1960s registered a high watermark in the spread of the multinational networks of U.S.-based industrial enterprises, as the number of foreign affiliates added annually to such networks reached an all-time high (UN Commission on Transnational Corporations 1978, 223). For at least a decade thereafter, the number of foreign affiliates added annually was much reduced. Without firm-by-firm data of the kind compiled by the Harvard Multinational Enterprise Project for the period up to 1975, it is hard to know more precisely what was going on at the firm level during the succeeding years. But the rate of growth of these networks appeared to pick up again in the late 1980s.

The high rate of growth in recent years, however, appears to be based on somewhat different factors from those that prevailed in earlier decades. Anecdotal evidence indicates that U.S.-based firms continue to use their multinational networks to transfer newly generated products and processes from the United States to other countries. But with the U.S. lead greatly diminished in the generation of new products and processes, it is doubtful that the transmission of new products and processes from U.S. parents to foreign subsidiaries plays as important a role in the business of U.S.-based enterprises as it did some decades ago. Indeed, by the 1990s, the ostensible purpose of some U.S.-based firms in establishing foreign subsidiaries in Japan was not to diffuse existing skills but to acquire new skills for their multinational network in the hope that their Japanese experience would strengthen their competitive capabilities in markets all over the world.[2] With Japanese and European firms acquiring subsidiaries in the United States at the same time for the same purpose, it was apparent that the distinctive characteristics of U.S.-based multinational networks were beginning to fade.

Another factor that began to change the behavior of U.S.-based enterprises was the increasing familiarity of their managers with the problems of operating in foreign environments. At least until the 1970s, in their decisions when and where to establish subsidiaries in foreign countries, U.S.-based firms had been giving a heavy preference to the familiar. Careful analyses of the geographical sequence by which these firms established manufacturing facilities abroad demonstrated a historically heavy preference for setting up the first foreign production unit in Canada, with the United Kingdom taking second place and Mexico third.[3] By the 1960s, U.S.-based firms were bypassing Canada for Europe and Latin America as the first point of foreign manufacture; by the 1970s, although Europe and Latin America continued to provide the principal first-production sites, Asian sites were beginning to turn up with increasing frequency[4] (Vernon and Davidson 1979, 52, 134–35).

The role played by experience during these early postwar decades could be seen even more directly by trends in the reaction times of U.S.-based firms in setting up foreign production facilities. Where new products were involved, U.S.-based firms character-

[2] See "American Business Starts a Counterattack in Japan," *New York Times*, Feb. 24 (1992, p. 1). A survey conducted by Japan's Ministry for International Trade and Industry in January 1990 reports that 38 percent of the foreign direct investors in Japan responding to the survey listed "engineering skill is high" as a reason for their investment, while 18 percent listed "collection of technical information and market information." Reproduced in *Nippon* 1991 (1992, 109).

[3] The generalizations are based on an unpublished study of the manufacturing subsidiaries of 180 U.S.-based multinational enterprises as of 1964. The 180 firms, whose multinational networks are covered in the computerized files of the Harvard Multinational Enterprise Project, were all large U.S.-based firms with substantial foreign manufacturing facilities (Vaupel 1971).

[4] The study is based on the same multinational enterprises as those in Vaupel (1971). Conclusions in the two paragraphs following are based on data in the same study.

istically set up their first production sites within the United States. Eventually, however, they set up production sites abroad as well; as these firms gained experience with producing in a given country, the time interval involved in setting up production facilities in the country for new products showed a marked decline. Moreover, as the number of foreign production sites in any product increased, the time interval in setting up another facility in a foreign country also declined. By the 1970s, therefore, U.S.-based firms were beginning to show less hesitation in setting up production subsidiaries abroad for their new products and were scanning a rapidly widening circle of countries for their production sites.

The pattern toward which U.S.-owned multinational networks seem to be moving, therefore, is one in which the parent firm in the United States is prepared to survey different geographic locations on their respective merits, with a much reduced presumption in favor of a U.S. location. Instead, when assigning tasks to the various units of their multinational networks, U.S. business managers are increasingly likely to discount the distinction between home-based and foreign facilities, except as government restraints compel them to recognize that factor. This does not mean that the role played by geography is altogether obliterated. U.S.-based firms, for instance, continue to rely on Latin America more than on Asia to provide their low-cost labor needs, while the reverse is true for Japanese firms.[5] But the sense of uncertainty associated with producing outside the home economy has substantially declined, and the preference for nearby production locations such as those in Latin America over more remote locations such as those in Asia has declined as well.

For enterprises operating in oligopolistic markets, however, a major source of uncertainty remains. Even when such enterprises are fully familiar with the foreign environments in which they are obliged to operate, they are still exposed to the predatory and preemptive tactics of their rivals in the oligopoly. The reasoning that led the international oil and minerals firms to develop vertically integrated structures before World War II, therefore, can be glimpsed in more recent decades in the behavior of U.S.-based firms operating in oligopolistic markets. For instance, U.S.-based oil companies, having been separated from some of their captive crude oil supplies by the nationalizations in the 1970s, remain unwilling to rely upon the open market for the bulk of such supplies despite the existence of a large public market for the product. Facing the latent threat posed by the vertical integration of the Saudi and Venezuelan state-owned oil companies, U.S.-based firms are repairing and strengthening their upstream links.[6]

Such cautionary behavior is not confined to the raw materials industries. Similar behavior is apparent among U.S. firms in the electronics industry: under pressure to reduce the costs of labor-intensive components, firms such as IBM and Texas Instruments have chosen to manufacture a considerable part of their needs within their own multinational networks rather than to rely upon independent suppliers. A major factor in that decision, according to many observers, has been the fear that predatory rivals might withhold the most advanced versions of those components from competitors while incorporating them in their own products. (U.S. Congress 1991, 97–100; Schwartz 1992, esp. 149; Teece 1987, 65–95.)

For some U.S.-based enterprises, it was only a small step from using their foreign subsidiaries as feeders for manufacturing facilities in the United States to using those facilities to fill requirements arising anywhere in the network; by the 1980s, it had become apparent that this process was well advanced (Lipsey 1988). Of course, in practically every multinational network, the parent unit in the United States typically continued to occupy a unique position: characteristically, the parent's U.S. sales still ac-

[5] United Nations data affirm the preferences of U.S.-based and Japan-based firms for direct investment in nearby locations during the years 1971 to 1986, as well as the tendency of these geographical preferences to decline over time (UN Centre on Transnational Corporations 1988, 518–20, table A.5).

[6] For an account of the downstream movements of the various state-owned oil companies, and of new upstream ties forged by Gulf Oil, Sun Oil, Citgo, and Texaco, see *Business Week* 1988.