Competition in Global Industries

EDITED BY

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Harvard Business School Research Colloquium

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Foreword

Founded in 1908, the Harvard University Graduate School of Business Administration celebrated its seventy-fifth anniversary in the academic year 1983–84. We chose to take this opportunity to involve our faculty in thinking seriously about the challenges and opportunities ahead in important fields of management research and teaching.

Field-based empirical research, within and across organizations, has always been fundamental to Harvard Business School's ability to meet its objectives of educating business managers and helping to improve the practice of management. In some respects, we are creating a distinctive model of research. We have often broken through the bounds of traditional disciplines and methodologies to borrow whatever tools and concepts were needed for a particular inquiry. In addition, we have been less concerned with testing existing theory than with generating new insights. And while we often find ourselves drawn to problems that are broad in scope, we strive for results that are operationally significant to managers.

Because Harvard Business School faculty members are committed to pursuing research on the way business actually *does* function, as well as theoretical explorations of how it perhaps *should* function, they can give students and practitioners a vital perspective on the real world of professional practice. Their continuing close contact with operating businesses keeps Harvard Business School faculty at the frontiers of management practice. Research conducted by the faculty often yields insights that are of considerable practical benefit to managers in both day-to-day operations and longer-range planning.

In sponsoring the colloquium series of 1983–84, we hoped to set the course for research development over the next decade, and in particular to encourage greater emphasis on multiperson, multiyear studies of major issues. The complexity of many issues confronting business today almost requires that academicians find more effective forms of collaboration in doing our research. The problems we study are often beyond the capacity of any individual researcher.

In addition to encouraging a reshaping of researchers' work habits, the conferences promised to help strengthen the ties between Harvard Business School and the outside academic and business leadership communities. The series comprised sixteen conferences held at the Harvard Business School campus, each lasting two to five days. Papers were presented by eighty members of the HBS faculty and an approximately equal number of practitioners and academics from other institutions. Altogether, some 450 academics and practitioners were involved as discussants and participants.

Some of these colloquia focused on current research topics, such as U.S. competitiveness in the world economy, productivity and technology, global competition, and world food policy. Others concentrated on establishing agendas for the coming decade's research and course development in a particular field. Clearly, these were not tasks to be attempted in isolation. Rather we wanted to work jointly with others in business, government, and the academic world who could contribute and would themselves gain from the undertaking. The papers presented in this volume have all benefited from the thoughtful discussion they received at the colloquium and have been re-worked since then.

Beyond exploring research findings in particular areas, we hoped that these colloquia would sustain and enliven the continuing dialogue between students and practitioners of management. From that melding of perspectives, we have found, insights emerge that can revitalize the education of future managers and refine current professional practice. In that spirit of cooperative endeavor, I am proud to introduce this collection of essays.

JOHN H. MCARTHUR
Dean of the Faculty
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Preface

This book, about strategy for competing internationally, was itself the result of a global strategy. It grew out of a research program involving scholars located all over the world, and I hope it illustrates that global coordination in research is both possible and productive. It was also refined and sharpened by a group of senior business executives and academics drawn, in approximately equal proportions from Europe, Asia, and North America, who came to Harvard to share their experiences. The exchange of views among this truly global group was a unique opportunity for all of us involved.

The Harvard Business School provided a unique setting and sponsorship for a project of this scope and magnitude. On behalf of my colleagues, I would like to thank Dean John McArthur and many others at the School for their encouragement, administrative help, financial support, and hospitality. I would also like to thank the business executives who gave so generously of their time in coming to Harvard to discuss this research. They were: Andre Benard, Royal Dutch Shell; William W. Boeschenstein, Owens Corning Fiberglas; M. J. Chung, Hyundai Heavy Industries; Matthew O. Diggs, Jr., Copeland; Jack Garonzik, Mars; Raymond Gilmartin, Becton Dickinson; David Gordon, *The Economist;* John Hanson, Caterpillar; Edwin P. Hoffman, Citibank; Takashi Kiuchi, Mitsubishi Electric; Jan Leschly, E. R. Squibb; T. S. Lin, Tatung Company; W. S. Lin, Tatung Company; Victor E. Millar, Arthur Andersen; Joseph Y. Pillay, Singapore Airlines; Mario Schimberni, Montedison; Shozo Shimuzu, NEC Corporation; C. Sun, Tatung Company; Donald Taylor, Rexnord; Koichi Tsundoa, Sony. Our thanks go as well to the scholars from around the world who so stimulated our thinking through formal participation as discussants.

They were: Joseph Bower, Dong Sung Cho, Robert Kaplan, Theodore Levitt, Richard Meyer, Robert Stobaugh, Pierre Wack—all of the Harvard Graduate School of Business Administration; Herman Daems, European Institute for Advanced Studies in Management; Lawrence Franko, Fletcher School of Law and Diplomacy; John McGee and John Stopford, London Graduate School of Business Studies; C. K. Prahalad, University of Michigan Graduate School of Business Administration; Donald Sexton, Columbia University Graduate School of Business; Raymond Vernon, Harvard University; and Steven C. Wheelwright, Graduate School of Business, Stanford University.

Finally, no editor can accomplish a task such as this book without a great deal of help and support. My colleagues who contributed to the book were unusually patient and always dedicated. Kathleen Svensson who administered the Colloquium did a marvelous job of bringing off a complex event. Lyn Pohl, who coordinated the assembly and production of the book, was not only superb at it but was a calming influence on all of us. Finally, my wife Deborah not only made it possible for me to live through the experience, but gave me intellectual and moral support in countless ways.

January 1986 — Michael E. Porter

Boston, Massachusetts

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Introduction and Summary

International competition has become one of the most important issues facing firms and governments today. It is not a new subject: nations have been trading for hundreds of years and multinational companies have been an important feature on the business landscape since the turn of this century. As a result, international trade is among the oldest subjects in economics, and every self-respecting business school has had courses on international business for decades. Yet today the interest in international competition has arguably never been greater, not only among managers but among researchers as well.

Why the new interest? The reasons appear starkly in the data on international trade and investment for just about any country in the world. Trade has exploded since the 1950s, while foreign investment has been significant and growing rapidly since the 1960s. Countries are now inextricably tied to each other through the thread of international competition. Competing internationally is a necessity rather than a matter of discretion for many firms. Policies toward industry and international economic relations are at the forefront of the policy agendas for governments.

While much is known about international competition, much more is unknown. Research in international competition has concentrated on the problems of doing business in a foreign country as well as on the unique problems of the multinational as compared to the domestic firm. Indeed, these problems represented the first and most pressing issues facing the growing number of firms learning to compete internationally. Today, however, many firms have overcome these problems and confront new and more complex ones. Firms can no longer view the domestic and foreign spheres as separate and different but must see the whole—how to conceive and implement overall strategies for competing globally. At the same time, much of what firms have learned about international competition must be relearned because of a rapidly changing environment. Old ways of competing internationally have become obsolete, and new concepts have elevated new players, such as the Japanese firms, to prominence.

If the old agenda for international firms was how to deal with foreign market circumstances, then the pressing new agenda is both broader and different. It is how to manage established networks of far-flung overseas activities as a single, effective unit. Firms are searching for ways to convert worldwide production, marketing, research and development, and financial presence into a competitive advantage. They face both pressures and offers of support from home and host governments and must decide when and how to respond. Firms are confronting also a bewildering array of coalitions among international competitors, as well as pressing management problems of implementing their own interfirm agreements. Finally, they struggle continually, against vexing organizational barriers, to coordinate units located around the globe to work together. Easy organizational solutions, such as establishing international divisions or global product organizations, have not proven entirely satisfactory.

THE CHANGING CURRENTS OF INTERNATIONAL COMPETITION

Firms confront today's agenda of international competition amid currents and cross currents of change. Particularly since World War II, a number of broad forces have led to growing international competition and widespread globalization of industry scope. Some of these forces are continuations of well-established trends, while others have emerged more recently. They are:

- *Growing similarity of countries*. The growing similarity in available infrastructure, distribution channels, and marketing approaches—a long-term trend—is continuing. More and more products and brands are available everywhere, manifesting similar buyer needs in different countries. Large retail chains, television advertising, and credit cards are just a few examples of once-isolated phenomena that are rapidly becoming universal.
- *Fluid global capital markets*. National capital markets are merging into a global capital market, characterized by large flows of funds between countries. Freer and more global capital markets have amplified the short-run variability of exchange rates as well as forces that are equalizing the cost of capital among countries.
- *Falling tariff barriers*. Successive rounds of bilateral and multilateral agreements have lowered tariff levels markedly since World

War II. At the same time, regional economic pacts such as the European Community (EC) have been formed to facilitate trade and other relations among countries.

4 *Technological restructuring*. Industry after industry has been significantly affected by some technological revolutions that are reshaping competition—microelectronics, information systems, and advanced new materials. These developments are significant enough to shake up industry structures and create unprecedented opportunities for shifts in international industry leadership.

Integrating role of technology. Technology is not only reshaping industries but contributing to bringing countries together. Electronics and new materials are working singly and together to yield more compact, lighter products that are less costly to ship. Transportation costs themselves have fallen. Increasing ease of communication and data transfer are creating opportunities to link operations in different countries. Firms are able to integrate and coordinate far-flung activities in more and more complex ways, aided by the permeation of information technology into manufacturing, logistics, R & D, and other firm activities. Finally, information is flowing more freely to buyers located everywhere, and buyers are increasingly aware of and demanding products of world class.

6 *New global competitors*. All these forces have triggered shifts, sometimes dramatic ones, in international competitive position. New players, principally from East Asia, have become full-fledged international competitors in the space of a decade. They have exploited the new international competitive conditions as well as the cross-cutting technological changes to leapfrog well-established rivals. The intensity of competition has also risen markedly, elevating the standard for international competitive success.

CROSS CURRENTS

While the currents of change just discussed have led to growing international competition, some important cross currents have made the patterns of international competition different and more complex since the 1960s and early 1970s:

Slowing rates of economic growth. While the 1960s and early 1970s were prosperous times in which an expanding pie provided room for many nations to partake, the last decade has been marked by slow and fitful world economic growth. Beginning notably with the first oil crisis, firms in many industries have been faced with slow and even negative growth and intense competitive rivalry. Less opportunity at home has made succeeding in international competition particularly important for firms, and the absence of buoyant growth has reshaped the attitudes of governments toward foreign penetration at home and the success of local companies abroad.

2 *Eroding types of comparative advantage*. Traditional sources of comparative advantage, such as labor costs, natural resources, and technology access, are receding in importance. New technologies are making direct labor costs a smaller and smaller fraction of the total costs, and many nations with low labor costs have gained the ability to produce advanced goods. The technological lead of developed versus developing countries is often fleeting, as technology diffuses rapidly among countries through licenses, engineering companies, the scientific community, and multinational companies themselves. Markets for natural resources and components have become increasingly global, largely eliminating access to them as a sustainable edge. All these changes have upset traditional competitive balances among nations.

3 *New forms of protectionism*. While the post-war trend toward free trade has brought tariffs down and spawned regional trade pacts, the pressures and upheavals of the new international competition have taken their toll in a new wave of protectionism. Protectionism is not only on the rise but is taking more and more subtle forms, with requirements for local content and local ownership prominent among them.

4 *New types of government inducement*. Another manifestation of the rising intensity of international competition is the growing rivalry among governments to attract foreign investments. Prospective foreign investors are greeted by dozens of bidders offering enticing packages that can strongly affect the economic attractiveness of locational choices. Governments are also increasingly aggressive in assisting their local firms to compete overseas.

Proliferating coalitions among firms from different countries. The increasing globalization of industry combined with the upheaval of competitive positions have spawned a proliferation of coalitions among firms from different countries. Firms are seeking to combine strengths and overcome weaknesses through collaboration that is broader and deeper than the marketing joint ventures and technology licenses of the past. Governments often force or encourage such collaboration in preference to merger or to allowing foreign firms to prevail in their country.

Growing ability to tailor to local conditions. As pressures for globalization are both increasing and changing, technology is complicating the choice of global strategies at the same time as it makes them more necessary. While the new technologies support globalization, they also have the important attribute of allowing customized or tailored product offerings reflecting local conditions at much lower cost. Computer-aided design and manufacturing offer new levels of flexibility, as do automated order processing and other activities controlled by computer-based information systems. Segmentation, whether based on country differences or otherwise, is more feasible. The need to standardize products worldwide is diminishing.

THEMES

As a group, these currents and cross currents in international competition are making more and more industries global in competitive scope, but in increasingly complex ways. They require that firms adopt a global approach to strategy and to managing every functional area, be it production, marketing, finance, or R & D. Yet this global approach must increasingly involve multiple production and R & D sites, as well as the need to respond simultaneously to country needs while reaping the benefits of global presence. The new conditions also require that firms find ways of actually getting far-flung, worldwide units to coöperate.

A number of themes have emerged in international competition that are richly illustrated in the chapters of this book:

1. *There is no one pattern of international competition nor one type of global strategy.* The chapters in this book show the wide variations in international competition across industries. Sometimes an international industry is nothing more than a collection of largely separate domestic industries. In other industries, competition is global, though in many different ways. Similarly, there is no archetypal global strategy, but numerous ways of competing globally that reflect different mechanisms through which a firm's international presence yields competitive advantage.

2. *The globalization of competition has become the rule rather than the exception by 1986.* Because of shifts in buyer needs, technology, government regulation, and other causes, many industries have today become global in their competitive scope. Even sectors such as consumer package goods, telecommunications, and services that were once largely separate domestic industries in each country have begun the process of globalization. The particular forces driving globalization as well as the resulting patterns of competition vary widely from industry to industry. However, firms in many if not most industries today must confront the need to set strategy with a global perspective.

3. *The nature of international competition has changed markedly in the last two decades.* The currents and cross currents of change described earlier have made the imperatives of international competition look different today than they did when international activity took off in the 1950s and 1960s. The result is that neither simple export-oriented international strategies nor decentralized country-focused

strategies are or will be appropriate in most industries. Strategies such as Toyota's historical approach, with most activities concentrated in Japan, are giving way to strategies involving more complex but highly coordinated global networks. A model is IBM's approach of performing R & D, manufacturing, and marketing in many countries, but reaping economies of scale through operating large facilities in a number of countries while balancing imports and exports in each country. The changes in international competition have affected every functional area; and historical ways of doing things, as well as research based on earlier periods, are no longer sufficient to guide today's strategic choices. Many firms are prisoners of their history, however, which makes new lessons difficult to learn.

4. *Coordination among increasingly complex networks of activities dispersed worldwide is becoming a prime source of competitive advantage*. In each functional area of a firm, whether it be finance, marketing, production, or R & D, the need to coordinate activities in different countries has become an imperative. The chapters in this book chronicle the dispersion around the world of production sites, R & D laboratories, service organizations, and procurement groups. Different activities within the firm are being located in different countries, raising the complexity of the coordination task. The most advanced market for many products is no longer the United States so firms must have the ability to scan markets around the world and transfer knowledge among units in different countries. Those firms that exploit their international network through coordinating across countries are turning out to be the winners.

5. *Governments are increasingly both promoting and protecting against global competition, requiring new approaches to government relations*. While governments are usually portrayed as getting in the way of global strategies, the chapters in this book suggest a more subtle role. While governments are intervening in global competition in new ways, they are also aggressively seeking to help firms based within their borders to become more successful global competitors. In the process, governments are also competing among themselves to attract foreign firms. Governments can no longer be viewed as just a problem to circumvent carrying out international strategies but also as a source of opportunity. Firms must discover ways of responding to governments' concerns without compromising their global strategies and recognize the interdependence of the relations with government in different countries.

6. *Global strategies frequently involve coordination with coalition partners as well as among a firm's own subsidiaries*. Firms that have entered broader coalition agreements with foreign firms have often found them difficult to reconcile with the need for global coordination. The history of such agreements is a checkered one, and many fail to