RESEARCH IN STRATEGIC MANAGEMENT
VOLUME 8

LEADERSHIP IN INTERNATIONAL BUSINESS EDUCATION AND RESEARCH

ALAN M. RUGMAN
Editor

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LEADERSHIP IN INTERNATIONAL BUSINESS EDUCATION AND RESEARCH

RESEARCH IN GLOBAL STRATEGIC MANAGEMENT

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RESEARCH IN GLOBAL STRATEGIC MANAGEMENT VOLUME 8

LEADERSHIP IN INTERNATIONAL BUSINESS EDUCATION AND RESEARCH

EDITED BY

ALAN M. RUGMAN
Indiana University, USA

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PREFACE

International Business (IB) education and research became institutionalized in leading U.S. business schools in the 1960s. The Academy of International Business was founded by a group of IB teachers in 1958, and the *Journal of International Business Studies* was launched in 1969. The founding members of the AIB and *JIBS* came from a small set of U.S. business schools, most notably Columbia, N.Y.U., Michigan, and Pennsylvania. Yet the most influential business school at the time and one of the first to develop a full IB department was Indiana University (IU). In the first section of this book, the leadership of IU in the developments of the field of IB is recorded and assessed, including a paper by the first chair of the IB Department, Stefan H. Robock. In subsequent parts of the book, the influence of IU on the major associated IB fields of research and teaching (finance, marketing, and management) is assessed, and recent research themes in these fields are explored.

The book develops several overlapping themes:

- the process of internationalization within major Business Schools – the IU experience as a leader in comparison to others,
- the current state of knowledge about IB research, and
- new issues in IB research.

Underlying these themes is a fundamental question pertinent to today's approach to internationalization in top business schools: As IB has become the accepted norm in business today and therefore no longer the provenance of exclusive "IB departments" only, to what extent has it been effectively "infused" in key functional areas of traditional business education – marketing, finance, management, accounting, etc?

In Part I, Professor Robock vividly describes the early years of the field: making the institutional commitment to IB; defining the parameters of the field; identifying key issues to be addressed through research; and developing the faculty, the literature, and the curricula necessary for its delivery. Jeff Arpan, a distinguished IU/IB doctoral alumnus and past president of the AIB, describes IU's role in educating a generation of faculty leaders in the field, particularly throughout the 1970s. And John Daniels, another past president of the AIB who played a significant role in the maturation of IB at IU in the 1980s and 1990s, discusses his own perspective on internationalizing the broad range of functional areas.

As the papers in Part I, Part II, and elsewhere in this book demonstrate, contributors conclude that IU was both a pioneer in building an early IB Department, helping to shape the development of the field generally and, later, fully implementing the infusion model. There are, however, divergent views on the success of infusion, both at IU and elsewhere, as discussed by David Ricks, Carol Howard, Laurence Booth, and Richard Wright, among others. Yet, in an up-to-date paper, Louise Siffin, IU's Global Programs Director, argues that infusion has been achieved in the MBA and undergraduate programs at IU and, to a large extent, also in the research activities of faculty. Today a "network" of IB activities exists. In this sense, IU is again leading the way in implementing the internationalization process at leading business schools.

Parts II, III, IV, and V of this book extend the theme about the historical development of IB by looking into current research areas. In Part III, as well as in the chapters by Laurence Booth and Carol Howard in Part II, the international aspects of research and teaching in marketing and finance are considered. In Part IV, several papers present state-of-the-art literature reviews and extensions of current research issues in international management strategy. In Part V, issues in global, regional and subnational strategy are considered, several from a business economics perspective. The latter parts of the book serve to place the earlier historical discussion of IB in context and illustrate how mature and wide-ranging the field has become over the last fifty years.

I would like to thank the sponsors of an authors' conference, held October 25–26, 2002, at the Kelley School of Business, Indiana University, Bloomington to help inaugurate the School's new Graduate and Executive Education Center. These were: Dean Dan Dalton, the IU CIBER, IU's Office of International Programs, and the IU Office of Research and University Graduate School. I also received excellent organizational help from Louise Siffin and Teena Albright. Finally, Mildred Harris ably prepared the manuscript and Melanie Hunter copyedited.

Alan M. Rugman
Series Editor

PART I: FROM INTERNATIONAL BUSINESS TO INTERNATIONALIZATION: AN ASSESSMENT OF THE INFUSION MODEL

INDIANA UNIVERSITY AS A PIONEER IN THE INTERNATIONALIZATION OF BUSINESS EDUCATION

Stefan H. Robock

ABSTRACT

More than forty years ago, IU helped begin the process of internationalizing business education by becoming one of the first U.S. business schools to include an IB program in its curriculum. In 1956 Columbia University led the trend, and in 1959 IU became the second to offer an IB major. The author, the first chair of the IB department at IU's Business School, describes the development of the field in its early years.

INTRODUCTION

More than four decades ago, Indiana University (IU) helped pioneer the internationalization of business education by becoming one of the first U.S. business schools to include an international business (IB) program in its curriculum. In 1956 Columbia University led the trend, and in 1959 IU became the second to offer an IB major. Several other schools followed shortly, including Harvard University in 1961 and New York University in 1963.

In retrospect, it may seem strange to mark the internationalization of business education as a signal event. In the real world, especially after World War II, international business had become a significant and growing force in the world economy. Many U.S. and foreign business firms had evolved beyond traditional

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importing and exporting and were establishing operating subsidiaries in foreign countries. But virtually all business schools in the United States and abroad were training future managers with a curriculum that completely neglected the important international dimension of business.

The standard business school curriculum focused on preparing managers for domestic operations. Aside from a small number of courses – typically on foreign trade or export marketing – offered in a few schools, all courses were taught as if the United States was the world. Accounting courses rarely touched on the subject of foreign exchange. Labor management courses dealt only with U.S. patterns of labor unions and labor legislation. Business law courses were limited to U.S. laws. And management courses implicitly assumed that the principles of management, derived almost exclusively from studies in the United States, were universal and applied to all national environments.

HOW IU BECAME AN IB PIONEER

It is easy to explain why Columbia led the field in IB training. In 1954, it hired Courtney Brown, a senior economist with Standard Oil of New Jersey (now EXXON), as the new dean of the Columbia Business School. And anyone who worked in the petroleum business knew that international business was big business. But how did it happen that a university in the hinterland, located in a small Midwestern college town, 55 miles from a major airport, became an early pioneer in IB?

In telling the IB story, one must begin with the fact that by the late 1950s Indiana University as a whole had already developed a strong international ambience under the leadership of President Herman Wells. Although a native Hoosier from a small Indiana town, Wells became internationalized as president of IU by acting during the end of World War II as a special State Department adviser on liberated areas in Europe, serving in 1946 as an observer for the Greek elections, and participating in 1957 as a delegate in the United Nations General Assembly.

With President Well's encouragement, IU had undertaken a number of overseas projects, assisting foreign universities in fields such as public administration, medicine, and so on. And within the University, at least twenty-seven different languages were being taught, and a number of regional study programs such as Latin American studies, African studies, Asian studies, and the Russian-East European Institute had been established. In his external activities, President Wells participated even more directly in internationalizing business education in 1963 by becoming Chairman of the Board of Trustees of the organization Education and World Affairs (EWA), about which I will comment later.

Within this international-friendly university environment, the motivation for adding IB studies to the business school curriculum came from Dean Arthur Weimer and several faculty members, such as Professors Leslie Waters and John P. Lewis. One important event that stimulated the business school's move toward internationalization was a cooperative program with the European Productivity Agency (EPA) undertaken in 1956 and continuing for five years, in which an outstanding group of young European professors of business and economics were brought to Bloomington for a year as European Faculty Associates. (Note: I think Professor Leslie Waters directed the EPA program, at least in the early years.)

Other significant events were an IU conference held in 1957 with local business leaders concerning the need for international business training, the National Defense Education Act (NDEA) recently passed by the U.S. Congress, and a large Ford Foundation grant to IU in support of international studies that included funds for the Business School.

The 1957 conference resulted in a decision to start an IB program, and an application was made for the NDEA three-year doctoral fellowships then available for new and significant programs. Four of these fellowships were granted to IU and in 1959 a graduate level IB program was introduced, with a new faculty member, Professor Charles Stewart, as director. However, Stewart left IU after a year to join the IB program at Columbia and I was recruited in 1960 as Director of the IB program. I continued in this position until 1967, when I too joined the Columbia faculty.

Let me inject a personal note. As an economist with a Harvard Ph.D., my professional career had been in the U.S. government, including five years as Chief Economist of the Tennessee Valley Authority; the United Nations technical assistance program, including overseas missions in Brazil and India; and the Committee for Economic Development (CED), a business-supported private economic policy research organization. My work experience in both the public and private sectors had been challenging and exciting. But in 1960 I had reached a stage at which I wanted to try out the academic world. I was especially anxious to do some writing based on my work experience; and in fact, I did get a book on foreign economic development written under Brookings Institution sponsorship while at IU. In any event, the timing of my academic search coincided with IU's search for a new faculty person to direct its IB program.

In moving to the academic world, I hoped to find a position teaching economic development. But virtually no economics departments at that time were offering such courses. I had not expected to join a business school, because my undergraduate experience at Wisconsin and my graduate experience at Harvard left me with the prejudice that business schools were "low-level" activity for good economists.

But in my job search I had written to an old economist friend, Ross Robertson who had recently joined the IU faculty, about my interest in an academic position, and he alerted me to IU's faculty search.

Despite my anti-business school bias, with Robertson's urging, I accepted an invitation to visit Indiana for an interview. After the visit my bias was dissipated when I discovered that its business school had a large number of distinguished economists and a challenging new program. So I eventually accepted the IU offer from among several other offers available. I suspect that my main attraction to IU was my overseas working experience.

DEFINING THE FIELD

During the 1960s, defining the field of international business became a popular parlor game – always enjoyable, usually spirited, frequently controversial, and eventually productive. And one of my first steps after I joined IU was to become an active player in this game. When I accepted the job, I asked Dean Weimer, "What do we teach in IB?" He replied, "That's what you have to decide." Although some beginnings had been made in defining the field, it quickly became apparent that we at IU needed help. To get it, we arranged in 1963 the first conference on education for international business held in the United States (Robock & Nehrt, 1964). We thought the conference would be small, because we knew of only a few academics who were facing the same dilemma. But much to our astonishment, as word of the conference spread, deans or their representatives from more than 80 business schools asked to attend. In general the conference was regarded as a great success.

The debates at the conference were stimulating and productive. Some academics questioned whether there was such a distinctive new field and whether a concept of IB existed that differentiated it from other academic fields.[1] Some argued that IB was nothing more than applied economics. Others suggested that nothing more was required than adding an international dimension to existing functional disciplines. Others took the position that the main focus of IB should be on doing business within specific foreign countries, or on comparative studies of business systems in different countries.

Out of these discussions, a consensus gradually emerged that the instructional and research focus of IB should be on those unique issues that arose when business activities crossed national boundaries. This rationale implied, of course, that such courses should draw on concepts and knowledge that existed, or should be developed, in the fields of political science, anthropology, law, and economics. Moreover, recognizing the emergence of multinational enterprises (MNEs), this

consensus meant that future managers working overseas or at MNE headquarters, and students we attracted who would be working for government agencies that would shape their country's environment for foreign direct investment (FDI), should be trained to deal with these unique cross-border issues.

The next task in defining the IB field, therefore, shifted to identifying the special issues that arose when business transactions crossed national boundaries.[2] As our thinking evolved, we identified four aspects of international business activity that should be covered in our program (Robock & Simmonds, 1966):

- *International risk elements*, including financial, political, regulatory and tax risks.
- *Multinational conflict elements* arising because of different national identities of owners, employees, customers, and suppliers, and because of divergences between national interests and the business goals of MNEs.
- *Multiplicity of environments*, including regional and international environments and cultures; and
- *International business as a key force* in the economic and social development of advanced and less developed nations.

DEVELOPING CONCEPTS, INFORMATION AND TEACHING MATERIALS

A definition was a beginning. The next challenge was to develop or find concepts, information, and teaching materials for internationalizing the business curriculum. Some cases with international content were available from Harvard and IMEDE in Switzerland. But as Professor Raymond Vernon explained in describing the evolution of the IB program at Harvard, "I could find no packaged curriculum, no textbook, that would offer a spoor of a trail others had beat before me. There were texts in international economics, histories of foreign direct investment, treatises on international antitrust problems, stories of Standard Oil, Unilever, and General Motors; but a text for international business courses, according to my lights, was not to be had" (Vernon, 1994).

One of the first IB textbook efforts was Professor John Fayerweather's *Management of International Operations* (1960). Cases were the heart of the book. But as Fayerweather explained, "The book was ahead of its time commercially. The market was thin and the book did not go beyond its first printing" (Fayerweather, 1994). Several other authors followed Fayerweather's effort with IB textbooks that, likewise, did not go beyond a first printing.[3] In my view, the problem, aside from the thin market, was that the development of concepts and information

had not yet progressed sufficiently to provide enough substantive material. In fact, it was not until the late 1960s and early 1970s that IB textbooks began to be reprinted.

Another important aspect of the evolution of IB instructional materials was the early scarcity of professional journals that would publish IB research. The *Harvard Business Review* published a few articles directed to business managers that were useful for IB instruction, but it was not a refereed journal and not interested in so-called scholarly papers. The *Columbia Journal of World Business*, established in the mid-1960s and directed also toward a business audience, was more receptive to scholarly pieces but did not have the desired cache of being a refereed journal.

The professional journals problem was greatly alleviated by the establishment in 1970 of the *Journal of International Business (JIBS)* by the Association for Education in International Business (AEIB), later to become the Academy of International Business (AIB). And as the IB field developed, other professional journals began to emerge in the functional fields such as marketing and finance. Fortunately for us, our journal at IU, *Business Horizons*, did accept IB articles.

ADDING IB TO THE CURRICULUM

In addition to defining the field and developing instructional materials, another early issue was how IB should be added to the curriculum. Should it be a separate department? Should IB courses first be introduced at the graduate level? And should all students be required to take at least one IB course?

Private universities such as Columbia, Harvard, and Stanford did not have undergraduate business programs, so the issue they faced was whether IB courses should be offered at the graduate level. State universities like IU were in a different situation. They were expected to offer undergraduate studies because many of their students would not continue with graduate studies. And if IB courses were not included in their undergraduate curriculum, such students would not have the opportunity to study about this important dimension of business. Consequently, although IU first began to offer IB at the graduate levels, an IB survey course was shortly included in our undergraduate curriculum as we added faculty (Robock & Nehrt, 1964).

The organizational issue was decided at IU in favor of a separate department. When I joined IU in 1960, I asked Dean Arthur Weimer, “What department will I be in?” Even though I was a staff of one, he replied, “You should not be in any of the traditional departments. If we make IB everyone’s business, it becomes no one’s business.”

The ideal curriculum strategy would seem to be adding the international dimension, where relevant, to all existing courses. But professors teach what they know. And in those early days, most B-School professors were not informed on the international dimension of their functional fields. Moreover, the IB field involved substantial issues that did not fit into the functional courses.

Fortunately, at that time Ford Foundation made a large grant to IU because of its international programs, and part of the grant was available to the Business School. With some of these IB funds, we gave individual IU faculty members in the functional areas opportunities for international travel and for doing research abroad. This strategy produced results, and soon the School began to offer international functional courses such as international marketing, international finance, and international management. As a next step, we formed a cross-department informal international faculty nucleus.

In 1967, when I joined the Columbia University faculty, IB was a separate department that also offered functional international marketing and finance courses because the functional departments were not interested in adding an international dimension to their program. But one of the several deans that succeeded Courtney Brown decided to make his special contribution by internationalizing the entire curriculum and abolishing IB as a separate department. To his surprise, I said that I approved of his initiative. BUT, I suggested, he needed to take three additional steps to truly accomplish this worthwhile goal. First, he will need to establish as a criterion in recruitment that every professor hired must be, or will become, well informed on the international dimension of his or her field. Next, he had to make sure that the necessary funds and time off would be made available so that those not prepared internationally could develop this competence. Finally, he had to establish as a criterion for granting tenure that each professor was competent in the international dimension of his or her field. This advice seemed to discourage him and he did not take action on his internationalizing plan. At a still later date, another dean did abolish the IB department and attempt to internationalize the complete curriculum, but without taking the steps I suggested, and with questionable results.

The issue of including IB as one of the core courses required by all students was debated then and continues to be debated today. The argument for so doing is that some exposure to IB is essential for all business graduates.[4] The issue was raised both at IU and later at Columbia, and I opposed making IB a required course for a selfish personal reason: I wanted students in my class who elected to study IB and were not taking my course just because it was required.

Experience convinced me that the key to internationalizing the business curriculum is a strong dean with an international commitment. "Changing the curriculum is like trying to move a graveyard," observed President Woodrow Wilson when he

served as head of Princeton University. And as Professor Lee Nehrt observed in a 1968 conference on IB, "If a dean feels that he can achieve the internationalization of the various functional courses without establishing some central organism from which the spirit of internationalization emanates, he is either fooling himself or he has established for himself another full-time job" (Nehrt, 1968).

FINDING IB FACULTY

Building a new program at IU had many dimensions. A key one of these was to recruit faculty for the program. One member of the IU faculty, William Hoskins, was on leave teaching in Korea and willing to become part of the IB program on his impending return. Another faculty member, Professor John P. Lewis, co-taught one of our courses until he went on leave to become a member of President John Kennedy's Council of Economic Advisers.

For additional faculty, our first outside recruit, Lee Nehrt, came from the recently launched IB graduate program at Columbia University. As I recall, Lee and I made contact at the annual meeting of the American Economics Association. Although he was still finishing his dissertation, we invited him to Bloomington for an interview and hired him to join the faculty in February 1962.

Our second new recruit was Kenneth Simmonds, a New Zealander with a DBA from the Harvard Business School, who was in London teaching and getting another degree from the London School of Economics. He learned of our faculty research through my recruiting efforts at Harvard and contacted me by transatlantic phone. After checking some of his Harvard references, and with the Dean's agreement, we made Ken an offer, sight unseen, to start in the fall of 1963 and he accepted.

A third recruit was Richard Farmer. In his case, I was visiting UCLA to meet another faculty prospect. While waiting to see this prospect, I went to the men's room and that's where Farmer and I first met. Dick introduced himself and when I told him of my mission, he said he was interested in joining an IB program. Farmer had taught at the American University in Beirut and had practical foreign business experience working with a trucking company in the Middle East. So I invited both him and the other UCLA prospect to Indiana for interviews. The end result was that we made an offer only to Farmer. He accepted and joined our IB group in the fall of 1964.

Still another new faculty member I helped recruit was Hans Thorelli, although he joined IU as a member of the marketing rather than the IB department. I had met Thorelli when I was with the CED, because he had worked in Sweden for a sister organization, SNS. Subsequent to our meeting, he joined the faculty of the

University of Chicago. A previous acquaintance from my Department of Justice antitrust days, Corwin Edwards, was also on the faculty at Chicago and I had invited him to lecture at IU on antitrust patterns in foreign countries. After the lecture while driving Edwards to the Indianapolis airport, we talked about Thorelli and I said that he would be an excellent addition to our IB program at Indiana but I didn't think he would consider leaving such a prestigious university as Chicago for IU. Edwards replied, "Why don't you try?" We did, and Thorelli came to IU.

As time went on and our reputation grew, recruitment became easier. In 1966, Robert Stevens, an economist from the business world, and Larry McKibben joined our IB staff. I also considered the possibility that we might find a business executive from a multinational firm who would like to become an academic. We did, in fact, find such a candidate (I don't remember how), and invited him to Bloomington for an interview. I was impressed with this person, vice president of an MNE, and enthusiastically recommended that we make him an offer. To my surprise, Dean Weimer turned down my recommendation. On the basis of his experience, the dean explained that businessmen made excellent contributions as guest lecturers in informing students on the current practices of the business world, but as faculty members most businessmen were not productive in developing the conceptual material needed for developing the field. And with further academic experience, I became persuaded of Dean Weimer's wisdom.

However, there are always exceptions. On the advice of an IU professor outside the business school, we appointed his brother, W. Dickerson Hogue, business executive in residence, a lecturer and research associate in our IB research institute. After retiring as President of Procter and Gamble International, Hogue had surveyed several major universities for an academic connection. Of the universities surveyed, he chose Indiana and later made a number of valuable conceptual contributions to the IB field (Hogue, 1967).

Our faculty development also benefited from visiting foreign professors. We were able to finance such invitations with funds from our Ford Foundation grant. And we were fortunate to recruit Noritake Kobayashi of Keio University as our first visiting professor. This fortunate event resulted from a contact I made with a vice president of Keio at a conference in Lausanne, Switzerland and a later visit to Keio University in Japan.

THE CHALLENGE OF INTERNATIONALIZING PROFESSORS AND STUDENTS

My bias in faculty recruitment and graduate student training programs is that more is required to internationalize professors and IB students than foreign travel as a

tourist or reading about foreign countries and their cultures. To implement this bias, we arranged financing for all of our first doctoral graduates to acquire overseas cross-cultural working experience in researching their doctoral dissertations.

Many academics who pioneered the IB field had various types of international and multicultural experience early in their careers. Some were internationalized by World War II military service, including foreign language training and participating in military governments. I had four years service as a naval officer in World War II, three of which were in North Africa, Brazil, and Japan. Lee Nehrt had four years of experience in international licensing and joint ventures with a multinational company. A surprising number of American academics attracted to the IB field were of the Mormon faith and had fulfilled their religious commitment of spending several years overseas as missionaries. Others had their foreign exposure through the Peace Corps, and still others were immigrants who became multicultural by doing graduate training in the United States. The U.S. government helped to internationalize professors through its Fulbright Scholars and foreign aid programs. And the United Nations provided other opportunities for international work experience through its technical assistance program, as was the case for me.

International work experience was available to students through the student-operated AIESEC (a French acronym for Association Internationale des Étudiants en Sciences Économiques et Commerciale), an organization founded in 1948 in Europe to arrange foreign work experience for students. AIESEC chapters in participating countries arranged summer trainee positions with business firms in their countries and exchanged these positions through the AIESEC organization for similar summer employment opportunities in another country. Fortunately, Lee Nehrt learned of the AIESEC program when studying in France and brought it to the U.S. by establishing the first American chapter at Columbia while studying there. He also started a chapter when he joined the faculty at IU.

JOBS FOR IB GRADUATES

With our progress in developing inputs for our IB program – such as teachers and teaching materials, we next had to focus on an output problem: jobs for our IB graduates. The response of MBA students to IB studies during the 1960s was strong and many of them chose IB as their area of concentration. As Dean Pinnell reported to the 1964 IU conference, “At the MBA level, starting back in 1959 when IB was first offered, 31 students enrolled during the year. By 1962–1963, 193 students were enrolled in international business courses” (Pinnell, 1964).

From the job placement standpoint, our MBAs who chose international business as their major encountered difficulties. Many chief executives of companies were

making statesmanlike speeches about the internationalization of their firms. But the lower-level personnel of their companies doing the recruiting were continuing their traditional pattern of looking for functional expertise. To meet this problem, we began to urge our MBA students to take a functional concentration, such as finance or marketing, along with their IB concentration.

Concurrently, we began to advertise our IB program to the regional and national business community with an excellent brochure on our IB program. We included a well-received IB course in our annual executive development program for business managers, with the expectation that this would improve job prospects for our MBAs. We appointed a number of leading business executives to a newly created International Business Advisory Board, several of whom were executives of well-known Indiana MNEs, such Eli Lilly in Indianapolis and Cummins Engine in Columbus.

At the doctoral level, even though our enrollment increased rapidly, our graduates rarely encountered placement difficulties. As early as 1963–1964, we had seventeen doctoral students: (six DBAs majoring in IB, seven DBAs and four Ph.D.s taking a minor field in international business). And according to my latest available records, in 1964–1965 I was serving on 10 doctoral dissertation committees, half of which I chaired.

With at least 12 NDEA doctoral fellowships made available by the U.S. government, we were able to advertise our program within the U.S. and get a flow of excellent graduate students who finished their doctoral work in the late 1960s and early 1970s, as Jeff Arpan will recount. With funding from our Ford grant we became known overseas by offering a single fellowship each year that was advertised around the world by the U.S. Information Service. And this tactic created international awareness of our program and brought us excellent foreign students like Paul Korsvold from Norway and Kichiro Hayashi from Japan.

INTERNATIONAL BUSINESS RESEARCH

Although the need for IB research was recognized as urgent, our research contributions in these early days were modest. The dissertations of our doctoral students began to make useful material available. With support from our second Ford Foundation grant, we created an International Business Research Center, and one of our first projects, under the direction of Professor Schuyler Otteson, was to identify specific international components to internationalize four traditional functional areas: accounting, business policy, finance, and marketing (Otteson, 1968).

In launching our research efforts, our students and faculty encountered difficulty in finding needed materials in our university libraries because there had been

little previous demand for such materials. Fortunately, the IU library was very cooperative, and in time it was able to build up the holdings in our area.

OVERSEAS PROJECTS

The IU environment encouraged professors to expand their foreign experience through overseas missions. After joining the IU faculty, I undertook a number of assignments, some on behalf of IU and others related to my previous development assistance work.[5] The major overseas assignment I was asked to undertake for IU was in East Pakistan and resulted in the School's first cooperative overseas project. In 1964, after Art Weimer had retired and George Pinnell had become dean, the Ford Foundation asked the Business School to explore the feasibility of establishing a business school project in East Pakistan, now Bangladesh. The Foundation's implicit motivation for asking IU to conduct this exploratory mission was to contract with the university to undertake this overseas project if a positive evaluation resulted from our investigation.

A survey team of three IU professors, Wallace Yoder, David Martin and myself, made the trip to Pakistan. Our recommendation was positive and suggested that the project be undertaken with the University of Dacca. Both IU and the Ford Foundation decided to press ahead on the project, and after a second IU mission headed by Leslie Waters went to Dacca to further explore the situation, IU agreed to take on the project to be financed by the Foundation.

ROLE OF EDUCATION AND WORLD AFFAIRS

In discussing the general topic of internationalizing the business curriculum during the 1960s, the role of the Education and World Affairs (EWA) organization should be noted. In response to a strong concern about internationalizing all activities of American universities, EWA was created in 1962 "to assist in strengthening United States colleges and universities in their international teaching, research and service activities." It is significant that IU's president, Herman Wells, was named Chairman of the EWA Board.

As one of its projects, EWA issued a report in June 1967 discussing the international dimensions of education for business administration. As a follow-up to this report, a major conference was held at Tulane University in 1967 aimed mainly at business school deans. Included in the attendance were 146 deans, professors, business executives, and other representatives from 98 U.S. business schools and 11 Latin American schools. Almost all the deans were there to learn, and the business leaders and IB professors were there to teach them.

The 1964 IU conference was focused on defining the substance of the IB field for professors and researchers. In contrast, the Tulane conference was intended to spread the word and motivate all business schools to implement the kind of internationalizing efforts already begun in a few schools. IU was well represented at the conference by President Wells, Dean Pinnell, Lee Nehrt, and myself (although I had just left IU) all of whom made presentations.[6]

A SEVEN-YEAR VOYAGE

Seven has long been a special number. There are seven Wonders of the World, seven seas, seventh heaven (especially in Islam), seven virtues, and seven deadly sins, just to mention a few examples. For me personally, seven was a special number because my IU experience was a seven-year voyage that ended in 1967, when I accepted an attractive offer from Columbia University to head its IB program.

As you can see from this rather brief report, IU's pioneering program for internationalizing its business school was a slow and multifaceted venture that involved considerable serendipity. Fortunately, in meeting our many challenges we benefited tremendously from the strong support of Deans Weimer and Pinnell, important business school faculty members, other divisions of the University, and especially President Herman Wells.

As Dean Pinnell told the 1964 EWA conference, "I'd say that our commitment as a faculty to the field of international business is quite deep, and it stretched well beyond the programs of the School of Business into many, many different areas of this university. One thing that is pleasing, and that I think was not true even six or seven years ago, is that when a discussion came up on this campus about some international matter, no one ever wasted any time debating whether or not the Business School might conceivably have some interest" (Pinnell, 1964).

But recognition of IU's Business School leadership in the international dimension of business was not limited to other areas of the university. The 1964 conference gave IU a large amount of unexpected national recognition. To our great surprise, *Business Week* sent a reporter to cover the meetings and published a long article on the conference. Moreover as mentioned previously, our scholarship campaign to attract foreign students rather quickly gave IU international recognition.

By 1967, our IB program at Indiana had most likely become the leading program in the United States and the world. As a special "Seal of Approval," the Ford Foundation made a second grant directly to the IB program – five times as large as the first that came as part of an overall university grant.

The principal accomplishments in my view that warranted such national and international recognition were the following:

(1) We had developed a large and excellent IB faculty.
(2) We had made significant progress in internationalizing traditional departments of the Business School faculty.
(3) We had attracted a large number of very promising doctoral students and started a flow of excellent future applicants (such as Jeff Arpan), who finished their doctoral work in the decade of the 1970s.
(4) We had assisted the Business School in extending its activities to overseas projects.

I should also mention that the unsolicited offer I received from Columbia University might be interpreted as additional recognition of IU's international business program accomplishments. I was sad to leave Indiana University and had expected to recommend Lee Nehrt as my replacement. But Professor Nehrt was in Tunis on an extended United Nation mission. I did not expect Professor Farmer to be interested in administration. But to my great surprise he was eager to become chair of the IB department.

CONCLUSION

This is the long answer to the question of how IU became a pioneer in international business education. Now let me end with the short answer I developed when I was at IU. One day a graduate student from UCLA dropped into my office because he saw the sign outside my door that I was in IB. He said that he was at IU to interview for a position in one of the traditional departments and in the interviews he heard a great deal about the international reputation of our business school. "I'm skeptical about the international emphasis," he said. "How can a school in a small Midwestern college town without a major airport be that international?"

I told him that I had just returned from a round-the-world trip to East Pakistan, and I asked him how long it took him to get to the LA airport. He replied, "It depends on many things, but on a good day I can make it to the airport in an hour and a half." "You know," I explained, "I can be on a plane at the Indianapolis airport in 55 minutes. And surprising as it may seem, it's the same distance round-the-world from Indianapolis as it is from Los Angeles." He walked away shaking his head.

NOTES

1. For a recent excellent discussion of this issue, see Kenneth Simmonds's article "International Business as an Academic Discipline" in *Current Issues in International Business* edited by Iyanatul Islam and William Shepherd. Lyme, NH: Edward Elgar (1997).

2. Identifying the special issues is discussed in greater detail in Robock (1997), "Internationalizing the Business Curriculum" in Islam and Shepherd (1997).

3. One of these textbooks was written by Richard Farmer in the mid-1960s and published by Richard D. Irwin, but not reprinted. Farmer later negotiated a return of the copyright to himself and continued to publish the book independently. The first edition of the Robock and Simmonds textbook was published in 1973 and the book survived four editions.

4. At a later stage, the issue of requiring all MBA students to have some exposure to the international business was raised with AACSB, the association of business deans, and after many years some action resulted. Professor Nehrt, who was active on this front, could relate a fuller report on this initiative (see Nehrt, 1977).

5. In the summer of 1961, I went to the Philippines as an industry advisor on a World Bank economic survey. As an extension of the Bank mission and at the request of IU projects underway in Indonesia and Thailand, I visited these countries briefly to advise on possibilities for business administration cooperative projects. In 1963, I undertook a month-long assignment in Nyasaland (now Malawi) to advise IU on whether the university should accept a proposal from the U.S. foreign aid program to undertake a country economic planning project there. (I recommended against the project.) Other non-IU projects were a short mission to Liberia in 1961 with Professor John P. Lewis for the U.S. State Department, a mission in the summer of 1960 to Brazil for the Organization of American States and the Ford Foundation, a mission in the summer of 1963 for the United Nations in Bolivia, and an electric energy planning project for the government of Brazil that required periodic trips to Brazil over a two-year period in 1964–1966.

6. The 300-page report of this conference, *Business Schools and the Challenge of International Business*, edited by Stephen A. Zeff (Graduate School of Business Administration, Tulane University, 1968) contains several significant papers relevant to the IU experience.

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INTERNATIONALIZATION IN THE 1970s AND 2000

Jeffrey S. Arpan

ABSTRACT

International business programs became realities in the 1950s, but only at two universities: Columbia and Indiana. In the 1960s, more universities added IB programs and departments; the 1970s saw even more added as universities realized that IB programs would enhance their reputations, improve student knowledge and expertise, and enhance companies' future success. In 1974, the AACSB added internationalization as a requirement for business schools, forcing even more to enhance the international dimensions of their courses, programs, and faculty. Now virtually all B-schools have become global to some extent, although major differences remain in the quantity and quality of their internationalization.

INTRODUCTION

My assessment is that Indiana University became the best IB school in the 1970s, thanks largely to the efforts of Richard "Dick" Farmer, Professor and Chairman of International Business and Stefan Robock, the former and first chairman in the 1960s (who left IU to head up Columbia University in 1967). Both men were very knowledgeable about IB and, more important, were truly committed to having students learn and become IB experts. Because of Robock's and Farmer's commitment and desires, and because the dean and other faculty also thought IB

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would enhance IU's reputation, IU was able to establish an IB Department, and offer degrees for undergraduates, masters, and Ph.D. students.

In addition to Dick Farmer in the 1970s, IU had a large group of internationally oriented professors: Harvey Bunke (Director of IB Research Institute and Coordinator of Overseas Projects); Bernard Estafan (Senior Researcher, IB Research Institute); Victor Childers (Associate Professor of IB), Leo Dowling (Associate Dean of International Programs, Director of International Services); Donald Harnett (Senior Researcher, IB Research Institute); W. Dickerson Hogue (Research Associate, IB Research Institute, and lecturer in IB); Ira Horowitz (Senior Researcher, IB Research Institute); Noritake Kobayashi (Japanese visitor who taught us how to eat, drink and speak Japanese); Lawrence McKibben (Senior Researcher, IB Research Institute); Lee Nehrt (Professor of IB and Senior Researcher, IB Research Institute); Hugan Waldemar Niemotka (Visiting Associate Professor of IB); Schuyler Otteson (Chair of the DBA Program and Director of the IB Research Institute); Manucher Roudiani (visiting Assistant Professor of IB in 1972); and Robert Stevens (Associate Professor of IB). IU also had several other internationally–oriented faculty in the College of Business, even though they were not in the IB Department or Research Institute. One of these was Hans Thorelli, who stayed at IU until he retired! Virtually no other business school had so many professors with such international expertise and commitment!

During the 1970s, IU taught an increasing number of IB courses. In 1970 there were two undergraduate courses (IB Administration and Special Studies in IB), six masters courses (Intro to IB, Environmental Analysis for IB, Business and Economic Growth: Selective Geographic Areas, IB Administration: Selective Issues, Western European Business, and Economic Development), and an excellent doctoral research seminar in IB. By 1975, there were four new courses available at the master's level: International Finance, International Marketing, Research in IB MBA, and International Colloquium: Russia and European Studies. By 1979 an additional course became available: Independent Study in IB.

Because IU had so many strong IB faculty members, courses, and overseas opportunities, there were also a large number of undergraduate, graduate, and Ph.D. students majoring in the field. The doctoral students who were with me in the early 1970s were Kichiro Hayashi, Paul Korsvold, Chris Korth, Don Patten, Lee Radebaugh, David Ricks, Randy Ross, Fred Truitt, Joseph Vogel, and Richard Wright. Interestingly, because of Dick Farmer's IB expertise and commitment to Business Administration faculty, students, and companies, there emerged a group of faculty and doctoral students known as "Farmer's Crop": Jeffrey Arpan (from IU to GSU and USC), Kichiro Hayashi (from IU to Aoyama Gakuin University, Tokyo); Richard Hays (from IU to Hays Consulting, Sarasota,

Florida); Paul Korsvold (from IU to Norwegian School of Management, Sandvika, Norway); Christopher Korth (from IU to Western Michigan University); Lawrence McKibben (IU and dean of the School of Business, Washburn University, Topeka, Kansas); Lee Nehrt (IU professor); Donald Patten (IU and Dalhousie University, Nova Scotia); Lee Radebaugh (from IU to Brigham Young University); David Ricks (from IU to Ohio State, USC, Thunderbird, and University of Missouri-St. Louis); Randolph Ross (IU and McMaster University); Frederick Truitt (IU and Willamette University, Salem Oregon); Joseph Vogel (from IU to Vogel Management, Seattle, Washington); and Richard Wright (IU, McGill University, and the University of Richmond). All of us truly enjoyed and learned a lot about IB when we were at IU.

What several of us also truly appreciated about IU at that time was that we were allowed to go into the Business School's DBA program without having taken a master's degree. Furthermore, the IB faculty allowed us to start our dissertations as soon as we wanted to even well before we successfully passed our comprehensive examination. This allowed me to successfully complete my DBA in IB within 22 months and at the age of 24! However, other IU business faculty did not like this, (especially marketing department faculty), and they subsequently required that doctoral students could not start their dissertations until after they had competed their comprehensive examination. Later, the dean and most faculty decided to eliminate the IB department, supposedly to infuse international business into existing functional departments. Partly because of this, IU's high reputation of international business dropped down in the 1990s.

OTHER STRONG IB SCHOOLS IN THE 1970s

In addition to IU, the other very high-level IB universities in the 1970s were Columbia, Harvard, and Michigan. Well-known IB faculty at Columbia Business School included Mike Adler (joint appointment with finance), Michel Amsalem, Gary Craig, Ian Giddy, Trevor Harris, James "Mac" Hulbert (joint appointment with marketing), Nat Leff (joint appointment with economics), Renato Mazzolini, William H. Newman (joint appointment with management), Stefan Robock, Don Sexton (joint appointment with operations), Kirby Warren (joint appointment with management), Maurice Wilkinson, and David Zenoff.

Well-known IB faculty at Harvard included Ray Vernon, Bob Stobaugh, and Louis Wells in the 1970s, with help from Mike Yoshino and a few others, including some visitors from time to time. Some of the Harvard IB doctoral students who became very famous in international business were Yair Aharoni (Duke and Israel), Seev Hirsch (TelAviv), Louis Wells (HBS), Donald Henley (Michigan State), Bob

Stobaugh (HBS), Jose de la Torre (GSU, France, UCLA, and FIU), John Stopford (London Business School), Fred Knickerbocker (Dept. of Commerce), and Warren Keegan (Pace).

Some of the leading IB faculty in the 1970s at the University of Michigan were Bob Adams, Paul McCracken, Vern Terpstra, Meryl Waterman, and Gordon Miracle. Michigan's well-known Ph.D. graduates were Whaterangi Winiata (UBC and New Zealand), Robert Thornton (Miami University of Ohio), Vern Terpstra (Wharton and UM), Duane Kujawa (GSU, Boston University in Germany, Florida International University, and University of Miami), Steve Kobrin (MIT, NYU, and Wharton), Tom Gladwin (NYU and UM), Ian Giddy (Columbia), and John Daniels (GSU, Penn State, IU, University of Richmond, and University of Miami).

Curiously, when the School of Business at Georgia State University started its effort to become a new and high-level IB school, the head of its IB program, Dr. Bill Ogram, hired four new doctoral graduates: two from Michigan (Duane Kujawa and John Daniels), one from IU (Jeff Arpan), and one from Harvard (Jose de la Torre). GSU also became the first publisher of the *Journal of International Business Studies* (*JIBS*). Interestingly, all four of us became presidents of the Academy of International Business, and all of us except Duane Kujawa won the top dissertation award from the AIB. During the 1970s, GSU was assessed as a new and high-quality IB program, and I went from assistant professor to associate professor to full professor during the 1970s. Unfortunately for GSU, all four of its top IB faculty left for other universities in the 1970s, and it was never able to get as many top quality ones again.

Also during the 1970s, the University of South Carolina (the original USC) created a new Master of International Business Studies (MIBS) Program 1974 and was the first university in the U.S. to require foreign language and a six-month overseas internship in addition to taking a host of required IB courses: international accounting, international marketing, international management, international finance, and international economics, along with many elective IB courses as well. Initially, students were required to take either German or Spanish and do their internships in Germany or Colombia. Later in the 1970s, French and Portuguese languages were added, along with internships in France, Belgium, and Brazil. (Later still, additional languages and overseas internships were added substantially: Italian, Japanese, Korean, Chinese, Islamic, and Russian.)

When MIBS started in 1974, USC had no IB department, which quickly caused problems for enhancing the program's quality and even for keeping it going. So a decision was made to create an IB department in 1976, moving several internationally-oriented faculty from other departments into the new department: Randy Folks (a Ph.D. graduate from HBS), who had immediately come into

USC's Management Science department in 1971 and who has continuously taught international finance courses at USC); Brian Toyne, who was in the marketing department (one of my GSU Ph.D. students); Allen Dickerman and Arnold Stebinger, who had been in the management department; and Rob Kuhne, who was hired by the management department but was transferred to IB when he arrived. Some new faculty were also hired in the last half of the 1970s: IU's Chris Korth came from Penn State, and I came from Georgia State, shortly after which I became the chair of the IB department. After I arrived at USC, we hired two other faculty with graduate degrees from IU: David Ricks (Ph.D. 1971) and Doug Nigh (MBA in IB at IU and IB Ph.D. at UCLA, who unfortunately passed away recently in September 2002). Other IU Ph.D. students who also became business faculty members at USC in the 1970s were Art Warner, Travis Pritchett, Joan Schmit, Stan Fryer, and Rod Roenfeldt.

In 1988, the *U.S. News & World Report* began the first formal ranking of U.S. business schools' IB programs and ranked USC number one. USC has continued to be ranked number one ever since. Having a strong IB faculty, courses, language and overseas studies, internship requirements, and commitment has made it happen.

FINAL COMMENT ABOUT IU's INTERNATIONAL BUSINESS

Thus, beginning in the 1960s and lasting during the 1970s and at least through most of the 1980s, IU remained one of the very best universities in terms of international business. However, by the 1990s, the IB department had been dismissed and moved into the management department, with a larger focus on infusing IB topics into existing courses rather than enhancing and expanding IB courses and faculty. From my perspective, these were the primary reasons why IU dropped in rankings and quality in international business. Now we move on to a study I did about internationalization of business schools in the year 2000.

INTERNATIONALIZATION OF BUSINESS SCHOOLS THROUGHOUT THE WORLD IN 2000

As mentioned earlier, in 2000 and 2001 Professor Chuck Kwok and I did an assessment of the internationalization of business schools throughout the world, largely similar to what we did with USC's Professor William R. Folks, Jr. in the 1990s.

Questionnaire and Sample

The questionnaire consisted of eight sections. Section I asked questions about the role of internationalization in the mission and strategy of the school. Section II inquired about the organizational structure of IB faculty and programs. Section III asked questions about the internationalization of the business curriculum. Section IV asked about faculty internationalization. Section V examined the arrangements and affiliations between the surveyed institutions and foreign institutions. Section VI asked questions about overseas student internships. Section VII sought identification of "best practices" in internationalization. Finally, section VIII solicited basic information about the institution (e.g. number of students and faculty members, private/public, accredited/non-accredited, and so forth).

The sample was designed to focus on educational institutions with IB degree programs primarily from the U.S., Canada, Latin America, Europe, Japan, and several other key countries in the global economy. The major findings are discussed below.

Section I: The Role of Internationalization

The vast majority of business schools had specific references to international/global business education and research as part of their mission statements and long-range/strategic plans. They also had more and higher objectives of internationalization at the undergraduate and master's levels than at the doctoral level, and more and higher objectives of internationalization for *some* programs (international programs) than for *all* programs, regardless of the degree level.

Section II: Organization of the Business School

In most schools, IB specialists were located in functional fields with *no special recognition* (54%), followed by location in functional fields with an *IB specialist recognition* (33%). Very few had IB departments (6%) or a matrix structure (7%).

A slight majority had individuals or groups charged with specific administration of the internationalization of curricula (58%) and overall administration/coordination of international activities (69%), whereas a minority had individuals or groups charged with specific administration of the internationalization of research (27%). Only 36% had a specific plan/program for faculty development in the IB area.

Section III: Internationalization of Curriculum

The majority of core courses were infused with international content, and a large number of specific IB courses (at least six) were offered and required in bachelor's and master's programs. In terms of "foreign" requirements, taking

foreign language during programs was the most often required, followed by foreign experience (internships, study and travel abroad). The most satisfying programs (in terms of internationalized curricula) were international master's programs followed by executive MBA programs and international bachelor's programs. All other programs were only "slightly satisfying."

Section IV: Internationalization of Faculty

The internationalization of faculty at business schools had increased over the previous five years: somewhat greater at 32%, considerably greater at 41%, and vastly greater at 21%. The largest percentage now had understanding compared to awareness and had become more international due to traveling, teaching, and/or living abroad. Typically, the largest number of schools had up to 15% of their IB faculty teaching in other countries, as natives of other countries, with formal education in IB, and had IB experience.

The most important incentives for internationalizing were considered to be research/travel funds, and funds for attending international conferences, seminars and workshops (because the greatest obstacle for internationalization is considered to be insufficient funding). Yet despite the number of increases in internationalization of faculty, only 15% of the responding schools were very satisfied with the level of faculty internationalization, while more than 25% were very or somewhat dissatisfied. Thus, it appears that more internationalization was still desired and needed.

Section V: Affiliations/Institutional Arrangements

More than half of the respondents (53%) indicated that their business school or university was a member of a consortium for the conduct of any international educational activity. Twenty-seven percent required a study abroad experience for students in some of their degree programs, and nearly 23% offered one or more of their degrees in another country.

The chief administrator (e.g. dean) of business schools had the most important role for initiating arrangements with foreign institutions (3.47 mean out of max of 5.0), followed by "study abroad" center directors (3.58) and presidents or other senior institutional administrators (3.47). However, in terms of who had the most important role of managing foreign institutional relationships (once established), "study abroad" center directors were the most important (3.83 out of a max of 5.0), followed by *chief* administrators of business schools (3.34). The least important were business school alumni (1.86). Sixty-two percent of respondent institutions were somewhat to very satisfied with their foreign affiliations/institutional arrangements, while 20% were somewhat to not at all satisfied.

Section VI: Student Internships in Other Countries
Half of the schools offered student internships in other countries, and foreign institutions/organizations had the largest responsibility for arranging such internships (3.48 mean), followed by university-wide offices (3.48), students (2.54), and IB centers/departments and business school dean's offices (each 2.5).

Section VII: Internationalization Satisfaction
In general, how satisfied were schools with the progress of internationalization in their institutions over the last five years? The vast majority of schools (77%) were satisfied, while only 16% were dissatisfied (of which only 1% was extremely dissatisfied) and 7% were neutral.

OVERALL SUMMARY AND CONCLUSIONS

Any summary of such a comprehensive study risks being both oversimplified and platitudinous. Despite what some may view as a rather melancholy text that precedes this summary, the overall conclusion of our survey was very similar to that of the previous 1992 survey. For example, along all dimensions, significant progress continued to be made in the internationalization of business schools throughout the world. The courses, programs, and other educational experiences available to students of business were rich and varied. The capacity to provide education in the international dimensions of specific functional fields was dramatically enhanced, and the infusion of international material into core courses continued to proceed significantly. Internships and overseas study opportunities also increased in many more schools throughout the world.

Moreover, all institutions reported significant enhancing/upgrading of the international capabilities of their faculty and had learned more about the value of various methods of doing so. Faculty research became increasingly international, and business schools responded more to the global needs of their stakeholders.

This said, there remained a shortage of international content in doctoral programs, requiring the internationalization of faculty to occur either before or after most doctoral programs, especially in the United States. This also led business schools to increasingly hire faculty who were already internationalized so they did not have to spend more time, effort, and funding to get their own faculty internationalized.

One very positive increase was the higher aspiration of institutions to internationalize their curricula. Whereas previously most schools sought to provide students with only an *awareness* of the international dimensions of business, and primarily used only infusion of international content into core courses, far more

schools now had understanding as the objective for all students and expertise for more students than previously. They also now had more IB courses, and required more of them for all students. These changes were most likely driven by the greater globalization of nations, industries, and firms, and resulted from increased amounts of required IB courses, language and cultural training, and overseas experiences for students.

So, was everyone satisfied with the internationalization of their curricula and faculty? Unfortunately, no. There was still only a minority of business schools who were *very* satisfied, despite an overall improvement and enhancement of the internationalization of faculty, programs, and students. The most likely reason was that globalization throughout the world (in terms of business) increased even faster than the internationalization of business schools' curricula and faculty – hence, the schools continued to lag behind business needs and developments. Hopefully, a similar survey at the end of this decade will show a closer fit between academic and world realities.

For the most detailed information about our 2000 study, AIB and USC have the book available for purchase ($35): *Internationalizing the Business School: Global Survey of Institutions of Higher Learning in the Year 2000*. Also, the most recent *Journal of International Business Studies* (*JIBS*) publication, No. 104, Volume 33, Number 3, 2002, has about a 10-page version of our global IB study.

SPECIALIZATION TO INFUSION: IB STUDIES IN THE 1990s

John D. Daniels

ABSTRACT

This paper highlights the evolvement of international business curricula during the 1990s, with an emphasis on occurrences at IU. Because business students are increasingly entering universities with more international experience and international learning expectations than in the past, business schools must respond with course content changes; however, not all professors feel comfortable in adding substantial international content to their courses. Business schools have responded in three organizational ways – separation, infusion, and diffusion – none of which has been without problems. During the 1990s, IU followed a combination of the first two.

INTRODUCTION

This paper focuses on the internationalization process in business schools during more or less the 1990s. It emphasizes the experience of Indiana University's Kelley School of Business, where I was a professor from 1987 to 1997.

Several data collections regarding IB at Indiana took place near the change of the decade, most in 1991. First, a task force determined the extent of international content in all the courses in the business school. This was the first ever such task force and involved interviewing over 100 faculty members and examining their syllabi in detail. Second, the first seniors having to fulfill an international

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requirement graduated in spring 1991, and the undergraduate office checked all their transcripts to determine how they fulfilled those requirements. Third, in preparation for writing a CIBER proposal, a select group of faculty participated in a SWOT analysis regarding the overall business program as well as the international activities within it.

The environments in which the 1990s international experience at IU took place were specifically at the business school, the university, and other universities. These environments affected international curricular directions and the feasibility of implementing certain practices. Hopefully, we can draw some lessons (both positive and negative) from the decade that can help the internationalization process, both at IU and elsewhere. During the 1990s and my tenure at IU, I served five years as CIBER director or co-director (including a stint on the board of CIBERs), four years on the board of the Academy of International Business (AIB) (two years as president and two years as past president), three years as Dean of the AIB Fellows, three years on the board of the International Division of the Academy of Management, five years on the internationalization committee of the Academy of Management, and two years on the internationalization committee of AACSB. During these same years I also visited eight other universities as advisor or evaluator of their internationalization process or CIBERs. Thus, I feel these experiences put me in good stead for placing IU's internationalization into perspective.

I considered options of organizing this paper chronologically, by degree program, and by specific events, but none of these approaches seemed to capture the essence because of the interrelatedness of activities. Hence, I may sometimes digress. Basically, I shall first describe international business as I remember it when I was new at IU. Then, I shall describe changes over the decade at the Ph.D., MBA, and undergraduate levels. Finally, I shall comment on the infusion versus separation models at IU and on IU's specific administrative structure and culture as they affect international business.

As I discuss the 1990s, I shall often refer to the IB faculty. When I do so, I am referring to the professors who were/are international specialists and who were/are assigned almost exclusively to teach cross-functional courses. When I joined IU, Joe Battat, Vic Childers, and Paul Marer comprised this faculty. I have included Vic Childers even though he was in Indianapolis because at that time anyone could be assigned to teach either at Bloomington or Indianapolis. Although faculty were primarily assigned to one campus or the other, I recall Childers teaching in Bloomington and Battat teaching in Indianapolis. This situation soon changed with the retirement of Childers and the separation of the two campuses, so in effect the Bloomington campus had three IB professors throughout almost all of the 1990s. Further, the Indianapolis campus did not replace Childers with an IB professor when he retired; nor did the Bloomington campus replace Paul Marer with an IB

professor when he retired. When Battat left to work at the World Bank, we did hire Arvind Parkhe in his place. Shortly after I left, the business school hired another IB professor, Roberto Garcia. With the hiring of Alan Rugman in the Waters Chair, the number of IB faculty has stabilized at three. I do not imply that the IB faculty members were responsible for all internationalization or teaching of international courses within the Business School. For example, Joe Miller regularly taught an international marketing course within the marketing department. However, these other activities were administratively very separate from what the IB professors were doing.

MY ARRIVAL AND EARLY YEARS

Before I interviewed at IU in late spring 1987, I had never visited Bloomington. Further, the only two active faculty members I knew at IU were Hans Thorelli, whom I had met on only one occasion about seventeen years earlier when he ran INTOP for a program at Georgia State, and Jim Patterson, whom I had lost track of when he left Penn State about 10 years before. I saw neither of them when I visited, so the interview process was truly one of mutual acquaintanceship. Of course, I did know many former IU international business Ph.D. students, and I had even co-authored publications with two of them, Jeff Arpan and Lee Radebaugh. I knew Dick Farmer, so interviewing for a not-yet-approved position to replace him while he was in a terminal health situation was awkward for everyone. (I was actually hired for an approved line position in strategy.) Between the time of being hired and moving to Bloomington, Dick passed away, and I began the unenviable task of replacing someone who, because of being unique, was really irreplaceable. My feelings of inadequacy grew when on my first day a former IB doctoral student came by to tell me that I could never fill Farmer's shoes. By the way, I did not know the former doctoral student, have not met him since then, and have even forgotten his name. Nevertheless, I am a great believer in serendipity and wish to thank Vic Childers, Joe Battat, and Paul Marer for somehow identifying me as a possible candidate and then tracking me down in Peru, where I was working for a year on a technical assistance project. The next ten years at IU were professionally and personally rewarding. Without those ten years of experience, I doubt I could have achieved two subsequent professional ambitions – to teach in a small liberal arts oriented college (University of Richmond) and to close out my career at the location of my roots (University of Miami).

Let me now briefly outline IU's environment for IB at the time. For many years, IU had been a bastion of international activity. It offered instruction in more than 60 foreign languages, all ranked by the *Gourman Report* among the top fifteen

programs in the United States. It had seven regionally focused interdisciplinary international area study centers, of which five were federally funded as national resource centers, and about fifty study-abroad programs in more than twenty countries. Approximately 2,700 foreign students from more than 120 countries were enrolled and more than 10,000 IU graduates were living abroad. At any given time there were hundreds of visiting foreign scholars on campus. There was hardly a day in which there were not multiple foreign visitors, lecturers, performers in musical and dramatic events, and competitors in sports activities. The environment was definitely more cosmopolitan than the one I was leaving at Penn State.

The Business School also had a legacy of international activity. Aside from the well known Ph.D. program in international business, the school had participated in establishing business schools abroad (such as in Bangladesh, Thailand, Yugoslavia, and Indonesia), had cooperated in executive programs in Venezuela, and worked on programs in China to develop business faculty there. Just prior to my arrival, the school received private funds to establish a global business center, approved an international studies requirement for all undergraduate students, and established a speakers' series in honor of Richard Farmer. These all harbingered a continued flurry of international business activity. However, some fairly recent events portented a change in how international business would be delivered and managed, including the transfer of the IB department so that it became a sub-group within the management department and the downsizing of the School's Ph.D. program to approximately half its former size. In addition, there had been a growing opinion within School that IB should be infused into courses rather than taught as a separate discipline. I shall come back to these points as I describe programs and try to explain why and how they evolved.

During my first year at IU, the IB professors were quite involved in trying to set up business schools in Budapest and Madrid. Paul Marer was the initial catalyst for the Budapest program because of his long and continuing Hungarian involvement. Further, the U.S. ambassador to Hungary, who had studied Hungarian at IU and was familiar with longstanding interchanges of economists between Hungary and IU, encouraged IU to spearhead this development. As an anecdote, I recall a fund-raising dinner for wealthy expatriate Hungarians right after the 1987 stock market crash. We pondered how to solicit a contribution from a prospective donor who, according to the *New York Times*, had just lost $700 million in one day. Later, Joe Battat traveled extensively to raise funds for the Budapest program. Meanwhile, I was the liaison for the Madrid program, which the main chamber of industries in Spain had asked us to establish. Vic Childers agreed to be the dean of that program. However, for different reasons, IU's involvement as main administrator in neither program reached fruition. While working on these programs, I reached the conclusion that the School's sole interest in the outreach

programs was to further internationalize its faculty so that IB would be infused into courses, rather than taught as a separate discipline.

Throughout my first year at IU, I also chaired a committee to run the new Global Business Center. In retrospect, I see that the committee acted passively, rather than proactively, to expend the Center's funds. In other words, we primarily read proposals for doctoral students' dissertations and faculty research, and we supported both. After a year, we concluded that a committee could not effectively run the Center. We recommended that the dean appoint a director. In line with the infusion process, we also recommended that the director not be one of the IB professors.

THE PH.D. PROGRAM

I indicated that the Business School cut the size of its Ph.D. program at about the time I came to IU. The objective was primarily to spread the thin budget for teaching assistantships over fewer doctoral students so that the School would be more competitive in attracting top doctoral candidates, who might otherwise go to other universities. The School cut the program size again in the mid-1990s, this time for a combination of budgetary factors and a bleak outlook for placing graduates over the next few years. Together, the two cutbacks caused the size of the IU Business School doctoral program to fall to about one-third the size of what it was in the 1970s and early to mid-1980s.

The smaller program created impediments to offering doctoral seminars; i.e. there were often too few students to justify offering them. As a substitute, I sometimes supervised independent study courses, which were really self-study reading courses. Further, with downsizing there was less chance of developing a cohort of IB students who could work closely together while at IU. The program size was especially an issue for IB, which was already smaller than some other programs, such as finance and marketing, before the downsizing took place.

The doctoral IB program was further affected by the shift of IB to the management department. Because this shift occurred before I arrived at IU, I don't fully know its history. It appears to have taken place to gain administrative efficiency, such as to share clerical assistance and a department chairman. In retrospect, however, it seems inevitable that once IB was in a functional department, it would be viewed as a branch or sub-set of that function rather than a separate discipline. Further, this administrative change affected the number of doctoral IB majors and minors as well as which functional majors or minors doctoral students studied in conjunction with IB. I shall now examine these implications.

With a downsized Ph.D. program, the management department, like other departments, received an allocation of assistantships for Ph.D. students. This effectively controlled how many students each department could accept because almost all students needed IU's financial support. For example, during the 1990s, I think the only IB major or minor without an assistantship was Len Trevino, who was completely funded through an AACSB fellowship. So the management department received a yearly allocation, which was usually for not more than three new students per year. We had a departmental doctoral committee that determined how many new Ph.D. students would be admitted for each area within the management department. As a diverse department that included such areas as organization behavior, human resources, strategy, and entrepreneurship, admissions to any single area were very thin. The doctoral committee experimented with different entrance formulas, such as admitting strategy students one year and IB the next, but none of these formulas was ideal.

In the 1960s and 1970s, many IU doctoral students combined IB with various functional areas. For example, Chris Korth combined IB with finance, Lee Radebaugh with accounting, and John Ryans with marketing. However, I think in the 1990s there was only IB combination with an area outside the management department, and that was with marketing. In essence, because other departments offered courses with "international" in their titles, such as international marketing and international finance, there was no perceived need to go to the management department to become internationalized. There was also no effective way to combine a sub-discipline of the management department with these other functional departments, such as for doctoral examinations or teaching assignments.

The move of IB into the management department also led to changes in the evaluation of IB faculty members' research and in hiring decisions for new IB faculty. Whereas faculty in a separate IB department or institute might publish research in different functional journals and have that research favorably reviewed by departmental peers, this is difficult within a functional department. At IU, we designated two IB journals as top-tier in the department. The department also considered certain management journals to be top-tier. However, if/when IB professors published in a top-tier economics or marketing journal, these publications did not count as top-tier. Further, if enrollments did not permit IB faculty to teach only IB courses, they had to teach other courses in the management department. Thus, we could not feasibly hire someone for an IB position whose functional connection to IB was anything other than management. For example, when Joe Battat left to work for the World Bank, we did not seriously consider applicants whose functional connection area with IB was anything other than management. We were fortunate to hire Arvind Parkhe, who seemed likely to publish in both

top-tier IB and management journals, and who could teach certain management department courses if needed.

What I have just described is similar to what was happening during the 1990s in many other business schools as well. Separate international business departments were becoming rarer, so IB doctoral graduates increasingly had first to sell themselves as functional specialists, and second as individuals who would like to add international dimensions to their functional teaching and research. In fact, some IB graduates from IU and elsewhere entered departments that did not even have separate internationally designated courses. Rather, if hired by a marketing department, they would teach a course in, say, consumer behavior or advertising, and they could include an international dimension for those courses.

Given the realities of the changing situation both at IU and elsewhere, we made several adjustments in IB studies at the Ph.D. level. In exchange for eliminating IB as a major, we took several steps that effectively increased the number of doctoral students who could teach their courses from a global perspective. First, we persuaded the management department to require IB as a minor for all its majors. Because for practical purposes there is not much difference between a major and a minor in IB, the number of students with some type of international business designation remained high in the 1990s. Although we do not have accurate figures to compare, the number may have been as high as in earlier decades. However, we never came up with a good nickname for them. Somehow, "Marer's horrors" didn't have the same positive resonance as "Farmer's crop."

We also used CIBER grants to get each department to devise means to internationalize all doctoral students so that, upon graduation, they could teach their courses from an international perspective. Each department did this differently based on its particular resources, curricula, and market needs. Two of these help illustrate the contrast. The finance department was large, and it relied on five faculty members to infuse significant international content into the five doctoral seminars they taught. It brought in two visiting lecturers, gave an award to the doctoral student writing the best paper on an international financial topic, and offered summer support to faculty and students who sought ways to add international dimensions to their courses. In contrast, the operations management department was small, so it delegated one faculty member the responsibility to develop a plan. This department devised a guest lecturer seminar, wrote international cases that doctoral students could use, and took all the faculty and doctoral students to Baltimore by van to attend a seminar on internationalizing operations management.

In addition, we devised two IB doctoral seminars, based on a combination of content and methodology – one focusing on comparative cultures and the other on international economics. Through a very hard fought process, the faculty required

that all doctoral students take one of these. Also, through CIBER, we offered competitive pre-dissertation and dissertation grants for which any business student doing research on an international topic was eligible. So, through the efforts at both the department level and at the school-wide level, we moved in the 1990s from training a select group of Ph.D. business students internationally, to training all the Ph.D. students in the international aspects of their disciplines. Some of this training undoubtedly led to infusion in undergraduate courses at IU because doctoral students taught a significant portion of the undergraduate courses. However, this infusion was probably small inasmuch as the doctoral students often received the international content near the end of their course work when their teaching assistantships were coming to an end. Nevertheless, of perhaps more importance, by graduating all students with an international perspective, we were contributing to the infusion of international content nationally.

MBA PROGRAM

I think it is safe to say that throughout much of the 1990s the MBA program was considered the flagship business program at IU. This had implications for resource allocations, particularly when trade-offs were needed with the doctoral and undergraduate programs. There were many of these trade-offs, given that the 1990s was a period of financial constraints at IU, as at most other state-supported institutions. This situation had both positive and negative implications for the IB faculty. Because most of our teaching was in MBA courses, we were fairly assured that we would not have to meet higher minimum class sizes in order to avoid cancellation of our sections. From a negative standpoint, most faculty members throughout the school perceived that there would be more rewards by teaching in the MBA program; thus we faced more competition to enroll students in IB courses. Further, because globalization had become the fair-haired buzzword of the 1990s, other departments were encroaching on what was traditional IB turf.

The MBA program office surveyed incoming MBA students in the fall of 1989 on a self-administered questionnaire concerning their international proficiency. This proficiency was based on foreign language training, foreign work and living experience, attendance in IB related courses, and international responsibilities within the workplace. The results showed that 53% had no international experience beyond a year or two of high school foreign language study. Another 17% had just a little more, characterized as minimum experience and barely usable skills. The remaining 30% had considerable international experience and skills, including 57% who were U.S. citizens and 43% who were foreign students. Further estimates

showed that only about 35% of the graduating MBA students at that time had taken a specialized IB course during their program, and about a quarter of those comprised students who already had a fairly high exposure to international skills when they entered the program.

In 1992, the Business School inaugurated a new MBA program that was lock-step for the first year. This new program had a number of effects on internationalizing MBA students and on the IB program. First, it mandated that an international dimension be included in each course during the students' first year of study. Second, it offered a series of guest lectures, mainly by practitioners, that first-year MBA students were required to attend. Some of these lectures focused on topics dealing with international business. Since no IB courses were needed, the required curriculum internationalization was entirely by infusion during the first year of study. At the same time, we kept specialized IB courses as electives in the second year of the MBA program. These were substantially revised because elective courses went from three credits to one and a half credits. I do not have enrollment figures; however, we had sizeable enrollment in our courses and substantial numbers of MBAs majoring and minoring in IB. In fact, one of the situations we sometimes faced was that courses filled. Since the regular MBA students had first priority for entry, exchange students and students from outside the business school (such as from area studies, political science, and the School of Public and Environmental Affairs) could sometimes not get into the courses as easily as before we initiated the new MBA program. Thus, we somewhat lost the ability to enrich our IB courses with perspectives from non-business students. When they did get in, there was sometimes resentment by the MBA students because they were paying more for the same courses. Moreover, doctoral students sometimes had trouble getting into the courses, which was a problem because we offered few IB doctoral seminars.

Unrelated to implementation of the new MBA program, we also dropped the area studies courses in IB. This was due partially to some philosophical reasoning that regional areas do not present new theories. It was also due to changes in staffing realities. Near the beginning of the decade, Joe Battat, Vic Childers, and Paul Marer taught courses on business in China, Latin America, and Eastern (now Central) Europe respectively. However, Joe left, Vic retired, and the Iron Curtain came down. The last event caused Paul to reorient his course to one on economies in transition. However, since neither Arvind Parkhe nor I consider ourselves area specialists, we had no one to teach the other area-focused courses.

Apart from the formal requirements of the MBA program and the specialized elective IB courses, there were several other developments that helped internationalize the MBA students. IU was a founding member and one of 20 MBA programs participating in the Enterprise Corps, which placed graduating MBA

students in internships in Central Europe. The Global Business Center ran its "Biz Quiz" to build students' international awareness, and it arranged plant visits to local companies with international operations. Several non-credit summer international orientation trips were put into operation, such as one that went to Finland. The CIBER developed well-attended, non-credit language tutorials for MBA students that enabled them either to start a language from scratch or to build on their existing backgrounds. Further, since these were tutorials, students could choose from a wide array of languages, schedule teaching when it was convenient to them, and move at their own pace. Through CIBER support, we also developed an experimental course team-taught by faculty members from three different departments and three different area studies centers. However, there were administrative problems in continuing this course.

Unfortunately, I have no data on how internationalized MBA students were at the end of the decade compared to the beginning. However, I shall make some conjectures. For more than twenty years, I have had my students fill out a questionnaire on the first day of class telling about their international experience outside the classroom. I have not kept a record of these through the years (I wish I had), but my impression is that students (both graduate and undergraduate) are coming into programs with more awareness and experience each year. Some of my observational change may be accounted for by my experience since I left IU. I went first to the University of Richmond, an elite private school whose business program is almost entirely undergraduate. The typical student there comes from a family whose income has allowed for considerable student travel internationally. I then went to the University of Miami, which is located in a metropolitan area where more than half the residences are foreign-owned and the local newspapers are more apt to cover a story in Venezuela than one in Chicago. However, even taking the geographic variable into consideration, I think my comments about the change in incoming students are true. Over the period, I have found a higher portion of students who have traveled, lived, and worked abroad. Not only have more had foreign experience, but this experience has become wider. In addition to Europe, they have also traveled to Africa, Asia, Latin America, and Oceania – they've sometimes done this on their own, sometimes with parents, such as living abroad because one of the parents is working abroad. I have also found, especially among MBA students, that a growing portion have had international work responsibilities, both in their home and in foreign countries. Another intriguing change is the increase in the number of students with dual or multiple nationalities, which may harbinger a category of managers who are more loyal to global than national objectives. (I had one two years ago with five nationalities.) The point is, MBA students who graduated at IU and elsewhere in 2000 probably had more IB knowledge than those who graduated in 1990 – regardless of how international

business was handled in their curricula. Moreover, this changed experience of incoming students has forced more professors to respond to students' international questions in the classroom.

UNDERGRADUATE PROGRAM

At the beginning of the 1990s, the business program was the most competitive undergraduate program at IU. Business majors were admitted only after their sophomore year, and on average they had the highest SAT scores and GPAs of any major on campus. This changed somewhat at one point in the 1990s, undergraduate business enrollments dipped nationally. This was one of the factors influencing the downsizing of the doctoral program – i.e. with decreased business enrollment, Ph.D. students would not be easily placed. I also recall Joe Waldman discussing the adjustment necessary in the undergraduate office from turning students away to promoting their entry.

The spring 1991 class was the first to graduate under the international dimension requirement, which required students to do one of four things: (1) complete any two of eleven courses within the Business School that had been predetermined as having significant international or foreign content (most of these were taught outside the management department and by faculty not designated as international business professors); (2) participate in a study abroad program; (3) take two advanced courses in an area studies program; and (4) finish two advanced courses in a foreign language. How the first class completed this dimension surprised us. Only 12% fulfilled the requirement by taking business courses with international content. Advanced language studies were by far the most popular means of completing the requirement (52%), followed by area studies (25%) and study abroad programs (11%).

We examined the data more closely and found that few students were taking both advanced area studies and advanced language training. For example, East Asian studies accounted for 52% of the area studies; however, Chinese (Mandarin plus Cantonese) and Japanese comprised only 5% of the language courses the graduates had taken. In other words, we were graduating students who knew the foreign language of a region, but not the region's history, geography, culture or politics where the language was spoken. Or they who knew the history, geography, culture or politics of an area, but not the language.

To help mitigate the area studies versus foreign language anomaly, the Business School approved an undergraduate concentration in international studies, the completion of which this concentration would appear on their transcripts. The first such concentration approved by the Business School, required students

to complete an additional nine credits from those courses approved for the international dimension. Students were not required to take the additional nine credits from the same category; however, they had to demonstrate linkages among the courses. For example, foreign language courses in Spanish, Portuguese, or Quechua would be acceptable with area studies courses in Latin American studies; however, these languages would not be acceptable in conjunction with Middle Eastern studies. Data collected two years later indicated about a 50% increase in the number of students taking fifteen hours or more of international dimension courses.

We also determined that space constraints were limiting the ability of undergraduate students to take our two IB courses, one dealing with the environments for IB and the other dealing with IB operations. The space constraint was exacerbated because doctoral students were teaching most of the sections. These sections had a maximum enrollment because of classroom sizes of about 40 students, and the number of IB doctoral student majors to teach these courses was declining. Anecdotal information indicated that many more students would opt to take the courses with IB content if more space were available. The IB faculty decided to explore means to teach both IB301 and IB302 effectively in mega-sections (250 or more students). At the time, the School's policy counted a mega-section as a two-course load, so we had a secondary incentive to move to the mega-sections. Doing so would reduce our contact hours in the classroom and give us more flexibility in collecting data for research abroad, particularly if we did some team teaching. We spent a year preparing the courses with assistance from instructional specialists. The implementation of the mega-sections was an integral part of the first funded CIBER proposal. Basically, our regular IB faculty taught two days in big sections. Then students met in smaller discussion sections of about 40 one day a week with graduate students, where they worked on interactive exercises such as Báfà Báfà and a foreign exchange game. Through CIBER assistantships, we got some non-business students to help teach the discussion sections. These were area studies majors who had formal business training as well, such as having received MBAs before entering a Ph.D. program in area studies. Our enrollments immediately shot up, and student evaluations for the new format were good, although about the same as when we taught the courses in smaller sections. We viewed this positively because students tend to evaluate large sections less favorably than small ones. Before inaugurating the mega-sections, only 12% of students were fulfilling their international requirements by taking business courses with IB content. I am sure that more than half were fulfilling this requirement with our courses afterward. On a personal negative note, as soon as we introduced our first mega-sections, rules changed so that a mega-section counted as no higher a course load than a regular section. Although we thought that by

teaching mega-sections we would have more time and flexibility for research, we actually ended up having less.

The other big initiative to internationalize undergraduate students was the implementation of a required one-credit senior course in which students played the Intopia game (discussed in the chapter by Hans Thorelli in this volume).

INFUSION MODEL

As early as thirty years ago, business schools debated whether to place international business in separate specialized courses or to infuse international content into all appropriate courses. Philosophically, the infusion model is very appealing. It parallels the argument against international divisions in companies, whereby product or functional divisions take on the responsibility for international operations instead. Further, how can anyone effectively teach accounting, marketing, or finance from only a domestic perspective when a significant part of U.S. companies' sales, assets, and profits are in foreign countries?

Although the infusion model has always had the most appeal philosophically, its implementation has been problematic. I recall Lee Nehrt's presentation at a 1991 CIBER conference at Michigan State, where he painted a dismal picture of how far AACSB schools had gone on internationalizing their faculty members. He concluded that less than 10% of faculty members were sufficiently trained internationally to infuse the requisite international content into their courses despite years of effort to retool faculty so that they would have more international experience. This retooling effort led business schools to send faculty to workshops offered by other institutions and professional organizations, such as the University of South Carolina, the University of Hawaii, the AACSB, and the Academy of Management. Business schools set up executive programs abroad and participated in foreign institution-building efforts so that the faculty would have opportunities to spend time in foreign countries. Nehrt concluded that, in spite of all these efforts, the number of faculty being retooled was less than the number of new Ph.D.s being graduated in business without an international knowledge of their fields. Thus, the situation was deteriorating rather than improving.

In the 1990s, IU was typical of the national situation, even though the Business School had been a leader for years in giving its faculty international opportunities, many of which I have already referred to. So what went wrong? In many cases, the already internationally converted and trained faculty members were the ones availing themselves of most of these opportunities. In some other cases, faculty members took trips abroad to teach in programs primarily because of the compensation or tourism benefits, rather than to learn in depth about business

operations abroad. Even if they had wanted to gain in-depth knowledge, a few days of being housed in a cookie-cutter international hotel chain would give them few insights.

Given what I have just said, it should not have been surprising that when we conducted a survey in the fall of 1991, we found that less than half of non-internationally specialized courses taught by faculty rather than doctoral students had any international content. Actually, we were even very lenient in what we called international content. Since this was a self-reporting study, we counted such responses as "I'm using a text that's adopted in a number of countries, so what I teach must have international applicability." Thus, I was and remain pessimistic about retooling faculty after they finish their Ph.D. Of course, there are exceptions. For instance, I received a phone call a few weeks ago from a former IU professor with no international experience who will be accompanying a group of students on a study trip to various places in Europe. I am sure this professor will prepare well and will return with a sufficient competence to infuse IB to existing courses or even teach a specialized international course.

During my years with the IU CIBER, I grew more pessimistic about the ability to internationalize a significant number of existing faculty members. Most older faculty members are simply too set in their ways to easily change. Most younger ones are so pushed to publish that they have little time to move beyond their existing topics, methodologies, and geographic scopes. In addition I think that both younger and older faculty members are influenced as well by the existence of IB specialists. In other words, they say to themselves, "Why should I go through the great effort to learn and infuse international content when there are specialists on our faculty who have responsibility for that?" (We probably see the same mentality for other areas, such as ethics and social responsibility.) In turn, the international specialists naturally guard their turf for the sake of job security and argue that others are incapable of doing what they do so well. Of course, I can say this now that I am so close to retirement and no longer worry about job security. But let me return to specifics at IU. At the CIBER we received funding for faculty study trips that were as close to boondoggles as one could imagine – such as an all-expense-paid trip (at first-class hotels) to visit Tokyo, Beijing, and Hong Kong. The only faculty interest came from professors who were already internationalized. I recall a lunch in which Roger Schmenner and I tried to help Terry Dworkin find someone, anyone, in the business law department to partake in one of our boondoggles. Terry was interested, but she was already sufficiently internationalized. In sum, we found no one in business law. Response was always by the usual suspects, which was no more than a very small percentage of the Business School faculty members.

I do not mean to imply from my cynical comments that I am against international faculty development. Rather, I believe it is insufficient. When IU began

internationalizing all doctoral students, it was really at the forefront for infusing international content into all relevant courses. However, to effectively do this nationally, will require training all business doctoral students nationally, and going through the gradual process of adding a higher portion of international content as attrition changes the composition of faculties.

Before I move on to suggestions on how to make infusion work better, I want to comment on our traditional way of measuring internationalization. We have done it by measuring inputs rather than measuring outputs, such as how many courses people have taken rather than what they have learned in relationship to what companies expect them to know upon entering the workplace. On this last point, we have never professed that business schools should teach students everything they need to learn; in fact much learning may be better accomplished on the job. In this respect, U.S. corporate managers have obviously been successfully learning IB operations somewhere, either in business schools or on the job. In spite of our emphasis on teaching about blunders, U.S. companies have been quite successful in international business, especially during the 1990s, which is my focus here. Their failure rates abroad have been lower than their domestic failure rates, and in many cases their international operations have performed better than their domestic ones. Further, their managers have often demonstrated knowledge of how to use international operations to bolster their domestic ones. For example, how else can we explain Enron's establishment of more than 800 separate subsidiaries in the Cayman Islands alone? Some managers in Enron had learned IB too well!

Now to return to IU in the 1990s. Where we most tried the infusion model was in the first year of the MBA program. I do not think there were any output studies showing what international content students learned in these infused courses. Having taught many of the students in second year electives, my impression is that there was a good deal of variation depending on what the first year course was and who taught it. However, even the MBA program was dual in that the IB faculty offered separate courses in the second year. Moreover, I do not think there were any internationally separate functional courses at the MBA level during the 1990s, such as a course in international marketing or international finance. These courses were offered as electives in the undergraduate program, though, where IU completely followed a separation model rather than an infusion model. I've discussed the mixed approach in the doctoral program and have nothing else to add here. In the undergraduate program, we stayed completely with the separation model. To what extent was unplanned infusion increased during the 1990s? I suspect it was substantial. Given the greater international sophistication of incoming students, professors have had to respond by preparing themselves to answer complex international questions intelligently.

It is useful to discuss alternative means of implementing infusion and draw some lessons from the IU experience. I have already alluded to the difficulty of retooling faculty and of hiring newly minted Ph.D.s with international training. To IU's credit, it placed great emphasis during the 1990s on hiring senior functional specialists who had a substantial publishing record of what I would refer to as IB research. For example, the management department hired both Christopher Earley and Tricia McDougall, whose international research records are exemplary.

Another way to implement infusion is to hire IB specialists and use them as resources for internationalizing the entire program. This is usually called a diffusion model. For example, Willamette and Duke hired Fred Truitt and Yair Aharoni, respectively, with this objective in mind and have apparently had success. Among other activities, the IB specialists have given guest lectures in other professors' classes, which has served two purposes – to infuse some international content into those classes and to train those professors. I was also involved in this for two years when I left IU and went to the University of Richmond. However, I could not force myself into someone else's class, and I found that a few professors kept inviting me back, probably because they simply wanted to get a guest speaker and shirk their own responsibilities to infuse international content. Thus, the guest speaker approach is far from a perfect solution. In fact, there is probably no perfect solution. Despite drawbacks in using IB specialists, I think IU could have used the IB professors much more effectively during the 1990s. For example, no one consulted us on what international content should go into the required first year infusion of the MBA program. Further, although there was considerable integration among the first year MBA courses, there was no attempt to integrate the first year's international content with elective IB courses that students took in the second year. Another example was that the Business School wrote its first two CIBER proposals without ever involving any of the IB faculty to make suggestions, participate in proposed funded activities, or even read the proposals before they were submitted. Not surprisingly, neither of those proposals was funded. For the third try, Dean Jack Wentworth asked me to write it, and we were funded. The Business School certainly might have moved more quickly in getting CIBER funding if it had involved the IB faculty somewhat from the beginning. A third example involved filling the Waters Chair in international business, for which the search began in 1997 but was not completed for several years. It was not until the day the first candidate was invited in to interview in the finance department that any of the IB faculty or the chairman of the management department even knew there was a Waters Chair. Certainly, the IB faculty members were in a very good position to suggest names and evaluate candidates. Interestingly, after I left IU I was contacted on several occasions to render opinions about candidates. Although I have made a case for using the IB faculty members more effectively, I fully understand the

potential downside. Had the Business School engaged any of us at the onset of any of the situations I have discussed, we may well have been self-serving in our advice. This may have delayed the involvement of a broader spectrum of Business School faculty.

ORGANIZATION STRUCTURE AND CULTURE

The Business School has a long tradition of entrepreneurship in building international programs. This is both a strength and a weakness. The strength lies in the fact that almost anyone is free to pursue new international activities. This has led to a proliferation of international programs and has enhanced the sustainability of programs because committed faculty members are necessary to make programs work.

However, over the years programs and offices have sometimes become so independent of each other that there has been duplication and confusion without synergy. It reminds me of a well known *Fortune* article from the 1980s about Westinghouse's decision to move from a product to a matrix structure. When operating under the product structure, a Westinghouse salesperson visited a Saudi businessman who pulled out business cards from twenty-four other Westinghouse business units and asked, "Who speaks for Westinghouse?" I received many similar questions while I was at IU and was glad to have been on sabbatical when Roger Schmenner had to explain the international structure of IU's Business School to the Department of Education representative who came to evaluate our CIBER. At the time, the School's IB program was housed in the management department, a CIBER (with co-directors), a Global Business Center (with a director), an International Business Forum (with a director), a Chair of International Activities, and a Director of International Programs and Special Projects. In addition, some other faculty members were in charge of outside funded international grants, such as a FIPSE grant for work in Central Europe, while other professors handled specific study and travel abroad programs. Just as the Saudi businessman asked, "Who speaks for Westinghouse?" one could ask, "Who speaks for the IU Business School about international studies?"

Given that so many diverse activities were taking place in such a decentralized manner, it is understandable that synergy sometimes lost out. There were no simple means to find out everything that was going on or to find out everyone who might benefit from a particular activity. In a sense, this paralleled a multidomestic strategy in company operations, whereby it was long assumed that if each country maximized its performance, the performance of the whole organization would improve. However, this strategy is now largely discredited because it loses synergy.

For example, at the Business School, the International Business Forum organized global conferences with high-level business speakers but never thought to invite the IB faculty members, who might have benefited from hearing presentations and might have transmitted new ideas and insights to their students. Had the School operated with a more global-like strategy, rather than a multidomestic-like strategy, perhaps it would have gained even more benefits from the variety of flourishing international initiatives. Nevertheless, one of the hardest things to do in an organization is to eliminate autonomy once people are accustomed to it. We need only look at the experience of Ford, which has been trying for over twenty years to move completely from a multidomestic to a global strategy.

Although I have written about matrix structures primarily from a negative standpoint, they do offer certain advantages. We see these today in a number of companies, particularly what I would call "modified matrices" that include such structures as team-based operations. With IB housed within the management department, there may be matrix advantages in bringing in faculty from other areas, such as finance and marketing, to coordinate IB specializations at the MBA and Ph.D. levels. However, the handling of IB through matrix structures has had mixed results. When I was at Georgia State, it worked quite well. For example, I was a member of the management department as well as a member of the Institute of International Business. This worked well because the management department basically deferred faculty evaluations for promotion, tenure, and raises to the Institute. However, this does not always occur. There are examples of schools in which faculty have had to satisfy two groups and two different sets of criteria to be promoted and tenured. The results have been disastrous.

THE IU IMPACT ON THE INTERNATIONALIZATION OF BUSINESS SCHOOLS

David A. Ricks

ABSTRACT

Indiana University has played a major role in the internationalization of American business schools over the past thirty years or so. This report of one IU graduate's role in the transformation begins with his doctoral student activities in the 1960s and continues with his personal involvement in faculty development program initiatives and teaching material developments. It concludes with the question of whether or not IU's impact on business school internationalization might even be so large as to be the possible cause of a future decline in the need for a separate Academy of International Business.

INTRODUCTION

Indiana University has had a tremendous impact on the field of international business (IB) education. One important activity clearly showing its imprint has been the internationalization of business schools. It has been something like a mission of the IU School of Business to help internationalize business school curricula and faculties. Many faculty and doctoral students who have been at IU have carried out this task with impressive results.

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I have been asked to report my own experiences in this mission. I feel somewhat awkward about this request since it means I will be talking so much about myself. However, I will do so in the spirit of acknowledging that some of my activities reflect but one part of the impact IU has had on the internationalization of business schools.

THE INDIANA UNIVERSITY EXPERIENCE

Soon after I arrived at IU in 1966, the School of Business hosted a conference on the topic of internationalizing business school curricula. A research monograph was published from this conference in 1968, *Internationalizing the Traditional Business Curriculum* (Otteson, 1968). All doctoral students in the IB program read and discussed the book. We had weekly seminars that included many aspects of this topic. We were already working out in our minds how we could help.

For those of us already studying IB, it was never a question of whether the goal to internationalize business schools was right. We knew that U.S. business schools mostly taught about business in America. There were very few courses about international business and almost no one added international dimensions to their business courses. We also “knew” (at least “believed”) that IB was important. (Of course, we had no idea whatsoever that it would become so much more important in the future.) Therefore, we jokingly suggested to our non-IB colleagues that they were merely studying a subset of our field – that we studied the world of business and they were just studying business in one country, the United States. This did not make us popular, but it made us feel good. We had fun suggesting that there was more to business than American business, but we also believed they needed to see that. We needed them to want to learn the international dimensions of their fields and to teach them to their future students. We were already on a mission to internationalize business schools and it started with our fellow doctoral students.

THE AACSB RULING, OPTIONS, AND OHIO STATE’S RESPONSE

When Lee Nehrt helped convince the American Association of Collegiate Schools of Business (AACSB) in 1974 that all business school curricula needed an international dimension, I was teaching at Ohio State University. The ruling was both a wonderful surprise and a challenge. I knew that the first question many would ask is “How should my business school be internationalized?”

That very question surfaced immediately at Ohio State. There, we decided to require all students to take a course entitled “Introduction to International Business.” That approach worked fairly well for us, but did not appeal to those at many other business schools. Meetings were held, some of which were sponsored by AACSB and some by the Academy of International Business (AIB), in order to better understand the implications of the AACSB ruling and how to meet the new standard.

It was soon concluded that there were three types of approaches possible. A school could:

(1) require all students to take some sort of introductory course in IB (the approach taken by Ohio State University, the University of Washington, and a few other schools);
(2) require students to take an international business course in their major (e.g. marketing majors take a course in international marketing, finance majors take a course in international financial management, etc.); or
(3) have international dimensions of business taught in all the core business courses.

Most schools had no idea which option to take and called upon AACSB for additional guidance.

THE AACSB INITIATIVES

In 1978, AACSB created several regional programs and invited business school administrators and faculty to attend. The purpose was to talk about the challenge of adding international dimensions to the curriculum. Coordinators were hired who, in turn, hired faculty to lead discussions on how to internationalize various functional areas (finance, marketing, etc.). I was hired for two of these regional conferences that first year and then to coordinate the Midwest one in 1979. I worked with AACSB on these programs through 1983, when they were discontinued.

CONSULTING AT SPECIFIC SCHOOLS

By 1983 it was clear that the task of internationalizing business schools was much larger than most had originally estimated. There were simply too many schools and faculty to host in these regional meetings. Schools started hiring some of those teaching in the AACSB programs to come to their schools for more customized support that was more economical than taking large numbers of faculty to a regional

program. I organized these programs and taught in many of them – even some in such faraway places as Santiago, Chile.

THE KENT SERIES

One of the first things recognized during the AACSB programs on internationalization was that faculty needed not only knowledge but material for the students to read. A frequently asked question was, "What should I assign for my students to read when I attempt to internationalize Topic X?" Most textbooks at that time contained nothing about international business. A few had a chapter on the topic, usually near the end of the book. The textbooks simply ignored the international dimensions of the topics covered in each chapter.

It was not realistic or even practical at that time to have students try to study the regular textbook plus an international one. Most of the latter were far too complex. What was needed was an easy-to-use paperback supplement that had chapters closely matching the topics in the standard textbooks and providing the international dimensions. Out of this need, the Kent Series was born.

The Kent Publishing Company agreed to publish a set of paperback supplements to fill this need. It was called "The Kent International Dimensions of Business Series" and I was the Series Editor. Many of the people teaching in the AACSB programs were the authors of these books. They found this to be a natural fit since they had already developed the material needed in the books in order to teach in the AACSB programs. (The series included books by Adler on organizational behavior, Alhashim and Arpan on accounting, Daniels and Radebaugh on business, Deans and Kane on management information systems, Dowling, Schuler and Welch on human resources, Folks and Aggarwal on finance, Litka on the legal environment, Phatak on management, and Terpstra on marketing.)

Wadsworth Publishing Company has now started a new series of books to help faculty and students. It is called "The Global Dimensions of International Business Series." Mike Geringer, Bodo Schlegelmilch, and I are the co-editors for this series of supplemental books.

FDIB AND ADIB AT SOUTH CAROLINA

The AACSB program and the consulting visits to specific business schools helped many faculty members, but these programs were usually just two days long or less. We were able to cover basic concepts but not much else. Many faculty members had expressed the desire for a longer seminar to obtain more depth and understanding.

In 1989, I created the first Faculty Development in International Business (FDIB) program. I had moved to the University of South Carolina and the people there (including Jeff Arpan) were fully supportive of the concept. We offered several different seminars; each was two weeks long. Most of the seminar leaders were South Carolina faculty, but some of them were people who had taught in the AACSB programs and were authors of books in the Kent Series. These FDIB programs are still being offered every summer at the University of South Carolina, but they are more concentrated now and are all one-week seminars.

The FDIB programs were so successful (usually involving about fifty faculty members in about seven different seminars) that I decided we ought to offer a separate program for business school administrators. These "Administrator Development in International Business" (ADIB) programs were shorter (about three days long) and were held in Charleston, South Carolina. They drew about thirty people each year for several years.

FDIB AT THUNDERBIRD

Jeff Arpan took over the responsibility of managing South Carolina's FDIB and ADIB programs after I moved to Thunderbird in 1992. He added a seminar for Spanish language teachers in the FDIB program and it was a big success. Believing that the market for FDIB training of business school faculty was big enough for two programs, I started a second one. This one was on the Thunderbird campus in Arizona. Thunderbird's programs were offered in January and in June and they are now managed by Bert Valencia.

Several schools now offer FDIB programs. It seems that the need to learn about the international dimensions of one's field still exists, but I do not have any plans to create additional FDIB programs. I believe the existing programs are adequate enough to fill the needs. In fact, I feel very good about them. Those who attend find them very worthwhile. I enjoyed my experiences in these programs and am happy to have been involved.

RECENT ACTIVITIES AT UMSL

In 1999, I was hired by the University of Missouri-St. Louis (UMSL) to build a good international business program. Our goal is to have the undergraduate IB program ranked in *U.S. News and World Report* as one of the best in the nation. This new job offered me a chance to put into practice the things we have been telling others were necessary. It was a chance to teach by example, but in some

ways it was also a challenge to prove that what we were "preaching" would work. (It might be noted that this challenge somehow even seems somewhat appropriate, since Missouri calls itself the "Show Me" state.) Nevertheless, this may be my last exciting professional challenge, so I am taking it very seriously.

Business students at UMSL are now required to take two courses intended to make them more "globally aware." Most of them take our IB courses to meet this requirement. We also now offer at least one international course in almost all major areas of business. These courses count as part of a business student's major. Further, most of our other business courses have a solid international dimension. In other words, we are using all three strategies identified as possible options in order to internationalize a business school.

"How have we been able to do this?" you might ask. Well, we are doing what we advised in FDIB and ADIB programs for many years. We have:

(1) obtained support at all levels of the university's administration, including from our Chancellor and our Dean;
(2) identified this as a College of Business initiative, not one of a separate department – all members of the College are encouraged to feel they are part of this program;
(3) formed a college-wide IB committee comprising at least one faculty member from each department, but others are made to feel welcome to all committee activities; in fact, we regularly have more non-members than members attending the meetings;
(4) identified the importance of IB in the College of Business's strategic plan;
(5) persuaded the University to identify international business in its strategic plan;
(6) obtained a Title IV-B grant to help finance our efforts;
(7) sent several of our faculty members (business and language) to FDIB programs;
(8) supported faculty requests for overseas travel, AIB conference participation, IB course development, and for IB research; and
(9) hired Allan Bird.

A REFLECTION

The AACSB, FDIB, and ADIB programs have exposed a large number of faculty and administrators to the international dimensions of business. The Kent Series and other recent publications have also made it easier for faculty to internationalize their courses. These activities have clearly helped generate interest in the field of IB.

The Academy of International Business has seen tremendous growth during this time. In the early 1970s, membership was only a few hundred; now it is over

3,000. Conferences once drew about 75 people; now we have 500 to 700 at our annual meetings.

The *Journal of International Business Studies* (*JIBS*) has also experienced similar growth. When I became editor-in-chief of the journal in 1984, there were about 1,500 subscribers. About 400 of them were libraries. When I turned the responsibility of managing *JIBS* over to Paul Beamish in 1992, we had more than 3,000 subscribers, including about 1,000 libraries. I believe there are now well over 4,000 subscribers.

Other academies and other journals also reflect this growth in interest in the field. Most of the main academies now have major international divisions. For example, the Academy of Management's International Management Division, which I chaired in 1988–1989, now has about 2,000 members. New academies and organizations totally dedicated to various aspects of IB education have also been started.

There are many new journals in the field now also. The *Journal of International Management*, which I started in 1994, is but one of them. Another fairly new journal, the *Journal of International Marketing*, has quality articles clearly reflecting the growth in both interest and ability in the field of IB.

Even the older and more established journals, such as those published by the Academy of Management, have greatly increased the number of articles about IB. In the 1970s, there were very few such articles in these major journals. Now some issues contain as many articles with international dimensions as those that are purely domestic. Well-known researchers, who started their careers with no interest in the international dimensions, have "seen the light" and are now active "missionaries" for the cause.

Even textbooks have changed significantly. Most of them now contain not just a chapter on the international dimensions, but have many international aspects within the chapters. Some of these textbooks are so internationalized they do not even need supplements.

WHERE ARE WE HEADED?

It is very interesting for me to wonder where we are headed. Will most business schools and their curricula remain internationalized? Will most business school faculty feel comfortable including international dimensions in their courses? I believe they will. In fact, I believe this is a very long-term trend.

Even more interesting is to wonder about the future of the AIB and *JIBS*. As more and more faculty become involved in IB, they seem more likely to join the international divisions of their academies rather than the AIB. They also seem to be

subscribing to and submitting research papers to internationally oriented journals in their field. The AIB has not been growing much in the past several years, nor has *JIBS* seen much increase in submissions or interest recently.

Interest in IB has continued to grow, but this has not shown up recently in the academy or its journal. Is this a sign of the future? Is it possible that the AIB has seen its day and has served its purpose? Perhaps. Maybe business schools, academies, and journals have become so internationalized that they no longer need AIB and *JIBS*. If this is so, should Indiana University receive some of the "blame" or "credit"? Has Indiana University really had much of an impact on the internationalization of business education? From my perspective, it seems fairly easy to conclude that the answer to this last question is "yes."

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RECENT HISTORY OF IB AT IU

Louise Siffin

ABSTRACT

This paper traces the fifty-year history of internationalization at Indiana University's Business School. From the impact of the end of World War II, to the founding of the nation's second IB department in the 1950s, to the School's extensive involvement in institution-building abroad, the author examines the various institutional models the School adopted over the years to further its internationalization efforts. Finally, the paper describes the evolution of the infusion model and the range of international opportunities it offers faculty and students at IU's Business School today.

INTRODUCTION

Internationalization at Indiana University (IU) dates back to the Second World War. The war provided scores of faculty – and thousands of students – with international experiences that few would wish to repeat, but that nevertheless opened their eyes and minds to a wider world, a variety of cultures, and a broader perspective that would stay with them throughout their personal lives and professional careers.

IU had a total student enrollment of approximately 4,500 in 1945–1946. This figure more than doubled in 1946–1947 to over 10,300 students, thanks to the end of the war and the revolutionary opportunities provided by the G.I. Bill. The IU School of Business played a major part in this expansion. In 1944, its enrollment totaled 303, including 81 men and 222 women. By 1945, with the war coming

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to an end, overall enrollment tripled and the ratio of men to women reversed dramatically: a total enrollment of 907 students included 627 men and 280 women. The war was truly over by the fall of 1946 and G.I. Bill education benefits were widely accessible. Business School enrollment jumped to 1,808 men – 1,579 of whom were veterans. It also included 346 women, 20 of whom were vets.

IU's visionary leader Herman B Wells, president from 1937 to 1962 – and dean of the Business School before that – helped ensure that the university capitalized on the nascent international awareness and experience of its premiere faculty and outstanding students. Dr. Wells had a wealth of international experience of his own. He participated in rebuilding the educational system of postwar Germany and was a delegate at the San Francisco Conference of 1945 at which the United Nations was founded. He also served as a founding member of the organization Education and World Affairs, an institution created in the early 1960s in response to the recommendation of then-Secretary of State Christian Herter that institutions of higher education make a greater contribution to the alleviation of international problems.

IU, Dr. Wells's true home, benefited from his commitment to this international orientation. He helped ensure that IU was involved in the international arena, that faculty were recognized and rewarded for their participation in international activities, that the study of a vast range of cultures and languages was available here, and that international scholars and students were welcomed.

INSTITUTIONAL EVOLUTION OVER FIVE DECADES

Indiana University has been involved in international activities throughout its history, but during the 1950s it became actively engaged in what was then popularly known as "institution building" around the world. Perhaps one of the most important characteristics of the Business School's internationalization efforts is the fact that it delved early into both the academic *and* programmatic aspects of International Business.

In the 1950s, IU's Business School became only the second U.S. institution to establish an IB Department, as Stefan Robock so vividly relates in his own paper. The School's scholars played a leading role in the development of the field and, in the process, trained an entire generation of leaders in IB. A major commitment was made to this educational effort. The IB department provided funding so that *all* of its early doctoral students incorporated a significant international experience as an integral part of their dissertation research process. At the same time, as described below, the School joined in the University's programmatic "institution building" activities from their very beginning.

There is ample evidence that this dual approach to internationalization – academic scholarship and programmatic involvement – has helped sustain the School's position among the leaders in IB scholarship, teaching, and service. Through peaks and inevitable valleys, the Kelley School of Business, as today's IU School of Business is known, has successfully drawn on relevant area and functional strengths to maintain and, when necessary, reinvigorate its commitment to IB.

One of the School's earliest forays into the international arena involved the training of business teachers from Western Europe in the post-World War II era. Sponsored by the European Productivity Agency – an outgrowth of the Marshall Plan – students from then-West Germany, France, Italy, Greece, and Turkey were sent to IU to study beginning in 1956. The students were selected as potential leaders in a movement designed to modernize and update business training in war-devastated Europe. The success of this Business School program can be demonstrated by the fact that its alumni who participated in this program continue to come together on a regular basis as the International Business Forum. And today, reflecting the continued, ever broadening international reach of the School, the Forum also includes members from Asia and Latin America.

At the same time the Business School was involved with Europe, it began to undertake programs in Asia. With funding from agencies of the U.S. Government and the Ford Foundation – a key supporter of international institution building efforts from 1950s to 1970s – faculty from the IU School of Business participated in the establishment of the National Institute for Development Administration (NIDA), its degree programs and curriculum in Bangkok, Thailand. Ford Foundation support also enabled Business School faculty to establish a training center with the National Institute of Public Administration in Indonesia. An Institute for Business Administration was created at the University of Dacca, East Pakistan (now Bangladesh) with assistance from School of Business faculty and graduate students during this same period. Following the establishment of diplomatic relations with China in the late 1970s, IU Business School faculty worked with the Shanghai Institute of Mechanical Engineering on a number of programs, including the creation of one of the first MBA programs to be offered in China.

While IU has maintained a varied and long-term relationship with many Asian countries and institutions over the years, its relations with Europe – particularly the countries of Eastern and Central Europe – have continued to grow. A relationship between the Kelley School (KSB) and the Faculty of Economics at the University of Ljubljana (FEL) in Slovenia began in the 1960s with a faculty exchange. By the late 1980s, it had expanded to include a student exchange component; today MBA students from FEL study at the KSB, while we send MBA students to Slovenia for study and internship opportunities. In 1992, the KSB received support from the

U.S. Information Agency to assist FEL in developing a part-time MBA program and, in 1993, to develop a full-time MBA. Each program enhanced the other, and both KSB and FEL faculty and students benefited from the increased level of interaction throughout the implementation stages of these projects. Today the KSB-FEL relationship remains very active. Each year, FEL MBAs spend part of the spring semester at the Kelley School and participate in a study tour organized by KSB faculty. Faculty exchange also continues; in addition to short-term visits, nine faculty from the University of Ljubljana have been resident at the Kelley School for a semester or longer over the last five years, and senior KSB faculty regularly return to Ljubljana to teach in the summer.

In the mid-1980s, the Business School was designated by the U.S. Agency for International Development (AID) as the lead institution for a Midwest Universities Consortium for International Activities (MUCIA) grant to develop the technical, management, and economic skills necessary to restructure Central and Eastern European economies. The MUCIA Consortium developed and delivered management education modules in Czechoslovakia, Hungary, and Poland.

Indiana University's involvement in Hungary has also been extensive over the years, and remains active today. In the 1970s, IU started the only Hungarian studies program in the United States and created the first American-Hungarian-sponsored Hungarian Chair. IU continues to be a central academic network for exchange between American and Hungarian scholars. Building on this involvement, in 1991–93 the KSB co-sponsored the Hungarian Blue Ribbon Commission, an international team of experts that developed an economic action plan for the then newly elected Hungarian government. From these and other activities in Hungary, the School developed the Management Training Cooperation in Hungary (MATCH) Project working with the Budapest University of Economic Sciences (BUES).

Funded by AID, the MATCH Project reflected the KSB's high level of interest in and commitment to the transition economies of Europe. Over the course of four and one-half years, Kelley School faculty worked intensively with BUES faculty and administrators to strengthen BUES's capability and capacity to deliver first-rate management education and training to students and business practitioners. BUES's Management Development Center (MDC) became the first Hungarian institution to offer a Western-supported MBA program.

Much of the work of the MATCH Project concerned curriculum development and the creation of sound but innovative administrative structures and systems. These included areas less familiar to many of our international partners: an emphasis on career development and placement opportunities for students; executive education development; fundraising in its many aspects, including stronger corporate relations and alumni development, and the design of executive education and short, modular courses tailored to a very specific audience or clientele.

Now, in the 21st century, the KSB is building on its extensive experience in transition economies by focusing its programmatic efforts on new countries facing many of the same challenges as those of Eastern Europe in the 1980s and 1990s (challenges in many cases, of course, still to be met). In early fall 2000, the KSB entered into a partnership with Kiev National Economics University (KNEU), the initial focus of which was on assisting KNEU and other Ukrainian universities in completely revamping their accounting curricula to reflect internationally recognized accounting and auditing standards.

Ukraine gained independence from the former Soviet Union in 1991, and the country's political transition has been basically bloodless, if not always smooth. The economic transition, on the other hand, has been difficult. The U.S. government views Ukraine as a strategically important country (as does the EU), and currently devotes more development funds to it than to any other former Soviet republic. Adoption of the principles and practices of an open market economy is a key goal of this aid. Addressing one part of that larger goal, the KSB-KNEU Accounting Curriculum Reform Project sought to introduce International Accounting Standards (IAS) and International Standards of Auditing (ISA) into Ukraine's higher education system. By training KNEU and other Ukrainian university faculty in the content and most effective delivery methods for ISA- and IAS-based curricula, they in turn will be able to educate the next generation of educators, practitioners, and economic policymakers, thus ensuring that international financial standards become institutionalized throughout the educational system and the financial and business communities. Unless the current educational system is changed and successive generations are routinely immersed in curricula reflecting internationally recognized standards, the likelihood of a steady and successful Ukrainian economic transition and integration into the global marketplace will remain problematic at best.

Kelley School of Business faculty and professional staff are also beginning to work with the historically entrepreneurial Economics Institute of Zagreb to help design and implement a high-quality English-language MBA Program that will serve the needs of Croatia and the surrounding region. One of the main problems facing Croatian enterprises is the serious lack of qualified managers – practitioners and policymakers able not only to diagnose and solve current problems, but also to plan strategically for the future. In order to grow, Croatia's businesses must participate more actively and effectively in international markets, and the expertise for doing so must be developed more broadly and at a higher level. A centralized English-language MBA program can contribute significantly to help meet these needs. Regionally based, it will also play a central role in educating generations of business professionals who will form a strong network of personal and business relations. This network will be very important in creating stronger economic ties

among the countries of former Yugoslavia and elsewhere; in doing so, it will also make a significant contribution to peace and stability in the region. With the KSB's strong partnerships in Hungary and Slovenia – Croatia's neighbors – we look forward to including the Croatian program, its faculty and its students in this active regional partnership.

While involvement in Latin America has been on a smaller scale, a number of faculty have pursued teaching opportunities at various institutions. In addition, the School carried out an executive education program with the Instituto de Estudios Superiores de Administracion (IESA) in Caracas, Venezuela during the 1970s.

These represent just a sampling of some of the major international undertakings of the Kelley School of Business over the last half-century. And they have contributed to the broad internationalization of faculty, students, and curricula – a process that continues today with a wide range of programs. Faculty who participate in these programs return to the IU campus with a new understanding of and appreciation for aspects of international business and culture, which they then integrate in their teaching across the undergraduate and graduate business curriculum.

INFUSION OF INTERNATIONAL BUSINESS AT IU

In the early 1980s, the School's leadership began to take a more active, institutionally-based look at how best to infuse international aspects across the curriculum. The Undergraduate Program, then chaired by an IU B-School alumnus, Joseph Waldman, took the lead. Not surprisingly Dr. Waldman, while a graduate student in the 1960s, had participated in a number of the School's institution-building programs, particularly in Southeast Asia. His early international experience influenced his academic and administrative career for the next several decades and led, in the early 1980s, to the School's establishment of business-specific overseas study programs for its graduate and undergraduate students. In addition to KSB programs, IU business students are also encouraged to participate in the University's more than 75 other overseas study programs. Again, guided by Dr. Waldman's vision and under his leadership, the Undergraduate Program instituted an international course requirement of all business majors – the International Dimension Requirement (IDR) in 1987. This international component can be fulfilled in a variety of creative, intellectually demanding ways – advanced language training, courses offered by IU's rich and diverse area studies centers, participation in study-abroad programs, or enrollment in specialized IB courses. No undergraduate leaves the School without some international enrichment. The more internationally focused students can enhance their business

education by fulfilling additional coursework with an International Studies Concentration or Field Specialization. For the most motivated internationalist, the KSB Undergraduate Program now offers two international dual-degree programs. First, the KSB-ESB Reutlingen Program, which requires advanced-level German language skills, a year's study in Germany, and a German internship, confers both a BS in Business Administration and the German Betriebswirt (FH). Second, in a five-year dual-degree program between the KSB and the University of Maastricht, a student spends three years at the Kelley School and two additional years at Maastricht, earning a BS from the KSB and a Master's in International Business (MIB) from Maastricht.

Both the MBA and doctoral programs also offer international courses and programmatic opportunities, and efforts are under way to increase these in the coming years. In the late 1990s, the School revamped its first-year MBA curriculum, creating an integrated core. Global strategy is addressed through eleven sessions in the core and tied to what the students are learning in other core sessions of the curriculum.

The MBA program also offers several specialized degrees. In 1997, the School joined with three of the University's area studies centers to offer a new joint MBA/MA degree. This three-year dual degree program – with specializations available in East Asian Studies, Russian and East European Studies, or West European Studies – offers a student the opportunity to gain a solid business education enhanced by in-depth knowledge of a world area.

In 1999, the MBA Program introduced a new international track for students: the Global Experience Academy, or GEA. This program is, in effect, an international concentration available for graduate students who wish to major in a traditional functional area – accounting, finance, marketing, etc. – but who also hope to pursue a career in international business. The Academy now focuses intensively on placement, assisting participating students in finding internationally oriented internships and career opportunities. With assistance from KSB alumni abroad, GEA has developed a significant number of internship opportunities for its student participants, particularly in Europe.

Also in 1999, a new MBA international study tour course was introduced. The Kelley International Perspectives (KIP) courses focus on a particular region or country and, within that environment, examine an industry or set of business issues. Largely student-driven, MBA teams select the country and industry to be studied, assist the course faculty director in putting together the curriculum, including identifying readings and speakers with regional and business expertise in the relevant area, and arranging the culminating trip to the country of focus. Each KIP class spends approximately ten days abroad, meeting with business executives and policymakers and conducting hands-on research for the final KIP

project. Although this is an admittedly abbreviated experience, it has proved an extremely effective way for the School to provide an international opportunity for MBA students immersed in an intensive, highly integrated two-year program. The KIP course option has met with great enthusiasm in its first few years, with participation levels of between 40 and 60 students each year. As of spring 2002, KIP classes had been organized for study in China, Japan, Eastern Europe, Brazil, South Africa, Ireland, Australia and Cuba.

The School also recognizes the valuable contribution made by international students and scholars. Of necessity, an internationally diverse class examines issues from a more varied perspective. U.S. students and faculty have the opportunity to work with individuals from different cultures and with different experiences, both professional and personal. Currently, approximately 35% of our MBA class is made up of students from around the world. The undergraduate population is 10% international and efforts are underway to increase this figure. The School also hosts visiting scholars from around the world each year. During a typical year, twenty to thirty professors from countries as varied as Ukraine, Kazakhstan, Korea, India, Italy, Japan, and Brazil share their special international perspectives with Kelley School faculty and students.

THE IU CIBER AND GLOBAL PROGRAMS OFFICE

In the late 1980s and early 1990s, the School decided that further internationalization would best be served if certain structural changes were made. With faculty across a range of functional areas increasingly engaged in international programmatic activities, research, and teaching, the School decided that infusion – rather than IB department centralization – was both the more appropriate and likely more impactful approach to continued internationalization. Nevertheless, it recognized the importance of a "championship" role: a locus or center whose primary mission was to serve as the School-wide catalyst for continued internationalization of faculty, their research and teaching, students, and curricula throughout academic programs.

Several models were tried, leading to today's highly successful, if still-imperfect, KSB approach. In 1992, the School established a Title VI-funded Center for International Business Education and Research (CIBER). In its early years, the IU CIBER focused primarily on international pedagogy, supporting the development of new international cases across functional areas, identifying resources and techniques for use in the classroom, and disseminating these materials widely. It broke new ground with outreach to the precollegiate community in 1997, developing and disseminating a sixth through twelfth grade curriculum,

Indiana in the World – a pedagogy tool that has also been adapted by a number of community colleges and particularly innovative elementary school teachers, and now serves as a model for similar pedagogical development in other states. In the same area, CIBER has also supported an interdisciplinary intensive *Summer Institute for International Studies* that provides an innovative, international educational experience for high school students and teachers from throughout the world. The IU CIBER continues these activities today, but has expanded its focus to better support the research function of business faculty and doctoral students – our future faculty – so essential to sustaining IB awareness, understanding, and engagement.

The CIBER mandate, at its core, concerns the advancement of U.S. *competitiveness*. Thus, individuals and programs eligible for support are typically US-based or centric – whether faculty, student, or business-oriented. Recognizing that this reach, though significant, is not sufficient, the School created an international umbrella center in the mid-1990s, the Global Programs Office (GPO), to build on and enhance the CIBER mandate. Working with the School's Global Policy Committee, the GPO oversees and assists all the international efforts of the School. It maintains ongoing international programs, works with individual faculty and all academic programs to initiate and implement new ones, and explores future opportunities through grant and fee-for-service avenues. It also serves as the School's clearinghouse on all aspects of international programs and activities, and assists international visitors, scholars, and students.

CONCLUSION

Indiana University is one of the great public institutions of higher education in this country and, because of its historic international focus, is one with friends throughout the world. Our first international scholar came to IU from Ireland in 1836. From that time forward, we have consistently played an important role in "things international," devoting significant resources to international studies across all fields and recognizing the need to be actively involved in the world as its boundaries – geographic, economic, intellectual – continue to diminish. The Kelley School of Business is proud to play its own significant role in the international life of Indiana University. From its seminal role in the development of the IB field to its education of a generation of leading IB scholars – a number of whom are represented in the preceding pages – from a focus on IB departmental resources and expertise to infusion across functional areas and throughout academic programs, the School continues its world-wide programmatic reach and encouragement of international scholarship.

Now, after five decades of IB evolution, the School is participating in a major world-wide re-examination of key issues facing the field today. As we proceed, we remain committed to equipping the future business leaders we educate with the skills they need to operate successfully in today's global economy. We are also committed to sharing our knowledge more broadly – on an applied level with the internationally engaged business community; at the pre-collegiate level with younger students who need to be introduced at an early age to the complexities and opportunities of today's interdependent world; with policymakers who can benefit from the sound scholarly findings and insights of our faculty; and with our international constituents from whom we learn much and with whom we are engaged.

PART II:
THE “INFUSION” MODEL
IN PRACTICE

THE MBA INTERNATIONAL FINANCE COURSE

Laurence Booth

ABSTRACT

The value of any course comes from analyzing new institutional arrangements, deepening skills, and new conceptual topics. However, whereas the international finance course contributed in all three areas ten to twenty years ago, developments in the MBA curriculum at major schools since then have reduced its value-added. By examining the four key areas of the course – the foreign exchange market, exposure management, funds management, and corporate finance – this paper argues that the topics are now better covered elsewhere, not because they are no longer important but because they have been absorbed into core finance topics, such as financial risk management.

INTRODUCTION

In teaching international business, it is standard to start by discussing the evolution of a firm as it starts to engage in international transactions. The first step occurs when the firm starts to notice that it is getting orders from foreign purchasers. In response it sets up an *international finance department*, which can help generate export financing, arrange foreign payment on delivery of the merchandise and insure the sale against political risks to increase the firm's competitiveness. The second stage is for the firm to produce locally or set

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up foreign subsidiaries. In this way it becomes a *multi-national corporation* (MNC) and organizes its operations to allow the optimal use of its comparative advantage. However, the firm will predominantly remain a U.S., UK, or German firm, for example, and be staffed at the upper echelons with citizens from its parent country. The final stage of organization is the *Transnational Corporation* (TNC), which outgrows its parent nationality and becomes a genuine stateless corporation.

It is my contention that the study of international finance and the MBA international financial management course has moved along a similar trajectory. The initial stage is the *international finance course*, where the curriculum committee of the faculty decides that the MBA program needs a course to expose students to the international dimensions of finance. The second stage is the *international program* or specialization within the MBA, where the course is combined with other courses in international business (marketing, strategy, culture etc). This prepares an MBA for a career in international management. The final stage is the genuine *international MBA*, where the international content is so thoroughly integrated within the standard curriculum that no one even thinks of calling the individual courses international.[1]

There will always be "local" non-TNC companies and "local" MBA programs to train their managers, but it is my contention that the top-tier MBA programs should be moving to stage 3, the international MBA, as rapidly as the top firms are becoming TNCs. In this context, I argue that the MBA international finance course has outlived its usefulness and should be scrapped in favor of integrating the material into other courses in finance, strategy and business economics. In developing this argument, I will discuss how I last taught the international finance course at the Rotman School of Management (RSM) at the University of Toronto in 1988 and why I have not taught it since. In the process, I will consider the standard international finance curriculum and where the material should be, and in some cases is, being, taught in our MBA curriculum.[2]

At the outset, I should point out a bias. I am an Englishman who as a professor of finance has lived in Canada for the last 24 years. Canada is a small open economy, which transacts about 85% of its trade with the United States, and the bulk of the rest is priced in U.S. dollars, since it is commodity exports. It is inevitable, therefore, that Canadian MBAs have a greater awareness of international issues than their U.S. counterparts. As I will show, it is inconceivable to most Canadian academics to segment finance issues into "domestic" or "international," such a distinction is fundamentally arbitrary for firms operating in a small open economy. Likewise, such a distinction is fundamentally arbitrary for managers operating in TNCs.

FINANCE COURSES AT ROTMAN

To understand how we treat international finance at Rotman, it is important to understand our other finance courses, since many finance topics can be covered in a variety of different ways. Rotman has a heavy finance orientation, because Toronto is the financial capital of Canada and the third biggest finance center in North America.[3] All of the Canadian banks have their headquarters in Toronto, as do the investment dealers (banks), most of the insurance companies, and the specialist boutique financial service firms. Consequently about 70% of our MBA students go into the finance business, either as finance specialists or as non-specialists working in the finance industry. Partly as a result, all of the courses in the second year of our MBA are electives and we have organized the finance courses into three streams to help students focus their interest. A brief description of our finance offerings appears in Appendix A.

I run the *investment banking stream*. This is really marketing, since in reality it is corporate finance, but the investment banking name is really attractive to students who are trying to land those top jobs at Goldman Sachs. We have four courses in the IB stream: corporate financing, financial management, capital markets and institutions and mergers and acquisitions. The first two are a two-course sequence in corporate finance, while M&A stretches across both areas. The capital markets course simply reflects the fact that investment bankers add value by their knowledge of current developments in capital markets. For example, developments in the royalty trust market may offer an opportunity in a restructuring or an acquisition that is not obvious to someone familiar with plain vanilla securities.

John Hull runs the *Financial Engineering and Risk Management* stream. He teaches the futures and options markets course, as well as the financial risk management course, while Alan White teaches advanced derivatives. The advanced derivatives course is focused on interest rate processes, as well as foreign exchange, since the two are interrelated. While the financial risk management course focuses on value at risk, it is obviously concerned with the techniques available to manage and hedge financial risks such as interest rate, commodity price, and foreign exchange risk.

Alan White also runs the *funds management* stream, which again is a bit of marketing, since it is simply an investments stream. The basic courses are a standard security analysis course focusing on equities and a fixed income course focusing on debt securities, both integrated into a capstone applied portfolio management course. This is a limited enrollment course taught by the University's CFO, who was formerly the Chief Investment Officer at one of Canada's largest financial institutions. The final course is an Excel-based financial modelling

course run out of our financial research and trading laboratory. The lab consists of 30 networked computers set up as a trading lab using Telerate/Bridge data feeds and a Bloomberg. The course focuses on market microstructure and the realities of integrating live data into practical portfolio management.

The final course is the "orphan," which is the international financial management course. It is listed with our funds management courses, but in reality it fits nowhere and everywhere. Whereas all of the other finance courses have either multiple sections or capped enrollments, the international financial management course barely meets the minimum enrollment targets necessary to be offered. In the next section I will describe the evolution of the international finance course and why it has become a bit of a dinosaur.

THE CLASSIC MBA INTERNATIONAL FINANCE COURSE

Appendix B contains a copy of my last (1988) MBA international finance course outline, where I used Alan Shapiro's *Multinational Financial Management* textbook (2nd edition 1986). At this point we did not have the three streams discussed above. In fact we had no financial engineering courses, no M&A course, and the only funds management course was basic security analysis. At the outset I should point out that this is an MBA, not an economics, "international finance" course. The focus is on how individual actors, such as the firm and the investor, behave in an international context, rather than how the international financial system "should" be organized. It is pretty standard and reflects my choice of topics for a fourteen-week, 28-hour second-year MBA course in a Canadian context. The key topics are:

- the foreign exchange market;
- analysis of foreign exchange rate exposure;
- funds positioning; and
- financing & capital expenditure analysis.

In considering the content of the international finance course, I was (and still am) aware that the learning experience comes from three different sources. The first was *new institutional arrangements*. I am a firm believer in both international travel and comparative analysis of economic and financial systems. Too many times we forget that what we observe in the economy is a product of a particular legal and cultural system that either does or does not allow certain behavior. It is important for students to understand what is "normal," resulting from the

operation of market forces, and what is the result of particular legal and other constraints.

For example, until 1998 the SEC Acts of 1933 and 1934 effectively separated investment and commercial banking in the United States. Combined with the existence of interest rate controls (old regulation Q), this caused the U.S. financial system to develop differently from elsewhere. One way of understanding this was to analyze the U.S. dollar financial markets operating in London – the so-called eurodollar and eurobond markets. These markets are dominated by U.S. institutions trading U.S. dollar instruments under English, rather than U.S., law. Consequently, it was possible to examine U.S. commercial banks engaging in investment banking operations in competition with the European universal banks and ask why can't they do this in the U.S.?

Another example is the role of floating rate notes (FRNs) and note issuance facilities (NIFs). In the late 1980s, these emerged in the euro markets as a result of the close links between traditional bank instruments and the markets. However, they quickly migrated to the major markets under various new acronyms, such as guaranteed underwritten notes (GUNs), with slight variations to meet different legal restrictions, such as withholding taxes. It is fascinating to analyze the emergence of new financial instruments, and this type of comparative analysis is extremely valuable. However, it can be (and is at Rotman), dealt with in the context of the functional finance courses, rather than as a topic within an encyclopaedic international finance course.

The second component of the learning experience is simply *skills deepening*. To some extent it matters very little if a student opts to deepen their financial skills in an international finance course versus an investments or corporate finance course. The key learning experience is simply practise and familiarity with financial concepts. I structure all my second-year finance courses in exactly the same way with team-based case assignments, and final examinations and many of the topics can be taught interchangeably in different courses.

The third major component of the learning experience is the introduction of *new conceptual topics*, that is, extending the set of useful skills by extending financial theory and practice. The most obvious innovations are the introduction of foreign exchange risk and political risk. Foreign exchange (FX) risk represents a new source of uncertainty for investors; political risk is another variant of credit risk, though unlike credit risk it is manifest in a variety of different forms other than simple default loss. Both FX and political risks run through almost all the topics of international finance.

In the following sections I consider the core topics in the outline in Appendix B and where the topics are/should be covered.

The Foreign Exchange Market

Because FX risk affects almost all aspects of international finance, it is inevitable that it be the first topic covered. In fact, it covered the first 20% of Shapiro's text. This is also the most difficult area to allocate to a particular course, since it really is not a finance topic. Most MBA students are required to take a macroeconomics course in the first year prior to second-year electives (and even the first finance course). An important component of macroeconomics, particularly for a small open economy like Canada, is the constraint imposed by the FX market. Our MBA students are exposed to the law of one price (absolute purchasing power parity or PPP) and interest rate parity (IRP) in the macro course. However, the focus is on Hick's IS/LM integration of the Keynesian short-run macro model, not the implications for managers.

What MBA students do not get in the macroeconomics course is a more detailed discussion of the financial instruments available and the mechanics of linking the FX and money markets. Parts of this are taught elsewhere. For example, our second-year elective on the economic environment of international business develops the standard open economy macro questions, before considering the public policy implications of FDI and the roles of the major international institutions. Similarly, our futures and options course does develop IRP, the differences between futures markets and forwards, etc., but generally the emphasis is technical rather than managerial.

For many years I taught a two-day executive program on the money and FX markets. The first day focused on understanding the standard financial instruments, treasury bills, bankers' acceptances,[4] commercial paper, etc., how they are priced and how the central bank operates in the money market. This then allowed a discussion of the term structure of interest rates and different trading and maturity strategies. The second day focused on FX markets, spot, forward, futures and options, developed IRP, and the term structure of FX rates. I brought senior people from the investment banks in as lunchtime speakers to talk about interest rate and FX forecasting, new developments, trends, and so on. I then finished each day with a case that I developed, one on short-term funding alternatives (bank financing, CP or BAs), the other on hedging transaction exposure (forwards versus money market hedges).

It was about this time that I stopped teaching international finance. For a while I was able to continue to dichotomise the material. I taught money markets and short-term financing alternatives in my corporate financing class and then the FX material in my international finance class. I also pushed to have the basic relationship between FX rates and interest rates (IRP) emphasised in the introductory finance course. This reflects the fact that the Canadian money market is highly integrated

with that in the US. For example, fully 50% of trades in the Canadian FX market are swaps, tied to interest rate arbitrage between the U.S. and Canada. In contrast, in the world's biggest FX market in London, swaps are normally less than 10%.

However, it increasingly became untenable to break up the analysis of money and FX markets: no one forecasts FX rates independently of interest rates; markets provide a free benchmark to assess interest rate forecasts the same as FX rate forecasts, and Canadian firms that access the CP market often also have a U.S. CP program. Consequently, I trimmed the material and moved the residual into the corporate financing class.

Exposure Management

The questions are the same today as they were in 1988: how can changes in xxx affect the firm? The answers are the same as well: xxx can affect the firm's financial statements (translation exposure), individual transactions (transaction exposure), or the value of the firm's cash flow and market value (value/economic/operating exposure). The only difference is that "xxx" is no longer restricted to FX rate changes, it now encompases interest rate and commodity price changes; while the range of commodity prices covered has extended from the classics of natural resource prices to new commodities like electricity.

In terms of the incremental learning experience, the "nugget" in the international finance course was always exposure management. However, this nugget has evolved into the new discipline of financial risk management. Moreover, the pace of developments is increasing as more and more financial contracts are developed and as specialists emerge as "risk managers."[5] The old questions in international finance as to

- whether or not the forward rate is biased,
- whether the futures and forward rates are the same,
- whether the risks should be removed,
- if risk is removed should it be removed completely through forwards or partially through options, and
- should options be paid for in cash or through the exchange of another option (range forwards) or through the ultimate conversion rate (Boston options),

all have their counterparts in managing interest rate and commodity price risk.

The fact that FX exposure management is now just one area of risk management is corroborated by the extent of the new accounting hedge guidelines (FAS 133) and the fact that they have replaced FAS 8 and FAS 52 (circa mid-1980s) as a major point of controversy. To the extent that any program develops expertise in risk management, it is inevitable that it does so at the expense of the international finance

course. Because we at the University of Toronto are blessed with an abundance of risk management talent and course offerings, the international finance course has suffered a significant decline in enrollment.[6]

One final example is that one of the most interesting questions raised recently in Canada was whether or not gold producers should hedge their gold price exposure – about half do and about half do not. The argument in favor was the familiar argument as to where their comparative advantage lay. The argument against was that while gold price risk is obviously diversifiable, some investors actually want and value that exposure. These arguments are simply the old question of whether multinationals are a substitute for international portfolio diversification recast in different clothing.

Funds Management

If there is one area I miss teaching, it is the way cash flows around a multinational corporation. This is a critical area in international finance because foreign operations have to be legally established as subsidiaries or foreign branches and legal and tax considerations arise as funds flow across borders as dividends, interest, royalty payments, and/or loan repayments. Moreover, the natural question arises as to how to evaluate and control these operations when their functional currency differs from that of the parent. This is the one area that dramatically enriched my understanding of corporate finance by teaching it!

However, I wonder whether the material is still relevant. With hindsight the control and evaluation aspects are normally taught in managerial accounting rather than a finance course and seem to figure in Shapiro's textbook mainly because of his own research interests. Moreover, their significance is less today than in the 1980s simply because inflation differences have ameliorated, while accountants have wised up.

Of more interest is the question of structuring foreign operations to lower political risk. This is the heart of the Dodge Ageana case, which I used to teach the value of fronting loans, transfer pricing, re-invoicing centres, political risk insurance, parallel loans, the value of locally financed debt, thin capitalization rules, absorbing global expenses locally, etc. I always found this material to be fascinating and it was immensely interesting to the students because it explained seemingly implausible events such as Muhammed Ali fighting for a world championship in Zaire and why in Ontario we were suddenly flooded with Romanian strawberry jam shortly after we "sold" them a nuclear reactor.

Of course, the heart of funds positioning techniques is meeting the letter of the law while avoiding its intent. This, of course, is functional fraud even if it is not

technically fraud. For example, Nigeria had foreign exchange controls in the early 1980s and would only pay hard currency for items with import licenses such as sugar. Corrupt international traders sent cargoes of junk and scrap metal to Nigeria and then bribed local officials to sign for them. These approvals then released export financing in London. By 1984, Johnson Mathey Bank (JMB) was financing millions of dollars on the basis of bogus exports to Nigeria. The whole scheme collapsed when the Nigerian military got fed up with the corruption of the civilian government and staged a coup, their first act being the freezing of payments on $7 billion trade financing. JMB went bankrupt and the principals took refuge in countries where they could not be extradited.

The JMB fiasco was a useful vehicle for discussing the mechanics of trade financing and the types of risks, namely fraud, that preoccupy banks. It is these concerns that have resulted in the current structure of the international payments system. However, like all interesting topics, I have found a use for it elsewhere. In the early 1980s, Canada attempted to stimulate research and development through a program called the Scientific Research Tax Credit (SRTC) programme, which gave direct subsidies through the income tax act to individuals who did R&D in Canada. However, it was poorly implemented and managed, cost the Canadian taxpayer over a billion dollars, and almost caused the downfall of the government.

Why did the SRTC program cost so much money? Simple: it generated fraud. In this case, all of the tricks of international finance were used: fake invoices, double billings, high management fees, inflated equipment purchases, dubious contracts. The Canadian government paid out millions on the basis of non-existent R&D that companies claimed to have carried out in Canada. Eventually, by 1986 the government wised up and launched a series of raids that closed down the more notorious fronts, but not before the principals skipped the country.

Many of the funds positioning techniques in international finance are the same as used in domestic fraud cases. Consequently, I have also recycled these techniques in the last three classes of my M&A course in which we deal with restructuring and conflicts between bondholders and stockholders. Black and Scholes (1973) pointed out that stockholders really hold a call option on the firm, with the face value of the debt the exercise price. Brealey and Myers (1981) ran with this idea to show the games that stockholders in distressed firms can play to transfer (fraudulently) wealth from the bondholders. Of course the various strategies – risk shifting, failing to contribute equity, playing for time, cash in and run – are not billed as fraud, but that is precisely what they are.

The bondholders, unlike equity holders, are not protected by securities law; instead they are protected by contract law. In this case, if they sign a contract that makes it easy to defraud them, then caveat emptor (WorldCom bond holders take note). This is also why complex corporate debt often attracts a default premium

over the debt of simple operating companies. Lending institutions are reluctant to lend to complex organizations where the cash can easily be moved to legal subsidiaries beyond their control (cash in and run).

The point is that funds positioning techniques highlight basic strategies for "gutting" loosely-worded legal restrictions. These same techniques are widely used in domestic fraud cases and are a vital concern for both corporate lenders and the financing of junior companies without obvious tangible assets.

Financing & Capital Expenditure Analysis

The final topics are standard corporate finance topics relevant for a multinational firm. However, these topics offer a fundamental paradox although they contain some of the most critical areas of finance, they offer very little value added over what the student is exposed to elsewhere. While there is considerable material to add to a Ph.D. seminar, the NPV of the ideas for MBAs is pretty low.

Take, for example, the key question of how asset prices are determined. Without handling the question of asset valuation in capital markets, we cannot determine the cost of capital for a domestic versus an international project. At one point I used to spend time discussing how the efficient frontier would first move out, offering a higher return for every level of risk, before the higher valuations resulted in lower equilibrium expected returns.[7] Conceptually, this continues to be extremely useful for dealing with emerging market firms listing in the U.S., sometimes via ADRs, to lower their equity costs. The central point – that as the world's capital market becomes integrated the overall equity cost falls due to the elimination of national systematic risk – is very important. Moreover, it can easily be demonstrated through the standard naïve diversification diagrams. However, two key questions remain.

First, what is the equity risk premium anyway? I have yet to see any U.S. textbook incorporate these integration gains into a lower market risk premium than the traditional historic estimate of 7.0–8.0%, even though this level for the equity risk premium is so high as to constitute a puzzle. We know that the U.S. estimates from 1926 on suffer from a significant survivorship bias, are higher than if we go back using earlier U.S. data, and exceed those for other capital markets. However, they are not downward-adjusted to reasonable levels. What is more the practice in many textbooks is to add a country risk premium based on sovereign debt spreads to the biased high U.S. estimates to get bizarre estimates that refute financial theory, not to mention common sense.

In Canada we routinely use a market risk premium of 4.0%, sometimes 5.0%, since there are significant tax incentives for Canadians to hold Canadian equities. If the U.S. market risk premium plus sovereign bond spread is used, a U.S. company

would always have a higher equity cost than a Canadian one. All else constant, no U.S. company would ever take over a Canadian one; in fact it would be divesting, since the Canadian capital market is willing to pay higher prices than U.S. investors, based on these lower equity yields. In practice, U.S. capital markets trade on higher multiples based on book values or earnings than do comparable Canadian companies, while U.S. firms continue to acquire Canadian ones, to the extent that the Canadian independently-owned oil patch almost disappeared through 2001.[8]

Second, if the size of the market risk premium remains contentious, so too does the extent of integration across markets. That is, does the law of one price apply to the equity market? When we apply the law of one price to commodities, it is easy to price, say, a barrel of oil in dollars and compare it with its sterling price, ipso facto, the same real prices imply that the market is integrated. In contrast, if the prices are outside the arbitrage bounds there must be other barriers that prevent the law of one price from operating. And prices must be determined in part by local factors.

With preferred equities, we can see immediately that markets are not integrated. In Canada we provide a dividend tax credit that reduces the personal tax rate on dividend income, while, unlike the U.S., inter-corporate dividend income is tax-free. Consequently, we have a relatively large preferred share market. More to the point, preferred shares trade on significant yield differences to equivalent maturity government of Canada bonds. Withholding taxes and the difficulties of shorting relatively illiquid instruments means that the Canadian and U.S. preferred share markets are segmented.

With common equities, the expected return is almost impossible to estimate; instead, we rely on ex-post returns and make heroic assumptions that over time these realised returns equal those expected. We then have to test which market index is efficient. A segmented versus integrated market test is then equivalent to whether or not the missing asset (foreign) market is priced. In practice, there is so much controversy over single market tests and whether or not arbitrary factors such as market-to-book ratios, size, dividend, and earnings yields are relevant that the incremental tests of segmentation versus integration are without power. What makes the tests even more dubious is that they are often extended back in time for markets where foreign exchange controls were in effect and the markets were legally segmented.

The pitiful state of asset pricing tests and the controversy over the size of the market risk premium makes fine adjustments for international factors of little practical value. Instead I have always focused on areas where there was practical value.[9] These have been twofold: debt issues and the overall valuation framework for capital expenditure analysis.

In a domestic context analyzing debt issues is straightforward. The yield is estimated and then multiplied by one minus the corporate tax rate to get the

after-tax cost of debt. There are hidden assumptions and problems in that the yield on debt is a promised yield and not an expected rate of return. As a result, weighting it in with the expected cost of equity is a fundamental contradiction. However this is a corporate financing issue. For international finance, the question is whether the currency denomination can change the after-tax cost in the face of pre-tax interest rate parity – which it can.

Soft currencies are those with higher inflation and forecast currency depreciation. Conversely, hard currencies have lower inflation and forecast currency appreciation. From interest rate parity, all else constant, weak currencies have higher nominal interest rates but the same real interest rates as hard currencies. However, weak currencies get higher immediate tax write-offs from the higher nominal interest rates. Subsequently, as the currency depreciates, the domestic value of the fixed foreign soft currency interest payments falls. When the soft currency debt is repaid, the capital gain from paying off the debt with fewer units of domestic currency is normally classified as a capital gain. The result is that the present value of the tax benefits increases with the forecast weakness of the currency. The only firms borrowing in hard currencies should be non-taxable firms that are cash-flow poor.

The above results are perfectly general and certainly apply on an expected basis. Moreover, the existence of a forward market allows the firm to lock in all the forecast interest and principal payments so that there is no uncertainty about the future stream of payments.[10] This naturally leads into a discussion of currency swaps, where the series of forward rates is combined into one contract.

The explosion of the currency swap market following the initial World Bank-IBM swap has profoundly changed corporate financing. Of interest is that I still use the Can-Am case listed in my 1988 international course outline. The only difference is that I use it in my corporate financing class. It became too difficult to discuss currency swaps in international finance and interest rate swaps in corporate financing when they are essentially the same instrument. I now discuss interest rate swaps, currency swaps, basis swaps and domestic and Euro financing all in the context of minimising the after-tax cost of debt in my corporate financing class.

It turns out that this is a much broader question than simply linking the interest payments with a soft currency. The interest payments can be linked to commodity prices, as they are for several Canadian resource firms; with a lag they can even be linked to the firm's profitability, as they are with Adjustable Rate Convertible Securities (ARCS). The payments can even be prepaid as they were with prepaid bonds (Canadian optional interest notes COINs).[11] The important point is that the currency effect is simply part of a broader determination of the after-tax cost of debt.

The final incremental topic is how to structure and evaluate foreign investments. I have already mentioned the difficulty of determining the cost of capital for

domestic, let alone, foreign projects. The only other question is how to structure the analysis. Lessard (1979) made an early attempt to argue that Myers's (1974) application of the M&M valuation equation, dubbed Adjusted Present Value or APV, had merit for evaluating international projects. The argument was simply that an expanded valuation equation was valid for multinational projects since there were more "add-ons" to the unlevered firm value, such as foreign exchange risk, subsidised investment incentives, tax advantages of debt, foreign remittances and so on.

I disagreed with Lessard[12] mainly because I had serious doubts as to the value of the tax shields from debt financing and the assumption that the amount of debt rather than the debt ratio was the more appropriate financing assumption. However, APV has grown in strength over the years, not from its particular applicability in international finance but from its usefulness in more general structured financings. APV, along with its twin the Flows to Equity (FTE) framework, is used in the evaluation of project financing, leveraged buyouts, real estate financing and any other valuation where the amount of debt financing is fixed and independent of the NPV of the project being analyzed.

I continue to have serious doubts as to the general applicability of APV,[13] but the more general valuation by components is very useful. Instead of being an international finance topic, APV, FTE and the traditional WACC are now taught in the valuation sections in the M&A and capital budgeting courses; what is left in the international course is simply an application. Moreover, frequently an international acquisition or project is in either the M&A or the financial management courses.

CONCLUSIONS

I have found teaching international finance exhilarating. I have no doubt that teaching it enriched my understanding of finance more than almost any other area. As I think through why I no longer teach it, I am struck by how much of the material is now integrated into my other courses. I simply cannot envisage teaching corporate financing without considering the possibility of foreign financing; how listing on different exchanges affects the universe of investors; how the after-tax cost of borrowing varies with the debt contract; how securities laws differ across jurisdictions, and how interest rates are determined. I cannot envisage teaching mergers and acquisitions without considering APV, cross-border valuation problems, and the cost of capital for domestic versus foreign projects. I cannot envisage teaching risk management without considering FX exposure. The problem is, after I do this, I cannot see what is left of value to teach in an international finance course.

The problem with the above discussion is that the word "international" gets dropped from the curriculum, which causes enormous problems with the ranking of business schools. Like most schools, we are concerned with our ranking. We were very happy that *Business Week* ranked us in the first tier along with 30 U.S. schools and 10 international schools and that the *Financial Times* ranked us 21 overall. We were less happy that the FT ranking was lowered due to our limited international content – this despite the fact that as discussed above, "international" runs all through our curriculum (particularly finance) like "fat through a well-seasoned steak," and that our faculty has very few Canadian-born academics. In fact, I would hazard a guess that Toronto is the most international of all the major business schools, which would simply reflect the UN rating of Canada as the best country in the world to live and Toronto as the most multi-cultural city in the world.[14]

How is it possible to move to stage 3 and fully integrate international topics into the curriculum and still get rated highly as international? One approach we are experimenting with is to chop up the courses into mini-semesters of seven weeks. This allows the material to be more tightly focused and reduces overlap in different courses. Of the international finance materials, probably the money and FX markets could be put into a mini-semester course with the other material in their functional courses. However, the word "international" would still tend to drop out of the curriculum.

In my judgment, the straight international finance course is now largely redundant, since the topics have been integrated into our other offerings, which is where they belong. However, dropping the international finance course would lower our FT ratings. In the future we may have to re-title our offerings "international M&A," "international risk management," "international . . .

NOTES

1. This is a familiar argument that has raged for a long time. At the University of Toronto we have never had an "international business" area, since the philosophy has always been that the topics belong in the functional areas. We did (do) offer an international business stream that allows students to combine these different functional areas.
2. At U of T, we are not at stage 3 yet, and, for reasons I will discuss, probably never will be.
3. The *Wall Street Journal* recently ranked Rotman 7th in the world based on academic excellence in finance and the 10th best place to recruit MBAs by financial institutions.
4. BAs in Canada are just bank-guaranteed CP issued for any purpose. They are not related to international trade and a very important part of the Canadian money market.
5. In response to requests from the business community we are in the early stages of developing a masters degree in risk management, the core of which is simply the financial engineering courses in our MBA.

6. At one point the international finance course was one of the most popular in the MBA curriculum; that title has now passed to the investment banking and risk management courses.

7. See Cohn and Pringle (1973).

8. I recently showed that size and SIC matching TSX firms against U.S. firms over the period 1994–1999 showed no difference in standard financial ratios such as return on equity, asset turnover, leverage, etc. The only significant difference was that U.S. firms traded on about 50% higher price to book multiples.

9. This is not to deny that the question of broadening the capital market is not very important. As I write this, seven Canadian stocks have been dropped from the S&P500 index, since S&P wants to make it 100% US, even though some of them, like Alcan, have been in the index for 65 years and some like, Inco, were Dow stocks. The stocks dropped in price an average of 9% the day this was announced. This is clearly a "listing" effect and not really an international effect. The same goes for repackaging foreign stocks into ADRs.

10. The Supreme Court of Canada has affirmed that the underlying logic does not matter as long as the substance of the two transactions is legitimate (Shell Canada decision); these transactions would now run afoul of the general anti-avoidance provisions of the Income Tax Act.

11. Prepaid bonds have now been caught up with changes in the Income Tax Act aimed at zero coupon bonds. Essentially, 99-year bonds were issued and the interest payments from years 11–99 immediately prepaid. The result was that the interest was tied to a par value even though substantially less was borrowed on a net basis. This increased the tax savings. Some firms even deducted the prepayments themselves before being caught. Apparently, prepaid bonds are still popular in France.

12. Booth (1982).

13. Booth (2002).

14. During the bidding for the Olympics, one American wag voted for Toronto on the grounds that there were no Canadians living there.

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APPENDIX A

Investment Banking (Laurence Booth)

Corporate Financing
An investigation of the framework underlying corporate financing decisions. Among the problems analyzed are the capital structure of firms, the maturity structure of debt, dividend policies, share valuation models and alternative financing strategies and instruments.

Financial Management
An examinations of the theory and practice of evaluating investment expenditure proposals. Topics include: lease-or-buy decisions, timing of capital expenditures, capital rationing, analysis of working capital and credit policy, cash management and financial planning.

Financial Institutions and Capital Markets
This course deals with the management of financial institutions and their interaction in the capital markets. The prime focus is on understanding Canadian financial institutions within the context of global markets. Topics covered include intermediaries, risk management, regulations, capital adequacy, deposit insurance, pension plans, investment banking and debt management. Consideration is given to banks, trusts, insurance and brokers.

Mergers and Acquisitions
This course develops an understanding of the strategic asset acquisition and divestiture process. Firms constantly make small-scale decisions to make, lease or buy certain assets. The same ideas can be applied to larger scale assets and the major product divisions of the firm. These decisions involve mergers and acquisitions of existing firms, as well as spin-offs and divestitures of existing assets.

Financial Engineering (John Hull)

Options and Futures Markets
This course covers forward, futures, swap, and option contracts. It deals with how the contracts work, how they are used, how they are valued, and how financial institutions hedge their positions in the contracts. The topics covered include Black-Scholes pricing, the use of binomial trees, and delta-gamma-vega hedging.

Financial Risk Management
This course covers ways in which financial institutions, corporations, and fund managers can quantify and manage risks. It covers the calculation and use of value at risk, ways of forecasting volatilities and correlations, the quantification of credit risk, and credit derivatives.

Advanced Derivatives
This course covers the mathematics underlying the pricing of derivatives and the numerical procedures that are used to implement derivatives pricing models. It includes in-depth material on exotic options and interest rate derivatives.

Funds Management (Alan White)

Security Analysis and Portfolio Management
An examination of investment policies of individuals and institutions. Topics include: security valuation models, utility theory, efficiency of capital markets, portfolio construction and performance measurement.

Analysis and Management of Fixed Income Securities
This course provides students with a focused examination of the debt market. Topics examined include valuation, term structure of interest rates, derivatives of fixed income instruments, corporate bonds and immunization strategies.

Applied Portfolio Management
This course meets every other week throughout the Fall and Winter terms. Enrolment is limited to 25 students who will be allocated into teams of fund managers advising Felix Chee, U of T's CFO, on the following: determining client needs; designing an appropriate investment strategy; selling and implementing the strategy and determining the effectiveness of the strategy.

Financial Modelling
This course will use an interactive laboratory-based setting in order to enhance and deepen principles of asset valuation. Students will apply methods of measuring value, adding value and maintaining value (risk management) in the context of constructing and managing an investment portfolio. This value-based management approach will be implemented using custom designed Excel applications linked to real time data feeds. Additional applications, such as, learning how markets work through virtual trading, and adding value through project evaluation (use of funds) and capital re-structuring (liability management) may also be explored.

International Financial Management
This course focuses on the international dimension of financial management. It aims to develop a working knowledge of the institutional features and interdependence of international financial markets so that the benefits and costs of international investing and financing can be evaluated. There is a particular emphasis on measuring exposure to risks associated with multi-currency business and managing those risks. Topical issues such as exchange rate crises are also discussed.

APPENDIX B

FACULTY OF MANAGEMENT STUDIES

University of Toronto

2305: *International Financial Management*

Laurence D. Booth — Fall 1988
Room 429
Tel.: 978–6311

A. *Objective*
This course will expose the student to the latest theoretical and empirical work in International Finance. The successful student will gain insight into the behavior of the foreign exchange market, the functioning of the international money market and how the multinational and international firm behaves in this environment. The orientation is strictly directed towards the individual firm. Traditional topics dealt with in International Finance in an economics department course, such as the gold system, fixed versus flexible exchange rates, how to “correct” a balance of payments deficit, etc., will not be covered.

B. *Prerequisites*
This course *builds* upon domestic corporate financial topics and reconsiders them in an international context. Hence basic requirements are,
(a) familiarity with basic topics in international economics. The student wishing a career in international business or international finance should be familiar with the basic theories of the international monetary system.
(b) an understanding of the modern theory of finance. We will spend some time considering international diversification, capital budgeting for the MNC and financing problems in an international context.

C. *Achieving the Objective*
The theoretical framework of International Finance will be discussed in the lectures and comprise about 70% of class time. The discussion will follow the assigned readings. The application of international finance will be covered by discussing eight cases, six of which are in the case book by Carlson et al. The cases are divided into the following streams:

A	*B*
Mexican Peso	Newport Systems A&B
Fasb 8 and Foreign	Solar Chemical
Currency Translation	CanAm Construction
Dodge-Osborn Ageana	Vick International
Reliable Refrigerator Trucks	

Each student will join a group for case work, with each group being allocated Stream A or B cases. Each group will be responsible for writing up four case analyses and presenting one. These analyses should not exceed 1500 words or about six pages (excluding exhibits). Grades will only be assigned to work submitted on or before the assigned due date. Class participation is an important part of the learning process and all students will be responsible for being able to discuss each case.

D. *Evaluation*
The student's achievement of the course objectives will be evaluated on the following basis,

Final Exam	50%
Case Analyses	40%
Class Participation	10%
	100%

E. *Course Materials*
A. Shapiro, *Multinational financial management* (2nd ed.). Allyn and Bacon, 1986.

Carlson et al., *International finance*: *Cases and simulation*. Addison-Wesley, 1980.

In addition, a readings package of key articles is available for purchase. This package includes the readings marked with an asterisk on the course outline.

Course Outline

Week No. 1	*Canada's Balance of Payments and International Capital Markets*
Handout:	R. Dornbusch, "World Economic Problems for the Summit: Co-ordination, Debt and the Exchange Rate System," Mimeo (April 1988).
	J. Crow, "Exchange Rate Policy as an Instrument of Payments Adjustment: A Canadian Perspective," *Bank of Canada Review*, (May 1988).
	Shapiro, Chapters 1,2,3
Week No. 2	*Foreign Exchange Market*
Shapiro	Chapter 4
Readings:	G. Pickering and S. Heard, "Survey of the Foreign Exchange Market in Canada," *Bank of Canada Review*, (November 1986).
	K. Chrystal, "A Guide to Foreign Exchange Markets," *Review*, FRB of St. Louis, (March 1984).
Week No. 3	*International Parity Relationships*
Readings:	*R. Solnik, "International Parity Conditions and Exchange Risk: A Review," *Journal of Banking and Finance*, 1979.
Week No. 4	*Forecasting Exchange Rates and Market Efficiency*
Shapiro	Chapter 5
Readings:	B. Cornell, "Spot Rates, Forward Rates and Market Efficiency," *Journal of Financial Economics*, 5, 1977.
	M. Adler and B. Lehman, "Deviations from PPP in the Long Run," *Journal of Finance*, December, 1983.
	*R. Levich, "How to Compare Chance with Forecasting Expertise," *Euromoney*, August, 1981.
	P. Boothe and D. Longworth, "Foreign Exchange Market Efficiency Tests: Implications of Recent Empirical Findings," *Journal of International Money and Finance*, June, 1986.
Case:	The Mexican Peso
Week No. 5	*Foreign Exchange Exposure: Transaction*
Shapiro	Chapter 7, 8 and 9
Readings:	*N. Abuaf, "The Nature and Management of Foreign Exchange Risk," *Midland Corporate Finance Journal*, Fall, 1986.
	*I. Giddy, "The Foreign Exchange Option as a Hedging Tool," *Midland Corporate Finance Journal*, Fall, 1983.

Case:	Newport Systems Inc. A&B
Week No. 6	*Foreign Exchange Exposure: Translation and Economic*
Shapiro	Chapter 6 and 21
Readings:	*R. Aliber and G. Stickney, "Accounting Measures for Foreign Exchange Risk: The Long and Short of It," *Accounting Review*, January, 1975.
	L. Booth, "An Economic Analysis of Hedging and the Canadian Accounting Treatment of Revenue Hedges," *Canadian Journal of Administrative Sciences*, March 1987.
	M. Adler and B. Dumas, "Exposure to Currency Risk: Definition and Measurement," *Financial Management*, Summer, 1984.
	*C. Hekman, "Don't Blame Currency Values for Strategic Errors," *Midland Corporate Finance Journal*, (Fall 1986).
Case:	FASB 8 and Foreign Currency Translation
Week No. 7	*Financial Planning and Control*
Shapiro	Chapter 22
Readings:	*D. R. Lessard and P. Lorange, "Currency Changes and Management Control: Resolving the Centralization-Decentralization Problem," *Accounting Review*, July, 1977.
	S. Robbins and R. Stobaugh, "The Bent Measuring Stick for Foreign Subsidiaries, *Harvard Business Review*, September-October, 1973.
Case:	Solar Chemical
Week No. 8	*Managing Funds Flow*
Shapiro	Chapter 10 and 11
Readings:	*D. Lessard, "Transfer Prices: Taxes and Financial Markets: Implications of Internal Financial Transfers Within the MNC," *Research in International Business and Finance*, 2, 1980.
Case:	Dodge-Osborne Ageana
Week No. 9	*International Tax Planning*
Shapiro	Chapter 12
Readings:	*E. P. Paules, "A Guide Through the Tax Maze," *Euromoney*, October & November, 1980.
	"Canadian Taxation of Foreign Source Income," Chapter 9 in D. S. Brean, *International Issues in Taxation*: *The Canadian Perspective*, Canadian Tax Foundation, 1984.

	R. Lindsay, "Financing of a Canadian Subsidiary by a Non-Resident Parent Corporation," in *Income Tax Consideration in Corporate Financing*, Canadian Tax Foundation, 1987.
Week No. 10	*International Financing Costs*
Shapiro	Chapters 16, 18 and 20
Readings:	*D. Lessard and A. Shapiro, "Guidelines for Global Financing Choices," *Midland Corporate Finance Journal*, Winter, 1982. L. Booth, "Taxes, Funds Positioning and the Cost of Capital for a Multinational," in C. F. Lee (Ed.), *Advances in Financial Planning*, Vol. 5, 1987. *C. Smith et al., "The Evolving Market for Swaps," *Midland Corporate Finance Journal*, (Winter 1986).
Case:	CanAm Construction and Engineering Ltd.
Week No. 11	*Financing Foreign Trade*
Shapiro	Chapter 17
Readings:	A. Gallant, "Trade Finance," Chapter 9 in *International Dimensions of Canadian Banking*, R. Wright (Ed.), 1983. Bank of Canada, "The Evolution of Banker's Acceptances in Canada," *Review*, October, 1981.
Case:	Reliable Refrigerated Trucks Inc.
Week No. 12	*Framework for MNC Capital Budgeting*
Shapiro	Chapters 13, 14 and 15
Readings:	L. Booth, "Capital Budgeting Frameworks, for the Multinational Corporation," *Journal of International Business Studies*, Autumn, 1982. D. Lessard, "Evaluating Foreign Projects: An Adjusted Present Value Approach," in D. Lessard (Ed.), *International Financial Management*, Warren, Gorham and Lamont, 1980.
Week No. 13	*Capital Budgeting Applications*
Case:	Vick International

THE INTERNATIONALIZATION OF THE MARKETING DISCIPLINE

Carol A. Howard

ABSTRACT

A case can be made that, to some extent at least, the marketing discipline has not kept pace with the practice of international marketing. Recognizing that internationalization is a dynamic process that may vary across the business of marketing, the development of marketing thought, the direction of marketing education, and the marketing research process, this paper explores that premise. Then, given the current emphasis on the integration of business activities on a worldwide basis, it suggests an interdisciplinary approach, grounded in the concept of market imperfections and internalization theory, to deal with the major challenges that now confront international marketing scholars.

> Marketing is a universal discipline, and international markets are in fact domestic markets. What makes them international is the perspective of the observer, not the character of the market.
>
> Warren J. Keegan (1984)

INTRODUCTION

In his examination of the differences between domestic and international marketing, Robert Bartels (1968) identified *marketing* as: (a) a dual technical and social activity; and (b) a consequence of environmental circumstances. He noted that

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attempts to conceptualize the extension of marketing practice beyond national borders had led to the development of: (a) the term *international marketing*, which actually refers to the myriad of activities previously called foreign trade (see Root, 1982); and (b) the term *comparative marketing*, which concerns the analysis of nationally dissimilar marketing systems and practices (see Liander et al., 1967). Bartels went on to assert, however, that there is also an identifiable international (inter-national) environment in which transactions occur across national borders that makes for clear dissimilarities between domestic and international marketing. Generally, there is no equivalent to the truly inter-national environment within either a purely national or a strictly limited comparative situation.

Today, that non-equivalent situation is captured in the idea of the scope of the activities of the global or transnational firm, i.e. a firm which sources, produces, and markets its products on a worldwide basis and makes its decisions according to overall corporate benefit. Brigid Gavin (2001) claims that the key features of globalization today are the internationalization of production and finance in ways that link suppliers, producers, and consumers both within and across national boundaries in novel ways. This, is fact, corresponds to the four-stage scheme described by Franklin Root (1987), in which he envisioned a firm moving from a very weak commitment to foreign markets in the first stage to becoming a globally integrated enterprise in the fourth stage (see also Bartlett & Ghoshal, 2000; Robock & Simmonds, 1973).

Has the marketing discipline kept pace with the practice of international marketing? Recognizing that internationalization is a dynamic process rather than a steady state, and recognizing that the process of internationalization may differ across the actual practice of marketing (business), the development of marketing thought (conceptualization), the direction of marketing education (curriculum), and the focus of the literature (marketing research), this paper attempts to address that question. Where is the discipline conceptually? How international is the marketing curriculum? What has been the nature and scope of the international marketing research endeavor? Given the current emphasis on the integration of activities on a worldwide basis, the paper also suggests an interdisciplinary approach for dealing with the major theoretical challenges that now confront marketing scholars.

THE DEVELOPMENT OF [INTERNATIONAL] MARKETING THOUGHT

Bartels (1981) began his description of the *ascendency of marketing* – the broadening of the perspective in which marketing is held, the globalization of its practice, and the universalization of its concepts and theory – by noting that

when in about 1900, the systematic study of distribution was begun, the United States, like all nations, was a developing economy . . . There was virtually no marketing technology, per se, and the term "marketing" was not coined until about 1912. With simple economic conditions, low expectations, and low technology, marketing was commonly defined as "the activities involved in the physical distribution of goods and the transfer of their title" (p. 5).

Following an extensive search, Bartels (1962, p. 4) believed he had identified the origins of marketing thought, placing it in the United States between 1906–1911, with his best approximation about 1910. His conclusion was based on: (a) when the term *marketing* was first used as a noun; and (b) where academic thought about marketing began. However, another study of the historical literature found the academic use of the term *marketing* – in a way compatible with current use – in 1897 (Bussiere, 2000, p. 142). Still another search for the origin of the term found *marketing* listed in *Webster's American Dictionary* as early as 1856 and probably in previous editions as well (Lazer, 1979). Yet another exploration traced the term *marketing* back to 1561 (Shaw, 1995). Furthermore, even though Bartels believed that marketing thought originated in university courses taught in the United States, evidence also indicates that marketing courses may actually have been offered in Germany prior to those offered at American institutions (Jones & Monieson, 1990).

Nonetheless, a major breakthrough in the development of marketing thought did come about during the first quarter of the twentieth century when marketing came to be identified as a discipline concerned with the distribution of products and the satisfaction of consumption needs, i.e. marketing was separated from economics. Then, in the 1930s the marketing process came to be viewed in its totality, i.e. as a system of flows and relationships. Further, marketing channels came to be viewed as social systems. Thus, the focus shifted from the economic task to human behavior as the concepts of roles, expectations, interactions, power, dominance, conflict, etc. were introduced (Bartels, 1981, p. 30).

Following World War II, a surge of social and behavioral research firmly established marketing as an interdisciplinary, rather than a primarily economic, discipline. At the same time the increase in international marketing activities created an awareness that domestic strategies were often incongruent in foreign settings. This led to the dichotomizing of the global environment into "across borders" and "within borders", classifications of overseas marketing, plus the development of a new literature on international marketing. Prominent among the contributors to this new field were John Fayerweather (1965), Richard Robinson (1964), and Robert Bartels (1962).

The concept of marketing management was not introduced until the 1950s, when the marketing functions were re-conceived as the controllable variables of product, promotion, place (distribution), and price, i.e. the *marketing mix*. Following

that development, the *marketing concept*, which stressed a customer-orientation, became the new decision-making focus. (For a comprehensive statement of the managerial marketing theory of that era, see Wroe Alderson's (1957) *Marketing Behavior and Executive Action*.) During the 1960s marketing came to be viewed as a social activity as the literature began to focus on the interactions and relations of role participants within the marketing channel. In the 1970s the increased expectations of marketing finally led to the recognition of the macro or societal dimension of the field, i.e. meeting consumption needs in a manner that preserves or enhances society's well-being. This stakeholder view of the marketing process is now known as the *societal marketing concept* (Bartels, 1981, pp. 9–10).

It was during the 1980s that the full extent of the global nature of marketing (and international business as a whole) was finally recognized. No longer was the international marketplace seen as the exclusive arena of large corporations. It also became a field of opportunity for small entrepreneurs, as well as a source of competition for merchants and manufacturers who found themselves challenged in their home markets by foreign competitors. Since then, traditional trade routes, the types of products traded, and the scope of foreign activities have all changed significantly. Markets are now constantly realigned by new capacities of nations to consume as well as to produce, the subsequent growth in export, licensing, and foreign direct investment flows and activities, the process of economic integration in Europe, North America, and elsewhere, the transition to market-based economies by the former Soviet Union and other nations, as well as the application of phenomenal technological innovations.

So where is the marketing discipline today? How international, how globally integrated has it truly become? Has it in fact been internationalized to the fullest extent with respect to the development and application of theory, the development of course and curriculum content, and the scope and nature of international marketing research endeavors?

THE SCOPE OF INTERNATIONAL MARKETING THOUGHT

Over time the academic view of marketing has progressed from one of simply an operational activity to that of a managerial process – a process which includes accommodation to the international environment initially associated with the export marketing process. Today *international marketing* is typically characterized in both texts and curricula as one of several international business (IB) functions; specifically, it is concerned with the management of the (international) marketing mix. As late as the early 1980s, however, international marketing was considered

to be a much more inclusive, interdisciplinary activity. Jean Boddewyn (2002) is of the opinion that international marketing courses predated general IB courses and that the early IB texts were actually international marketing texts (e.g. Hess & Cateora, 1966; Kramer, 1959). In fact, Stefan Robock and Kenneth Simmonds's (1973) trailblazing *International Business and Multinational Enterprises* did not appear until the mid-1970s.

In a brief fifty-page booklet first published in 1977 and eventually as a revised and updated book, Root (1987) noted that the pursuit of international market opportunities involves three fundamental questions: (a) How should managers decide which international markets to enter? (b) How should managers determine their mode of international market entry? (c) How should managers develop their international marketing plans – their product, channel, price, and promotion strategies? After dealing with those questions, Root went on to consider the development of an international marketing plan in the context of a global enterprise system with several products and several country markets, as well as the cultural differences that are so distinctive a feature of international business (p. xv). Throughout his text, Root made no distinction between what would today be considered IB activities and the more limited field of international marketing – they were one and the same.

At an international marketing conference sponsored by the Netherlands School of Business, Warren Keegan (1984) claimed that as international marketers, we are part of what is one of the oldest, if not the oldest, profession in the world (p. 1). He observed that over time two different perceptions of international marketing have evolved. The first is that there is no such thing as international marketing (or no such thing as mere marketing) – there is only one marketing discipline. Marketing applies worldwide in every culture, under every system of government, and at every stage of development.[1] The relative importance of different aspects of the discipline may change from country to country, but this is merely a matter of emphasis, not of a different or distinctive discipline. Thus, marketing is a universal discipline, and international markets are in fact domestic markets. What makes them international is the perspective of the observer, not the character of the market (p. 5).

The second perception noted by Keegan is that in order to succeed in international markets there are distinctive aspects to international marketing that must be understood. These include (pp. 6–8):

environmental sensitivity: some products are more sensitive to cultural and economic factors than others

unifying and differentiating influences: firms must profit from the economies of standardization at the same time adapt the marketing program where necessary

in order to compete effectively and meet the needs and wants of customers [a concept first suggested by John A. Fayerweather]
leverage: unique comparative advantages accrue to the international marketer who works smarter than his domestic counterpart, i.e. the experience effect [a term introduced by Ralph Z. Sorenson]
the product/market life cycle: experience in one market cannot necessarily be projected into other market's
orientation: there are both conscious and unconscious assumptions about and approaches to markets [ethnocentric, polycentric, and geocentric – terms coined by Howard Perlmutter]
learning: each stage of international marketing requires learning that prepares the firm for the next state

Early on these ideas were incorporated into the major texts in the field (e.g. Terpstra, 1972) and remain there today. Like Root, Terpstra, and others, Keegan embraced the breadth of international marketing activities. Keegan also recognized the growth of the multinational corporation as well as the development of world-scale industries serving global markets.

Nonetheless, international marketing has been repeatedly characterized as one of the marketing areas in which work by practitioners is far more advanced and insightful than its conceptualization by academicians. At the same conference at the Netherlands School of Business, Helmut Soldner (1984, p. 25) suggested that methodological advances (which tend to focus on data analysis methods) may have been greater than our efforts to build the appropriate conceptual foundations, either by defining the scope of international marketing or by delineating the core of knowledge necessary to progress on the road of theory development. As is evident from the literature to date, the primary academic concern has been with operational and micro-management decisions, as conditioned by the international task environment of the firm. International marketing operations have overwhelmingly been perceived as extensions of domestic marketing activities, international marketing concepts and theories have largely been developed as extensions of domestic marketing concepts, and the entire realm of macromarketing has been treated as the unwelcome stepchild of the discipline.

Twenty-five years ago Yoram Wind and Howard Perlmutter (1977) suggested that scholars should look for a fuller range of international marketing specifics by adopting a stronger macro perspective. Indeed, it is the overall macroeconomic parameters which govern a great many of the more basic strategic international marketing decisions, which in turn determine international marketing mix decisions. The greater the extent to which firms are viewed as global systems for market development (characterized by a multiplicity of relationships with their

environments and stakeholders), the closer the attention scholars should pay to the interplay of strategic international marketing decisions, general business policy decisions, and firm-exogeneous decision factors. To this end, the conceptual emphasis would shift not only toward the inclusion of the macro-environment of international marketing, but also toward the joint analysis of both micro and macro variables as interactive sets, i.e. it would become a broad, interdisciplinary pursuit.

Soldner (p. 26) suggested that the search for concepts and empirical results to integrate into a more macro-oriented conceptualization of international marketing calls for turning to the disciplines that explain international economic relationships and exchange processes. Further, he identified three additions to the base of marketing theory which he felt lend considerable support to the perceived stronger conceptual macro-orientation of international marketing: (a) the development of the generic marketing paradigm (the societal marketing concept) with its emphasis upon stakeholders and the social responsibility of the firm; (b) the emergence of the field of macromarketing, which addresses (among other things) the joint micro-macro responsibility of firms; and (c) the merging of marketing with the corporate planning and strategy formulation functions. Soldner believed that this broadened macro orientation toward international marketing would capture the increased societal expectations of marketing for meeting not only consumption needs, but also for promoting the public interest.

So what has happened in the interim? Has the discipline of international marketing become more or less inclusive in its scope? Has it become more or less interdisciplinary in its approach?

THE STATE OF THE ACADEMY

From time to time the academy steps back to assess its development and progress. This review of the state of the art is divided into two sections. First, research regarding trends in international marketing education is examined; then, trends in the internationalization of marketing research are explored.

International Marketing Education

For the most part, studies of trends in international marketing education are embedded within broader studies of IB education. However, Gerald Hampton (1983) conducted a Delphi study among twenty-eight international marketing experts (conference participants) regarding the concerns and directions of international marketing education as part of an international marketing workshop sponsored by

the Marketing Science Institute. First of all, Hampton discovered that the study participants felt that the subject areas most important to international marketing students were largely non-marketing in nature. They included: foreign language fluency; cultural awareness; communication skills; management skills; and competency in international economics, political science, regional studies, and IB ethics (most of which were neither offered nor required by business schools). Second, with respect to the importance of specific marketing competency (international trade and investment knowledge, research skills, marketing management skills, plus the knowledge gained from internships and exchange programs), the respondents emphasized the application of marketing concepts. That is, the respondents assumed a high level of student knowledge concerning the marketing process and its international environment prior to their taking courses in the international marketing area.

Paul Beamish and Jonathan Calof (1989) surveyed 122 major Canadian corporations with respect to their views regarding IB education. Among other things, respondents ranked business (business/commerce, accounting/finance) and engineering degrees as most beneficial for students preparing for international careers. These were followed by economics, law, science, and general arts. When asked to rate the importance of fifteen internationally focused courses, the three highest (in descending order) were: international marketing/sales, international finance/capital markets, and international trade/export management. Although regional studies and languages were ranked among the lowest desired courses, the authors noted that their significance increased with the seniority of the respondents. The authors also noted that their rankings were supported by rankings within the American studies of Nehrt (1977) and Farabakhsh (1984) and were close to those obtained by Patrick (1978).

Finally, as part of the sixth global survey regarding the internationalization of the business curriculum and faculty, Chuck Kwok and Jeffrey Arpan (2002) touched upon numerous topics related to international marketing education. (Their study included 151 complete responses, of which 102 came from the United States; 75 of the responding institutions were accredited by the AACSB.) Among other things, Kwok and Arpan discovered that during the 1990s nearly 90% of the responding schools included IB as part of their education and research missions. Relatively few schools had stand-alone IB departments; IB specialists were mostly located in functional areas, but less than half were given IB specialist recognition. Courses infused with IB content were predominant; core courses in marketing infused with IB content rated nearly 90% at both the bachelor's and master's levels, but less than 30% at the doctoral level. Approximately 60% of the responding schools offered specialized international marketing courses at the bachelor's level, 50% at the master's level, and 10% at the doctoral level. IB majors

were required to take an average of at least six IB courses at the bachelor and master's levels, while doctoral students were required to take an average of at least three IB courses. Foreign language study was the course most required at all levels.

Kwok and Arpan also discovered that of the major IB activities of the faculty, teaching was the most extensive, followed by research and consulting. Teaching/living abroad was considered the most effective factor for internationalizing faculty. More than one-fourth of the schools required study abroad experience for students in some of their degree programs; nearly one-fourth offered one or more of their degrees in another country. The highest scores regarding satisfaction with the progress of curriculum internationalization were for IB masters programs, executive MBA programs, and IB bachelors programs; three-fourths of the schools were moderately satisfied with their progress. In sum, Kwok and Arpan concluded that while the process is far from complete, during the 1990s significant progress occurred in the internationalization of business school curricula and faculty throughout the world. (For a more detailed discussion of this study, see Arpan, 2003.)

For a current examination of the curriculum challenges to today's business schools, see Richard Wright (2003). Among other things, Wright concludes that just as business schools introduced a new set of *interpersonal skills* into their curricular during the last decade, they now need to develop a new set of *inter-organizational skills and competencies* in the managers who will compete in tomorrow's arena. Moreover, Booth (2003) argues that in the final stage of a genuinely international MBA, international content is so thoroughly infused into the standard curriculum that the straight international finance course becomes redundant.

Strong support for the infusion model of internationalization can be found among marketing scholars, as well as across the entire IB field. Although the evidence seems to indicate that a majority of business schools place IB faculty within functional areas such as marketing, management, and finance and tend to infuse courses with IB content, as yet there is little research to show that this structure and approach is in fact more effective than alternative models. John Daniels (2003) concludes that while the infusion model is very appealing, implementation can be very problematic. Efforts to educate new faculty, re-tool current faculty, and incorporate international business/marketing theory into texts and courses have proven challenging indeed. Often, when authors claim to have taken an international approach in the writing of their basic marketing texts and incorporated that dimension into both topical material and cases (and perhaps even their book titles), one often finds a complete lack of the relevant international marketing theory. Lectures and other course content often reflect a similar deficiency. Daniels believes that the effective infusion of international content into functional courses will be a long time in coming, because it will require training

business doctoral students to incorporate that dimension into the courses which they subsequently teach from the outset. This process will surely be a gradual one, because it can only occur as the prevailing international mindset changes with the attrition of senior faculty who remain wedded to a more insular perspective.

The International Marketing Literature

More than twenty-five years ago, E. T. Grether (1976) reviewed interest levels in particular marketing topics, including international marketing, as indicated by the annual number of articles published in the *Journal of Marketing* from 1936–1976. He noted that although there were always some international marketing papers published each year, international articles only represented about 5% of the articles from 1936–1951; that level peaked at nearly 14% in the early 1960s, and declined abruptly to barely more than 3% by 1975. Overall, Grether categorized the topic of international marketing as one of medium and relatively stable interest. In addition, when examining articles devoted to the social role of marketing, Grether found a decline in the number of articles from just more than 2% in 1936 to 0% in the early 1950s, a peak of nearly 10% in 1970, and then a decline to just more than 7% in 1975. Reflecting upon these figures, Grether stated that in the early period of the study, marketing related directly to both micro- and macro-economic analysis. In the later period of the study, however, the interests and energies of marketers had shifted toward the social-behavioral applications of marketing, and highly competent work was being done in those areas. Grether rued the lack of interest in the functioning of the competitive market system, but he admitted that (as was noted earlier in this paper) the direct links to economics had for all practical purposes been severed by marketing scholars.

In a relatively broad analysis of significant contributions to the IB literature for the period 1980–1989, Allen Morrison and Andrew Inkpen (1991) examined publication records in nine separate leading journals. Of the 664 articles they considered, 290 appeared in the *Journal of International Business Studies*, 281 appeared in the *Columbia Journal of World Business*, 45 appeared in the *Harvard Business Review*, and 24 appeared in the *Journal of Marketing*. The authors stated that while the mainstream functional journals appeared to be providing an outlet for only a limited amount of IB research, they were hopeful those outlets would be more receptive in the future.

P. R. Chandry and Thomas Williams (1994) examined the impact of various journals upon IB research by analyzing the citations that appeared in articles published by the *Journal of International Business Studies* for the years 1984–1993. They observed that during those years, *Harvard Business Review, Columbia Journal of World Business, Journal of Marketing*, and *Journal of*

Marketing Research ranked second, fourth, sixth, and seventh in the number of citations, respectively. They concluded that the areas of management, economics, marketing, and finance seem to be the most important in influencing IB research.

Subsequently, Frank DuBois and David Reeb (2000) rated and ranked thirty IB journals using both a citation analysis and a survey approach. On the basis of total citations in core IB journals (*Journal of World Business, Journal of International Business Studies, Multinational Business Review, Management International Review*, and *International Business Review*) for the period 1995–1997, *International Marketing Review* and *Journal of International Marketing* ranked fourth and sixth, respectively (p. 695). On the basis of an integrated ranking that represented the simple average of five measures representing both objective and subjective measures of journal quality, the top five IB journals (in descending order) were: *Journal of International Business Studies, Management International Review, Journal of World Business (CJWB), International Marketing Review*, and *Journal of International Marketing*. Two of the top five publications deemed to be most influential in guiding research in the field of IB are marketing journals. (Many also view the acquisition of the *Journal of International Marketing* by the American Marketing Association as a positive indication of the increasing prestige of international marketing research within the field of marketing itself.)

As part of their analysis of twenty-five years of research published in the *Journal of International Business Studies* from 1970–1994, Andrew Inkpen and Paul Beamish (1994) analyzed the percentage of articles per discipline. The breadth of topics covered within the marketing area included: comparative marketing; international marketing management and strategy; cross-national consumer and industrial behavior; international product/promotion/pricing/distribution strategy; and export-import/foreign market entry modes. (Those categories were part of a much larger list of IB topics also used by Andrew Inkpen and Adva Dinur (1994, p. 732) to index all of the articles, notes, comments, and replies published by the *Journal of International Business Studies* in its first twenty-five volumes.) While ranging from a high of nearly 20% in 1980–84 to a low of barely 15% in 1985–1989, overall, international marketing articles accounted for 17.5% of the total during the twenty-five year publication span. In addition, international marketing management and strategy ranked third with respect to the number of articles that appeared during that time.

For a current review of the state of international marketing research, see Greg Kitzmiller and Joseph Miller's (2003) article regarding International Marketing Research – But How International? They conclude that while both the number and quality of international marketing articles have improved significantly during the last thirty years, truly global research is nearly non-existent. In fact, they found that when authors used the word "global" in their titles, the research was most likely regional rather than global in scope.

THE CASE FOR AN INTERDISCIPLINARY APPROACH

Although the vast majority of authors who have published in the *Journal of International Business Studies* classify their own work as interdisciplinary, scholars such as John Dunning (1989, 1993) have argued that insufficient progress has been made in this direction. In their study of IB research trends, Richard Wright and David Ricks (1994) called for more research collaboration across national boundaries, and for a greater synthesis of research into broader, more integrative frameworks. This is necessary, they claimed, because while the need to view IB as a multidimensional process has become more and more apparent to practitioners, researchers have lagged behind in both their concepts and tools to approach such research. Historically, a comparative marketing approach has been used to examine the similarities and differences that exist across national market boundaries. Gopalkrishnan Iyer (1997) argued, however, that variations in national marketing systems can be established as much on the basis of their institutional environments as from the strategic responses of the organizations comprising those systems. Thus, he proposed using instead an interdisciplinary framework which takes into account relevant actors, conventions, and patterns of behavior, as well as the structure of the environment and the historical conditioning of present and future choices.

When considering an exploration of the international macroenvironment for the purpose of developing an interdisciplinary framework for the further development of international marketing thought and research, one must surely begin with the seminal contribution of Ronald Coase (1937), who viewed the firm as an institutional alternative to the marketplace whenever corporate resources are to be marketed or transactions are less profitable via external markets. Building on this idea of market imperfections, Peter Buckley and Mark Casson (1976) demonstrated that management will then internalize markets via vertical integration. Once firms proceed to internalize technology, management know-how, integrated production and marketing, etc. across national boundaries, the multinational enterprise is created.[2] In the post-WWII era, the rise of multinational corporations was primarily determined by corporate objectives to generate, diffuse, and use technical and marketing know-how internally. The internalization of marketing expertise is seen as being particularly key to this process (Rugman, 1981; Rugman et al., 1985) because such intermediate products and skills become manifest in firm-specific technological leads, patents, innovative marketing techniques, progressive organizational structures, etc. Accordingly, it is this stream of intangible intermediate products which links the corporate network of production, distribution, and research and development units.

Soldner (1984) argued, however, that marketing scholars prefer to conceive of the international firm as a global marketing system, which, through coordinated

multinational marketing strategies and integrated operations, relates corporate resources to worldwide market(ing) opportunities. From this perspective, the internalization of intermediate markets for primarily intangible proprietary assets such as knowledge mainly occurs after the internationalization of markets for final products. Accordingly, the birth and rise of multinational firms would be primarily determined by the corporate rationale to profitably exploit product and process innovations via cross-border transfers in international markets.

Among the contributions to the foundations of IB theory, John Fayerweather's *conceptual framework* (1978) is notable for its level and breadth of conceptualization because he supplemented the theory of comparative advantage with ideas from cultural anthropology and political science. In the first two-country dimension of his framework, Fayerweather sees the international firm as the institutionalization of the inter-nation transfer of various economic resources. Those transfers are governed by the economic differentials between the two countries and are conditioned by both political and cultural factors. In the second, multi-nation dimension of Fayerweather's framework, the international firm synergistically utilizes its specific skills in a globally integrated corporate system of production and marketing. The most efficient transmission of firm resources (particularly knowledge and skills) is then achieved by means of a sophisticated corporate communication and control system. In these determinants, one can recognize the causes of market imperfections identified by Buckley and Casson (1976) and Rugman (1981), prompting internalization via the establishment of foreign subsidiaries.

The firm's mode of entry into international markets is conditioned by host country factors, overall environmental factors, and global synergy considerations. However, the decision among exporting, licensing, and/or foreign direct investment is also influenced by internalization considerations. Strategically, marketing parameters may have to be given more weight in the equation of supply (cost) and demand (revenue) related factors, which eventually determines the appropriate degree of internalization. In this day and age of increasing outsourcing, many firms think more in terms of externalization, rather than internalization. At this point the decision perspective could thus presumably shift from strongly centralized, globally integrated systems of international production to strategically flexible, market-oriented combinations of input and output factors.

Dunning's (1981) Eclectic Theory of International Production and Rugman's (1981) theory of the multinational synthesize major strands of previous international trade and investment theory, including the internalization theory of Buckley and Casson (1976). Dunning first relates firm-specific, country-specific, and internalization advantages to each other, which, in turn, determine firm preferences for exporting, licensing, and/or foreign direct investment (see Fig. 1). In the last analysis, the type and intensity of IB activities are determined by the

OWNERSHIP-SPECIFIC ADVANTAGES	INTERNALIZATION ADVANTAGES (BY MNEs)
FIRM-SPECIFIC KNOWLEDGE ADVANTAGES	ENFORCE PROPERTY RIGHTS AND OVERCOME OTHER TRANSACTION COSTS
MANAGEMENT, MARKETING, FINANCIAL SKILLS	REDUCE BUYER UNCERTAINTY
VERTICAL INTEGRATION:	OVERCOME GOVERNMENT REGULATIONS
CONTROL OF RESOURCES	
CONTROL OF MARKETS	
RISK DIVERSIFICATION	

LOCATION-SPECIFIC (COUNTRY-SPECIFIC) ADVANTAGES

NATIONAL PRODUCTION FUNCTIONS

GOVERNMENT CONTROLS AND REGULATIONS

POLITICAL RISK

CULTURAL VALUES

NOTE: ALL THREE CONDITIONS ARE REQUIRED FOR FDI TO OCCUR.

Fig. 1

Dunning's Eclectic Theory of International Production. *Source:* Rugman, Lecraw and Booth (1985, p. 118).

interaction among the three categories of advantages with the structural parameters of firms, industries, and countries, i.e. by market imperfections (see also Rugman et al., 1985).

The basic lesson to be drawn from the internalization literature relates to the challenge to structure more explicitly those international marketing decisions pertaining primarily to the multinational macro-environment, i.e. to arrive at a better integration of firm-internal micro-management aspects with the external parameters prescribed by the firm's market and non-market macro-managerial environments. In other words, the breadth of the theory of internalization makes it possible to examine the interplay among strategic, managerial, and operational decision-making in international marketing. International marketing analysis can thus incorporate a broader range of economic, cultural, and socio-political macro factors and at the same time be increasingly integrated into strategic (marketing) management decisions.

The logic of this argument is in fact supported by Mark Casson (2000, p. 91), who observed that the threads of just such a research agenda have been allowed

to lapse not once, but twice. When Coase (1937) and Buckley and Casson (1976) laid out the agenda, scholars failed to recognize the significance of their work. Thus, internalization theory was stated in terms of decisions taken by a single firm, rather than in terms of interdependent decisions taken within an efficiency-driven system . . . where the rationale of the firm had to be proved in relation to the benefits of using the market. Although complex, Casson demonstrates that it is not impossible to articulate a systems view of location and ownership strategies.

In his impassioned plea for a more interdisciplinary approach to the study of IB, Dunning (1989) makes a vital point: the *study* of international business should be as interdisciplinary as the *practice* of it. While Inkpen and Beamish (1994) are confident that the *Journal of International Business Studies* will continue to be a natural home for the presentation of interdisciplinary research, evidence that other mainstream journals are likely to be so inclusive is scant indeed. Nonetheless, strong support for Dunning's call for the interdisciplinary development of the field can be found in Susan Douglas' (2001) refreshing essay on the challenges of global marketing, which was published in the book review section of the *Journal of Marketing*. After describing the incredible breadth of her academic studies and interests, Douglas concludes: "In coming to the end of this essay, I realize that there are few marketing references. This is perhaps because in exploring global markets, and in seeking to understand the attitudes and behavior of other cultures and countries, I have found it most useful to follow the paths of other explorers. Writers of many different backgrounds and perspectives – philosophers, sociologists, anthropologists, and political scientists – have tried to understand the different ways of thinking and behaving of other cultures and countries. From their varied perspectives I gained the richest insights" (p. 106). Douglas goes on to say that not only are the issues of international marketing complex and difficult to master, but its contribution is not well recognized nor understood in academic circles. She agrees with those who feel that international marketing is a stepchild within the realm of marketing, and, in conclusion, admits that she fears that this perspective still holds among many academics, despite the almost dizzying pace at which the globalization of business is occurring (p. 106).

> When true simplicity is gained to bow and to bend we shan't be ashamed,
> to turn, turn, will be our delight til by turning, turning we come round right.
>
> Shaker song (18th Century)

NOTES

1. Like Keegan (1984), Bartels (1981) concluded that economic development erases environmental differences and results in greater similarity of marketing systems and

management. (p. 9) Further, he claimed that from the global perspective, three characteristics of marketing are outstanding: (1) marketing practices differ throughout the world; (2) marketing practices are similar in groups of nations at similar stages of development; and (3) in moving upward in economic and social development, nations tend to adopt marketing expectations, techniques, and capabilities characteristic of the higher level. Thus, economic development is the common independent variable in a large set of marketing principles which are universally applicable for the explanation of marketing conditions and the guidance of marketing practice (p. 24).

Taking a different path to reach a similar conclusion, Richard Farmer (1985) observed that after 1945, given no alternative but starvation, Japan and Hong Kong opened their economic systems and took what he called a total marketing approach to the world. Soon the world began to witness an amazing pace and pattern of economic development. Farmer concluded that one of the more interesting surprises of the postwar world is that the total marketing approach really works! Out of the Bretton Woods Conference, the Marshall Plan, and other such schemes, there was set in motion the development of an economic order that somehow evolved into a world marketing system. When examining the second-order moral effects of this new international marketing framework, Farmer (1987) remarked, “In the end, and how I hate to admit it, marketing may well be the most moral field of all. What other discipline not only saves lives but minimizes wars?” (p. 115). He went on to say, “Ironically, it appears that the best defense is to sell people to death, as Japan and Hong Kong have demonstrated. If you get so valuable to your trading partners that it isn’t worth taking you over, then you can prosper and survive” (1985, p. 6).

2. The significance of this particular contribution was verified recently by the re-issuing of *The Future of the Multinational Enterprise* on the occasion of the twenty-fifth anniversary of its original publication and the honoring of its authors, Peter Buckley and Mark Casson, at a special session of the 2002 Annual Meeting of the Academy of International Business.

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IB TEACHING TECHNOLOGY: SIMULATE TO STIMULATE

Hans B. Thorelli

ABSTRACT

The changing focus of international business in academia should be viewed in the context of a rapidly changing global environment. Initially, attention centered on "infusion," the incorporation of international subject matter into established functional disciplines. Next followed a holistic approach to managing the multinational corporation. Recently the focus has shifted to interorganizational relations involving strategic alliances and networking, various types of horizontal arrangements, in- and out-sourcing, and even international value chain systems. Frontier-edge simulation games of IB operations have moved in pace with the discipline. An example is INTOPIA, an offspring of IU and the universities of Chicago and Santiago.

INTRODUCTION

During the last half-century, the traditional teaching vehicles in business schools – lecture-discussions and group projects in the form of cases – have been enriched by the emergence of internships and business simulations in the game form. Games may be regarded as pilot labs in management, and by definition they are dynamic in nature. Almost invariably, students express enthusiasm and typically add subjective statements about games enhancing their learning experience.

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This article analyzes the nature and application of simulations in IB education. A set of salient criteria is set forth, notably including entrepreneurial and strategic factors as well as inter- and intracompany transactions and networking freedom. Possible outcomes in terms of participant learning are anticipated. IB simulations demonstrate the urgency of integration of geographic, functional, and product aspects of the MNC. Performance evaluation is given special attention. Integration of simulation games into the IB curriculum is illustrated by concrete examples.

A Greek philosopher stated that mankind may be divided into two classes: those who divide mankind into two classes and those who do not. Similarly, the IB professoriate may be divided into two classes: users of games and non-users of games. IB games are used at hundreds of colleges and universities around the world. Yet no such simulations are widely used by first-rate research universities (with the exception of Columbia, Chicago, University of Texas at Austin, St. Gallen, Lund, Getulio Vargas, and another handful of such institutions). One hypothesis is that professors focusing most of their attention on their own research generally do not wish to set aside the time – two to three weeks for sophisticated models – to get on top of the games, much less to attempt to integrate them into their courses. Some evidence of that is seen at INSEAD and IMD, which were both intense users of the International Operations Simulation (INTOPIA) game before they decided to be high-level research institutions. It should be clear, however, that sophisticated games can also be used for research purposes, as documented in the *Simulation and Gaming* journal. Although our INTOPIA pioneered the field, there are now some ten to twelve computerized IB games. Most comments will apply to them as a group. When a specific example is needed, the INTOPIA simulation will be used. It still seems to be the most comprehensive IB exercise, and with universities in 36 countries having adopted it, a noteworthy part of IU's reputation among business schools abroad is based on it. We are, in fact, due to release a new edition of the simulation.

DESIGN CRITERIA

Important design criteria for IB simulations are listed in Fig. 1. The *international scope* includes the part of the world environment being simulated. This would include several countries and currencies, as well as differences (and similarities) in cultural values, consumer standards of living, income inequality, public policy regarding the domestic economy, and international trade and investment. The impact and variation in business cycles and inflation rates

1. International scope
2. MNC structure
3. Multifunctional decision-making
4. Entrepreneurial opportunity and strategy richness
5. Inter- and intracompany transaction freedom
6. Qualitative factors
7. Integrative focus
8. Artificial reality

Fig. 1. Design Criteria of an Advanced IB Simulation.

should be reflected, as should infrastructure (notably production, distribution, and transportation facilities and their costs). Of special interest in the finance area are local interest and exchange rates and tax policy. Adequate representation of *MNC structure* presumes the existence of a home office as well as operating subsidiaries.

In INTOPIA, the standard operating areas include the U.S., the E.U., and Brazil, manifesting both regional and global aspects. INTOPIA MNCs are all headquartered in Liechtenstein, for several reasons. That mini-state is neutral relative to the operating areas, and the Swiss franc as local currency is known as both stable and hard. The corporate tax rate is low, and multitudinous MNCs have their actual or nominal home offices in Liechtenstein.

An advanced IB simulation will have sufficient complexity to provide meaningful choices between products, functions, and geographical areas as mainstays of organization structure. A variety of e*ntrepreneurial opportunities* should certainly be present at the initiation of a simulation run; preferably, they should be available throughout the entire run. Strategy alternatives are also important, e.g. with regard to in- and out-sourcing, entry modes, and various patterns of specialization and diversification.

Inter-company *transaction freedom* should embrace not only the buying and selling of products or services but also a variety of other transactions between firms, such as loans and other financial services, patent licensing and pooling, currency hedges and options, disposal of excess plant capacity, and joint ventures. As in practice, certain types of combined activity may be enjoined by American or European antitrust laws. The significance of inter-company transactions is not limited to the contractual arrangements themselves. In effect, they are

also important determinants of the place in the value-added chain occupied by individual firms. To some extent this also applies to dealings between subsidiaries of a single company. Intra-company transactions are mainly confined to buying/selling products and making service payments from operating areas to the home office for such things as overall management, patent royalties, or contribution to corporate R&D programs.

A sophisticated IB simulation cannot simply be an econometric model. It must also include consideration of *qualitative factors*, such as environmental protection, business ethics, antitrust policy, and labor relations. Akin to this observation is that the underlying model should not be totally deterministic. For instance, the R&D function should recognize that more money is not a sufficient assurance of product innovation or improvements, and consultants' estimates of production cost, or marketability, of new models are given within a random range around actual numbers in the game design.

An *integrative focus* should be almost a given feature of an IB simulation. This type of general management game dealing with various cultures, functions, and products offers a special challenge of a balanced approach to coordination versus decentralization, standardization versus differentiation of strategies, and the seamless integration of functions.

A simulation necessarily involves "*artificial reality*." It is crucial, however, that it is perceived with subjective realism and credibility by participants in the exercise. It should be viewed neither as a lottery nor as an example of applied mathematics, however elegant.

FACILITATING FEATURES

Well-designed *briefing materials* for facilitators and students are a necessity. Traditionally facilitator and participant manuals are published separately. Facilitator compendia typically discuss the purpose of the game, describe how relevant aspects of the Master Program (MP) are delivered to participating teams, and explain how to handle the collection of team decisions and run the MP for the current period, including the production of individual company outputs and a detailed overview of company legacies for all periods for facilitator use (Fig. 2).

Facilitator manuals may also describe the underlying economic modeling and, in games where program parameters can be reset, include a description of how this is done. When MP parameter change is possible, a parameter "dictionary" should be included – preferably with observations of the impact to be expected by changes in individual parameters and, when needed, advice regarding appropriate ranges

1. Briefing of facilitator and participants
2. Context-sensitive help routines
3. Information flow and databases
4. Simplification vs. complexity
5. Internet compatibility and security
6. Central vs. local game administration

Fig. 2. Facilitating Life for Instructor and Participants.

of changes. The manual may also make comments regarding team performance evaluation as viewed by the designers.

Demonstration of a sample run will help concretize the game for the facilitator. Currently, we have a set of demo disks for INTOPIA, with a sample run of four companies for one period (only). An attractive step has been taken by the CAPSTONE simulation people, who take potential Facilitators through personal interactive demonstrations. After receiving a program copy, the facilitator runs it by direct telephone interaction with an expert sales agent at the CAPSTONE home office.

The participant guide will also discuss the purpose of the game, as well as include a description of products, countries, and the functional areas represented in detail, including critical decision points. Typically, one may expect a sample of a company output with more or less detailed comments. INTOPIA participants have also found helpful a concentrated "log" of all key data available to them (starting prices, factory acquisition cost, logistics costs, accounts payable/receivable in different parts of the world, etc.). Naturally, there is also a description of decision and output delivery routines.

Context-sensitive HELP routines built into both participant and facilitator programs are a feature of any well-designed program. In INTOPIA, such routines are also built-in to provide interactive overviews of entire program modules. In-depth HELP is provided for each of the fifteen decision forms at the disposal of participants.

Decisions and results (outputs) of each company and time period, as well as the facilitator reports, constitute *databases* indispensable to analyzing company performance and activity over time. Properly digested, databases may also constitute the single most important tool in forecasting. Information flows should be organization-neutral so that the relevance of databases is equally important regardless of company organization structures.

IB simulations vary dramatically in degree of *simplicity/complexity*. Both types offer challenges. An overly simple game tends to make a single strategy the best available. Overly complex exercises, on the other hand, run the risk of being considered "too much" of a good thing by participants and/or facilitator. The INTOPIA simulation is highly complex – and it is, indeed, fairly easy to add further challenge by introducing more than the regular number of parameter changes and environmental events. An option in INTOPIA is creating an intricate set of environmental events over time by providing facilitators with mostly automated parameter changes, accompanied by a trade journal predicting (sometimes mistakenly) corresponding changes in the operating environment. This is what we call a Model Scenario.

On the other hand, a memo on the Web describes various ways in which the simulation may be simplified for introductory undergraduate courses, or to save time in executive seminars. An especially dramatic simplification is the use of fixed currency exchange rates, or even a single world currency. Another major simplifying move is the elimination of entrepreneurial decisions, confining companies to one or a few standard profiles. Other items include eliminating the second product or one or two of the operating areas, permitting solely air freight and/or unrestricted patent licenses.

Internet compatibility is now an indispensable requirement of computer-driven IB games. Minimally, email may be used to send inputs and outputs between facilitator and companies, as well as inter-company memos. Supplementation with Web operations offers considerable additional advantages, notably the opportunity to publish participant manuals (and maybe even the facilitator guide) on a global basis. Security concerns affect any operations on the Net, but their resolution is a matter of complex technical detail. Whatever the arrangements, game users, like computer people in general, have to live with the notion that "total security" is not likely to be attainable any time in the near future. So this is just another realistic part of the exercise!

An interesting development in recent years has been the emergence of *centralized administration* of games. As an example, the MARKETPLACE simulation developed at the University of Tennessee is run from that university only. As far as is known, the game is not available for independent (decentralized) administration. The Tennessee group is experimenting with automated analysis and feedback to individual teams at subscribing institutions. Thus far, the game has been run two or three times a year, with subscribers in a dozen countries. In part, the motivation of the group is no doubt to protect its copyright in the era of distance operations on the Internet; the profit motive may also be involved.

The merit of centralized operation is clearly the removal of administrative chores on the part of individual facilitators. On the other hand, our experience

says that student enthusiasm is strongly linked to facilitator enthusiasm and *understanding* of the simulation. Furthermore, centralized runs tend to be time-consuming, because allowance has to be made for the different time zones around the globe. Finally, as central runs by definition are standardized, their integration with current courses and program curricula will be more difficult to achieve. It may be that the new INTOPIA B2B will be available both on an independent and centralized basis.

PARTICIPANT LEARNING/BENEFITS

Most educators are aware of the complexity and controversiality inherent in the question, "What do students really learn from my courses?" or "How much do they retain after final examination?" Research on the efficacy of different educational vehicles, from lectures to simulations, is still in the throes of adolescence. Testimony from INTOPIA participants from a thirty-year period indicates that the simulation was a memorable and useful instance of experiential learning. Administrators of that game have also made the less-than-original observation that different individuals learn different things. For purposes of the present discussion, let us just assume that the listing in Fig. 3 gives a picture of learning from an IB game under optimal conditions.

The game provides an opportunity to learn from a practical experiential exercise. One may assume legitimately that, regardless of any prior courses on the subject, participants improve their *understanding of what IB is all about*. If nothing else, they will face both the excitements and intricacies of IB operations, such as entry-modes and technology transfer, exchange rate changes, and standardization vs. adaptation in different cultural and economic settings. Almost certainly they will come away with a different "dream world" than they had previously. A changed view of the world of IB may well influence the nature and direction of their career aspirations.

A key reason for the experience remaining in long-term memory is that games provide "*learning by doing*." In this respect, games differ from cases, which typically present a set of problems in a static situation. The game is inherently dynamic: As the run proceeds, you automatically learn the lesson that you have to live with the consequences of your decisions. Good decisions give good results, and vice versa. Some critics claim that teams do not have to worry about results because games do not involve real money. This claim is not terribly relevant; we have yet to encounter a team willingly "losing face" due to poor performance.

Entrepreneurship skills are often revealed or displayed by the individual chosen as team leader. By rotating the internal positions of team members at mid-game,

1. What international business is all about
2. Learning by doing
3. Entrepreneurship and leadership skills
4. Communication skills
5. Teamwork and mutual learning
6. Negotiations
7. Diagnosis of financial statements
8. Value of time
9. Integrative review of business and the global market system
10. HQ-subsidiary and inter-subsidiary relations
11. Balance between competition and cooperation
12. The role of trust and credibility

Fig. 3. Participant/Learning Benefits.

at least one other participant in each team gets a chance to demonstrate these skills. There is ample room for every team member to exercise leadership skills as managers of operating areas, product managers, etc., and in active participation in the deliberation of the team as a whole.

Communication skills are practiced in internal discussions, written assignments by the facilitator, meetings with other teams, and the debriefing session. Part of the latter session may be a presentation of a management audit of another company. Note also that "strategic signaling" is a major communication device.

Teamwork develops automatically within the teams with varying intensity. (As in the world of practice, there will be an occasional "free rider.") Beyond coordination of positional roles, there is always the challenge of smooth interpersonal relations. These days many students have had prior business or other work experience. Drawing on these experiences to influence inter-participant learning in the context of the simulation can clearly be of great importance. Facilitators can play a major role in stimulating such interactions. Intra- and intercompany interactivity is a key.

As mentioned in the outline of design criteria, INTOPIA offers more than half a dozen different types of *business-to-business (B2B)* transactions. While inter- and

somewhat less frequently intra-company sales/purchase agreements (both "spot" and "standing" contracts) are by far the most common transactions, licenses, loans, currency hedges, and so on, also play a prominent role. *Negotiation skills* initially are often surprisingly modest, but they tend to develop rapidly. This process can be accelerated by devoting (part of) a class session to a discussion of such skills. I have found that a one-page listing of "determinants" of success or failure of negotiation may also be quite helpful to participants.

A critical element that often tends to overwhelm participants is the *diagnosis of financial statements*. Interestingly, experience indicates that many executives need to develop skills in this area as much as students do. With the new U.S. regulations requiring top executives to certify the veracity of financial statements, the importance of management development in this area is bound to increase further. The conventional financial statements represent the skeleton of in-depth analysis of company and industry performance encouraged by the kind of rich data banks referred to earlier.

Ponderous decision-makers quickly recognize the *value of time*, due to the necessity of prompt processing. This calls for discipline imposed by the team and hopefully stimulates the setting of priorities in the strategic decision making of the firms.

It is in the nature of IB simulation to demonstrate the urgency of the *integration* of geographically and otherwise dispersed operations. Students – and often executives as well – tend to display an "isolationist" preference for their individual positions in the company. However, IB simulations demonstrate the need for integration not only of internal company assignments but also with local market systems and, indeed, the global economy.

Related to integration is the subject of *headquarter-subsidiary* as well as *inter-subsidiary relations*. The nature of these relations and the reciprocal patterns of independence, influence, and control will vary from one MNC to another and, indeed, inside any given MNC over time – in the game situation, as in practice. Typical problems involve the overall tax policy of the MNC and its interaction with subsidiaries in such areas as transfer pricing, internal service payments, and local vs. central currency management. Determining the role of each subsidiary in local as well as global value-added chains comes into play, as do reporting duties, standardization vs. adaptation of product and marketing strategies, repatriation of profits, and, not least, overall resource allocation between corporate units over time.

Company and subsidiary advantage/disadvantage patterns are largely determined by the twin forces of *competition* and *cooperation* (within the framework of antitrust and other public policies as well as the World Trade Organization). Indeed, a favorite hypothesis of mine is that the continuous search for balance

between competition and cooperation is one of the greatest challenges of modern business leadership. The interplay of these key forces is well illustrated in INTOPIA and maybe a handful of other IB simulations. There is full recognition of the fact that the relations between two companies may be a mix of competition and networking. Incidentally, we have settled for joint ventures as the most intimate form of cooperation in INTOPIA. It would be feasible to include mergers and bankruptcies as well; however, the question arises as to how the facilitator (and the companies involved) would deal with the problem of "surplus" executives. Games are typically not run over the length of time required for such a group of managers to build a new viable business before "the game is all over." A possible solution might be to distribute these managers over other teams.

Finally, recent revelations of unethical and/or illegal behavior by thousands of companies around the world should be sufficient to drive home the *importance of trust and credibility*. Misunderstandings in B2B transactions can generally be rectified, but even opportunistic withholding of relevant information in negotiating such transactions may undermine the trust that must be a given in open market systems.

PERFORMANCE EVALUATION: CRITERIA AND PROCESS

(Some aspects of this section are further developed elsewhere.)

Taken seriously, the evaluation of teams and participants in a sophisticated IB game is on the same level of complexity as the evaluation of MNCs in the world of practice. Different philosophies of relevant criteria and their appropriate weights abound. Indeed, an individual facilitator may find that different criteria should be applied depending on the purpose of different runs. A corporate seminar on organizational restructuring might call for a different mode of evaluation than an MBA course in entrepreneurship or an undergraduate course serving as a general introduction to IB. Fairness calls for common criteria in evaluating a company relative to other members of the industry. But an individual team also has a legitimate claim to be evaluated on its own merit as to objectives, plans, and achievements. In the antitrust case against U.S. Steel some 80 years ago, the Supreme Court stated that "mere size is no offense." But mere size is not an indication of greatness either, as evidenced by thousands of successful small businesses (Fig. 4).

1. Different philosophies about evaluation
2. Pre- and post-run communication of criteria
3. Intracompany evaluation
4. Evaluation by competitors
5. Financial criteria
6. Qualitative criteria
7. A key criterion: Action potential for the future
8. Participant evaluation of the simulation

Fig. 4. Evaluation Criteria and Process.

It is a matter of both importance and fairness that the general philosophy as well as the role of particular *criteria in overall evaluation* be made clear to participants even before they make their first set of decisions. If the game is to be a part of a given course, the percentage of the overall course grade given to the game is of obvious significance to students. I have found that in the debriefing session, a class discussion of criteria actually applied, as well as alternative criteria, has been a learning experience for both participants and Facilitator.

Performance reviews begin at home, that is as *intra-company evaluations*. Participants in a team anonymously evaluate each other's contributions to company performance. On rare occasions, a student will object to the idea of evaluating comrades, but will generally "see the point" after being reminded that practising executives are expected to evaluate colleagues throughout their careers. Equally important is that members evaluate the performance of their own company. This may be done as a written assignment. Even better is to let each company conduct an oral self-review (if there is enough debriefing time), with the rest of the class representing their companies or simulating shareholders of the company under review.

Evaluation of competitors tends to be a continuous part of a company's intelligence analysis in preparation for decision-making. In a game like INTOPIA, this is vastly facilitated by the availability of dozens of relevant market research and consulting items, some of which will be identified in the next section. If time permits, each company team may conduct a management performance audit of another company. This is a more ambitious assignment than a self-review and demands significant time both in preparation and oral presentation in debriefing

As you retire, your Board is giving you a farewell contribution of SF100,000 to your retirement fund. You already have plenty of stock in your own company. The Board, believing in the wisdom of a balanced portfolio for retirement, requires that you invest your total gift in other companies in the industry, in the order you believe in them. (You are, of course, free to invest it all in one company).

Kindly record your investment below and return form punctually. Thank you!

Fig. 5. Retirement Portfolio Bonus.

sessions. Another device appealing to students and useful to the facilitator in overall evaluations is illustrated by Fig. 5. The amounts invested are summed up for each company, and the companies are ranked by the "investments" received.

Of key importance, of course, are the *financial evaluation* criteria. Participants often think of "profitability" as the most meaningful indicator. Even here people differ as to whether ROI, ROS, ROA, EBITDA, etc., is most significant. INTOPIA offers a consulting item labeled Profitability Ratios and Activity Indicators (see Fig. 6), providing a fairly liberal selection of financial ratios.

Several of the Activity, Liquidity, Leverage Ratios, and Consumer Market Shares may also be relevant, depending on the purpose of the run, facilitator preference, and so on. Detailed definitions accompany all indicators.

I also place considerable emphasis on *qualitative criteria*, including matters such as the evaluation of the company objectives-plans-implementation sequence, adjustment to environmental events, evidence of social and ecological consciousness, and evidence of managerial integrity or lack thereof.

Finally, some facilitators may consider the single most important performance evaluation criterion to be *action potential for the future*, including such functions as investment capital available, dividend payments, patent position, production cost structure, displayed networking proficiency, and so on. Making it clear from the outset that this will be a crucial factor at the end of the run has a beneficial side effect: it largely eliminates dysfunctional behavior in the last decision period (such as cutting down on advertising and R&D) – and there is no problem in letting teams know about the number of periods from the beginning of the simulation run.

It is self-evident that there should be an anonymous *participant evaluation of the simulation itself*. This should be a separate evaluation, whether the game was run as an independent course or as an element of some other offering. An open

PROFITABILITY RATIOS

- ROS
- ROI
- ROA
- ROE
- Gross Profit Margin
- Net Profit Margin

ACTIVITY RATIOS

- Cumulative Dividends (000s)
- Paid in Capital
- Current Dividend Payout Ratio
- Investment Intensity
- Fixed Asset Intensity
- Advertising Intensity
- R&D Intensity
- X Patents Owned (Grade)
- Y Patents Owned (Grade)

LIQUIDITY MEASURES

- Current Ratio
- Quick Ratio
- Inventory/Net Working Capital

LEVERAGE RATIOS

- Debt to Asset Ratio
- Debt to Equity Ratio
- Long Term Debt/Equity Ratio

CONSUMER MARKET SHARES (Sales in Units)

- World Market Share of X
- World Market Share of Y
- Area 1 (2,3) Market Share of X
- Area 1 (2,3) Market Share of Y, etc

Fig. 6. Profitability Ratios and Activity Indicators.

group discussion of the merits or weaknesses of the simulation may also be of particular interest to the facilitator.

MODELING SPECIFICS OF IB SIMULATIONS

With the purpose here being to present the rationale of using IB simulations, there is no great need to go into the details of modeling specifics. We have set forth the econometrics of our initial version in complete detail in our 1964 book. As far as we know, this is the one and only presentation of the underlying computer model

of any IB simulation. Later versions have been variations or extensions on this basic theme.

The econometrics have their root in the classic ("Chicago") theory of the firm. Even so, we have introduced certain amendments. For instance, in the belief that the psychological reaction of consumers to price change is essentially short-ranged, we have introduced as an "extra" a marginal decrease (increase) in the price set by a company, depending on the direction of change. This may be viewed as a one-period addition to consumer goodwill or "badwill." After that period, consumers revert to classic comparison of price-quality relationships. In the quality area, we recognize that what development engineers perceive as a marked improvement will occasionally strike consumers as a "lemon" or a "dud." As noted earlier, the computer model is essentially deterministic, except in the R&D area, where the correlation between investment and outcome is modified by a stochastic element. Moreover, consultant estimates are given in ranges, rather than in actual numbers.

Parameter settings reflect different demand and cost factors, interest and exchange rates, and infrastructure in the different cultural environments as well as in the inter-nation interface. A set of parameter changes over time constitutes a scenario, developed in literary terms in a trade journal.

Much more important than programmed variations on the classic economic theory, of course, is the superstructure of actual *managerial behavior* of the teams. Different levels of competition and cooperation (the "inter-structure" of networking) are of great importance, as are the relative availability of information and the psycho-social determinants of group behavior inside company teams. We believe strongly that the behavioral determinants of managerial activity are fully as important as those based on classical economics. For better or worse, as we all know, the behavioral factors are less predictable than the infrastructure of economics.

INTEGRATION INTO IB CURRICULUM

There are two basic ways of integrating a simulation in the IB curriculum. One is to run it as a separate course, supplemented with lecturettes on integrative topics. Figure 7gives an illustration of suitable subjects in a general IB course. (Due to its richness in the several functional areas, INTOPIA has also been used in capstone business policy courses).

Typically, when INTOPIA is used as a course of its own, it will extend over a semester. However, it is also possible to condense a reasonably full-fledged run

Note: These are illustrative only. The specific topics integrated with a particular run naturally depend on the purpose of the run.

1. Structure-strategy-performance (SSP) model; organization ecology of the MNC
2. Vision, business concept, entrepreneurial aspects
3. Strategic signaling, benchmarking, data sharing
4. Inter-company transactions: spot vs. standing contracts
5. Entry modes and technology transfer
6. Strategic planning – continuous!
7. International business theory
8. Foreign currency management
9. Introductory public offering of stock (IPO) – how to prepare for it?
10. Marketing channels and logistics in international business
11. Operations strategy, global in- and outsourcing
12. Coordination of the MNC; intra-company capital transfers, taxes, service payments
13. Economic value added (EVA) vs. discounted cash flow
14. Financial implications of marketing decisions
15. Cross-cultural business; standardization/adaptation strategies
16. Small business exporting
17. Open markets, economic development, and political democracy
18. Ethics issues in international business; the problem of corruption
19. WTO, ASEAN, EU, NAFTA, etc.
20. Performance evaluation and management audit

Fig. 7. Sample Integrative Lecture and Lecturette Topics.

13	Introduction: Course Purpose and Evaluation. The Challenge of International Business in General, and for Finland in Particular. Prospects for World Trade and Foreign Direct Investment.
	International Business (IB) Theory. The Strategy, Structure, Performance (SSP) Paradigm. Read Thorelli 1.
14	INTOPIA briefing. Forming INTOPIA teams.
	Company Mission and Strategy. Synergy – internal and with network partners.
	Organization Structuring Approaches.
	The FORMIN Program and Demo Disk
	Read Executive Guide.
15	No session, but learn use of FORMIN Demo Disk. Prepare for Q1. Consider Company Mission *first*, and *then* elect President. Networking!
16	Q1 Decisions. IB THEORY QUIZ
	One representative per co.: attend R&D convention.
	Read Executive Guide again!
17	Q2. *Co. objectives and organization charts due.*
	Networking, Systems, Strategic Alliances, Role of Trust in IB.
	If time: Networking and Signaling Opportunity
20	Q3. INTOPIA RULES QUIZ. IB Planning.
21	Q4. Marketing Channels talk and convention. Executive Evaluation for Q1–4.
22	No session – but rotate management, reconsider objectives, prepare individual planning memos.
23	Q5. Q5-Q8 plans due.
	Foreign Exchange Exposure and Management
24	Q6. Demand Analysis and Marketing Research
	Discuss creativity assignment.
27	Q7. Intra-Company Transfers and Coordination.
28	Q8. *Creativity Assignment due.* Outline Co. Performance Review
29	No session – prepare self-review of your company.
30	Company Performance Review
Oct. 1	Company Performance Review, cont'd. Administrator and student review of course. Executive Evaluation Q5–8.

Fig. 8. International Business Strategy – Helsinki.

to a two- to three-week period, as shown in the International Business Strategy-Helsinki outline in Fig. 8.

As might be expected, INTOPIA has been used in several specialized IB courses, such as International Finance, Marketing, Production, and Logistics offerings. Clearly, it is beyond our confines here to illustrate synopses of this variety of courses.

PART III:
INTERNATIONAL ASPECTS OF MARKETING AND FINANCE

INTERNATIONAL MARKETING RESEARCH

Greg Kitzmiller and Joseph Miller

ABSTRACT

The number and breadth of research articles, diversity of topics, and improved quality in international marketing research have all grown rapidly over the past 30 years. Our sample of 26 research journals shows that the number of articles increased by almost 400% between 1970 and 2001, rising from fewer than 50 in 1970 to nearly 200 in 2001, and more than doubled between 1980 and 2001. More important, the quality improved even faster, while the range and diversity of topics expanded at least tenfold. Indiana University was a principal actor in this revolution.

INTRODUCTION

A major part of the phenomenal growth in international marketing research has been the creation of several research journals that specialize in the field, the foremost of which is the *Journal of International Marketing*. Other similarly specialized journals include the *International Marketing Review*, the *International Journal of Research in Marketing*, the *Journal of the Market Research Society*, the *European Journal of Marketing*, and the *International Journal of Retail and Distribution Management*.

In selecting the sample of 26 marketing journals for our study, we began with the highly prestigious *Journal of Marketing Research*, the *Journal of Marketing*, the *Journal of Consumer Research*, the *Journal of International Marketing*, the

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Journal of the Academy of Marketing Science, and *Marketing Science*. To this group, we added the most-respected journals of research on a wider range of IB topics: the *Journal of International Business Studies* and the *International Business Review*, both of which carry many articles on international marketing. Our third group of journals includes some of the more specialized international journals, such as the *International Journal of Research in Marketing*, the *European Journal of Marketing*, the *Journal of the Market Research Society*, and the *International Journal of Retail and Distribution Management*. Fourth, we added a large set of highly respected and mainly U.S. journals that specialize in various aspects of marketing, such as the *Journal of Advertising*, the *Journal of Advertising Research*, the *Journal of Business Logistics*, the *Journal of Retailing*, the *Journal of Product Innovation Management, Industrial Marketing Management*, the *Journal of Marketing Management*, the *Journal of Personal Selling and Sales Management*, the *Journal of Direct Marketing* and its successor, the *Journal of Interactive Marketing*, and the *Journal of Consumer Policy*. Finally, we also added some of the prestigious journals that cover several research areas in business, including marketing: the *Journal of Business Research*, the *California Management Review*, and the *Harvard Business Review*.

Constrained by time and a large number of articles, we decided to examine articles only from 1997 into 2002, plus 1970, 1980, and 1990. Undoubtedly, some important articles were omitted as a consequence, but the total number is still impressive – close to 1,700 articles. The most recent five and a half years, 1997 to 2002, provide a detailed look at contemporary research, and by comparing 1970, 1980, and 1990, we were able to see some of the changes in numbers and content over time. It must be said that only six of the research journals in our sample of 26 were in existence in 1970, and those that were started in the early 1970s were counted in the tabulation for 1970 (similarly, journals that were first published in the early 1980s were included in the 1980 count).

Of the 26 research journals they include the *International Journal of Research in Marketing*, the *European Journal of Marketing*, the *International Journal of Retail and Distribution Management*, and the *Journal of Consumer Policy*. We could possibly have added other non-U.S. journals, especially others in Europe, Asia, and Australia, but some of these journals were not available to us. In the final analysis, however, we must plead guilty to omitting them.

Our results understate the total number of research publications on international marketing also because our sample does not include books, monographs, reports, conference papers, and other research publications that did not appear in our sample of the 26 journals. Some of these publications are difficult to uncover, but our main excuses for omitting them were the constraints of limited time and the more specific focus and thus generally higher quality of research articles. Moreover, the inclusion

of books and monographs would, to a considerable extent, duplicate the research articles, since many books are based on earlier articles and many conference papers and reports are revised to become articles in research journals.

FINDINGS (1): QUANTITATIVE GROWTH AND QUALITATIVE IMPROVEMENT

Overall, the total number of research articles in our sample increased from 37 in 1970 (or another year in the early 1970s when a few of the sample journals were first published) to 194 in 2001, for a percentage increase of 424%. From 1970 to 1980 (or early 1980s), the increase was from 37 to 103, or 178%; from 1980 to 1990, the number grew from 103 to 114, or 11%; and from 1990 to 2000 the increase was from 114 to 189, or 66%.

The large increases, from 1970 to 1980 and from 1990 to 2000, can be explained to a considerable extent by the start-up during these decades of most of the journals in the sample, especially journals that publish only on international topics. Between 1970 and 1980, four of the sample journals were launched: *European Journal of Marketing*, in 1971; *Industrial Marketing Management* in 1972; the *Journal of the Academy of Marketing Science* in 1973; and the *Journal of Consumer Research* in 1974. Because the latter three of these journals published only three international marketing articles in 1980, however, the large (178%) increase between 1970 and 1980 resulted from the *European Journal of Marketing* (27 articles in 1971, and 60 in 1980) and the remaining 30 articles from the older journals, particularly the *Journal of Marketing*, the *California Management Review*, and the *Journal of Advertising Research*. Between 1990 and 2000, the number of articles increased by 66%, from 114 to 189, and during this decade four of the sample journals were started up – *International Journal of Retail and Distribution Management*, the *Journal of Business Research*, the *Journal of Product Innovation Management* and the *Journal of Interactive Marketing* – but only the first of these journals actually showed any increase in articles on international marketing.

An interesting question arises: Why did the smallest increase, 11%, occur between 1980 and 1990, the decade in which the largest number of journals (12) were started up? During the two periods that had the largest increases (178% between 1970 and 1980 and 66% between 1990 and 2000), only eight of the 26 sample journals were begun. There are two explanations to this question. First, some of the journals that were launched during the 1980s did not focus on international topics, though their editors became much more interested in international articles in the 1990s and later. Journals in this group include the *Journal of Marketing Management* (started in 1985) and the *Journal of Marketing*

Education (1980). However, purely international journals were also launched in the 1980s, including the *International Journal of Research in Marketing* (1984) and the *International Marketing Review* (1983), so the second explanation may be that the other journals began in the 1970s or earlier saw decreases in their numbers of articles on international marketing topics.

Precise measures of the quality of the articles surveyed are lacking, but we think most would agree that there has been a substantial improvement in their quality over the thirty year period, as indicated by the increase in specialization of the journals, as well as the use of more refined methods of data collection and analysis.

FINDINGS (2): WIDE RANGE OF TOPICS WITHIN INTERNATIONAL MARKETING

In addition to the rapid growth and large number of high-quality research articles on international marketing, our survey also found an extremely wide diversity in the range of different topics included. Indeed, it is no exaggeration to say that, without exception, all of the topics originally considered sub-categories of U.S. or domestic marketing have become important sub-topics in international marketing. Thus, there are many research articles each year on international or internationally comparative research questions on, for example, consumer behavior, ethics, retailing, distribution channels, pricing, product decisions, advertising, sales management, services, marketing research methods, e-commerce, and professional training and education. In addition to these standard sub-categories, the field of international marketing has itself generated several new and rather different sub-categories that were not originally included in domestic marketing. These new categories include country-of-origin research (e.g. how buyers in one country react to products imported from other countries), international trade and trading blocs, modes of entry into foreign markets, exporting/importing, and international joint ventures and alliances. Each of these purely international categories now commands substantial numbers of research articles each year.

Our research procedure began with the 23 categories of different types of research in marketing as used in the Literature Review section of the *Journal of Marketing*. From these, we dropped two categories – 3.3 International and Comparative (because all articles in our sample are international or comparative) and 5.2 General Marketing (a catch-all of hard-to-classify articles) – and added fourteen new ones. Our preliminary examination indicated significant numbers of research articles in the five purely international categories

mentioned above, and we decided to add nine other categories that have been growing rapidly in the past twenty years, including market orientation, entrepreneurship or small business, e-commerce, marketing performance, diffusion of new products, brands and branding strategies, direct marketing, negotiations, and segmentation.

The great majority of the articles selected are clearly international or comparative in scope, with analyses of quantitative or qualitative data from two or more countries. We also included articles that focused on one country, e.g. channels of distribution in China, but contained comparisons of results from that country with similar marketing phenomena in other countries, often the United States. In some instances, especially marketing theory and a few research methodology articles, the international data analyzed are ideas or techniques, but they clearly apply to international or comparative situations. As explained more fully below, actual articles on global research are practically non-existent despite the rather frequent use of the word "global," if global refers to all countries in the world or a large sample.

Each article selected represents only one topical category. We followed this procedure to simplify our rather large task, and for the great majority of articles it is correct and appropriate. For the estimated 10% of articles that focus on two or more topics, however, it results in an understatement of the number and diversity of topics. Using the *Journal of Marketing* categories, the categories that overlapped in a few instances include: 1.2 Legal, Political & Economic and 1.3 Social & Ethical Issues in Marketing (through the total number of articles in these two categories was fewer than 50); 2.2 Retailing and 2.3 Channels; 2.3 Channels and an added category, 2.4. Exporting; 2.5 Physical Distribution; 2.7 Product and another new category, Branding; 2.9 Advertising and Branding; and 4.1 Theory and 4.2 Research Methodology. Categories 3.1 Industrial or Business-to-Business (B2B) Marketing and 3.4 Services are broad (similar to the original 3.3 International and Comparative), and we may have understated each of them by assigning articles to more specific categories such as 2.9 Advertising or 2.10 Sales.

In descending order, the largest categories found were retailing (with 15.4% of all articles), consumer behavior (9.3%), and research methods and advertising (each 7.6%). It may be noted that the *International Journal of Retail and Distribution Management* accounts for a major portion of this high percentage and is the only specialized international journal in our sample. B2B (or industrial) marketing, service marketing, branding, new products, exporting/importing, and strategy each accounted for close to 5%. The remaining 25 categories ranged from about 3% (e-commerce) to 0.5% (negotiations) of our sample of almost 1,700 articles. Looking at the most recent articles, those published since 2000 some (450 articles), we found some differences in the percentage distribution: retailing

is still the largest category but now with an even higher percentage, 21%, followed by research methods with 9.2%, branding with 7.1%, consumer behavior with 5.9%, services and advertising each with 5.5%, B2B marketing with 5.3%, and strategy and new product decisions each with 4.6%. These differences reflect not only shifts in interests by researchers, but also the growth of several specialized international journals that were started in the 1980s and 1990s.

As expected, the "international journals" provide a large share of the articles surveyed. Taking all articles sampled, from 1970, 1980, 1990 and 1997–2002, the percentage share of these journals is 63.7%, based on articles in the *Journal of International Marketing*, the *Journal of International Business Studies*, the *International Marketing Review*, the *European Journal of Marketing*, the *Journal of the Royal Market Research Society*, the *International Journal of Retail and Distribution Management*, and the *International Journal of Research in Marketing*. Only one of these seven journals was in existence in 1970, and two of them were not started until the 1990s. Looking at the articles published since 2000, these international journals command an even larger share, 91.4%, of the total number of international marketing articles.

FINDINGS (3): TRULY GLOBAL RESEARCH IS NEARLY NON-EXISTENT

Although Theodore Levitt's 1983 *Harvard Business Review* article, "The Globalization of Markets," was not the first international marketing article to use the word "global," it quickly became the most quoted. The fashionable buzzword in many research articles became "global." As Levitt stated unambiguously, "global" means worldwide, embracing all countries of the world, and his thesis was that since consumers in all countries are becoming more alike in their preferences for globally standardized goods (e.g. Sony televisions, Coca-Cola, Honda motorcycles), companies should develop global marketing strategies that reach people throughout the world. Indeed, many multinational companies have announced that their objective is to become global, suggesting that their own marketing research is looking for common preferences among consumers and B2B buyers across a large number of countries.

At the same time, however, many business strategists (see, especially, Rugman, 2001) have pointed out that true globalization is neither an accurate description of today's world nor a realistic objective for most marketers. Our examination of research on international marketing supports these criticisms. "Global" is a word that appears less today than in the 1980s and 1990s because researchers now realize that few companies have truly global marketing programs. Also, in

practical terms, it is very difficult to conduct research in a large number of countries. Instead, research questions mostly involve comparisons among regional groups of countries and more typically between two countries.

Truly global research is rare. This term would imply that investigators studied a particular subject, such as advertising, using a method that tallied some form of results from all global regions, with implications for the world. Some might say this would be impossible because in the purest form it would require investigation in perhaps 100 or more countries. However, might we not expect global marketing research to be conducted so as to have implications for truly global marketing? Would not those implications require a look at all world regions?

In reviewing hundreds of abstracts and papers, we found only one paper that comes closest to global research. A close look at the methodology in Dekimpe et al. (2000) reveals that it is a study of the global diffusion of technological innovations uses UN regional data. Data were collected that considers 160 countries across all continents. This included 51 countries in Africa, 38 in Asia, 37 in the Americas, 27 in Europe, and nine in Oceania. The data were assembled from the International Telecommunications Union of the United Nations. The research referred to the change of telephone service providers to digital telecommunication switches. The investigation revealed that such factors as the wealth of nations and homogeneity of social systems correlated with more rapid product diffusion, this is one of the few studies that might be considered nearly global in both its methodology and implications.

Most published marketing research follows three types of methodology. Papers refer to comparisons between two or three nations, contrasts between two or three nations, or a cluster analysis such as investigation of a particular subject within a small group of countries that are usually on the same continent. Thus, most investigations are restricted to a very small number of nations. One additional methodology is deemed international only because it either investigates a topic that is international, such as exporting, or examines a different, "foreign" country published elsewhere. Thus, "consumer behavior in China" when published in a U.S. or EU journal would be seen as international, whereas "consumer behavior in the U.S." and published in a U.S. journal is not. Clearly, none of these methodologies carry full implications for marketing a global brand.

To broaden the scope of international marketing research, we might suggest that such research be conducted at least in somewhat representative nations for major world regions. Although that may stimulate an argument about "world regions," it further suggests a categorization of countries by some type. Are countries better categorized by geography, by cultural similarity such as a common language, by status of development, or by some other system? It appears that such categorization has rarely been used.

Because most international business is transacted in and between the triad of a cluster of Asian countries led by Japan, a cluster of European countries led by the EU, and North America led by the U.S., we might expect market research to generally span these world regions – "the triad," as we commonly refer to it. It appears that some studies have been designed at least to attempt to generate information from this triad. A good example is a paper from the *Journal of Marketing* on "Brand Positioning through Advertising in Asia, North America, and Europe" (Alden et al., 1999). However, of all the studies conducted, this research base is rare.

We see very general titles of research from the 1970s such as "The Internationalization of American Business" (Leighton, 1970) or "Marketing Policies in Multinational Corporations" (Holton, 1970). By 2001, we see a proliferation of titles and subject categories covering international business. Because most are international in the sense that they refer to more than one nation, they are multinational yet not global.

We determined that it was instructive to look at these different methodologies of marketing research that we have classified as international marketing research. Perhaps by examination this will stimulate interest on the part of other researchers in expanding to coverage that is more international in nature.

It seems that current research methodology, falling into one of the four categories we identified runs counter to the declaration of many multinational enterprises (MNE's). Firms such as Procter & Gamble, Colgate, or Nestlé are operating on all continents in most nations. Many, including these three mentioned, announce that they are building global brands and global marketing programs. Colgate's Total brand toothpaste is touted as a world brand, while Ford's Focus brand automobile is heralded as a world car. It has been shown that current marketing research is not about a "world" subject. There is clearly no alignment between some managerial thought and current market research practices. Truly global marketing research may be outside normal methodology, and any attempt to use a method that provides the broadest regional focus within the triad for the greatest issues would be a step toward gaining a common ground with managerial thinking. Managerial thinking may change upon better understanding the differences found in this research.

Some may argue that there is an exception to our finding that global research does not exist: the small body of theoretical and research studies that explain methods, models, or concepts intended to apply to all countries on a global scale. Several articles illustrating this type of research are included in a special issue of the *International Marketing Review* in 2001 (Vol. 18, No. 1), the theme of which was "Research Methods and Models in Global Marketing." Thus, for example, Steenkamp (2001) wrote "The Role of National Culture in International Marketing," which compared the Hofstede and Schwartz models of cultural differences

between countries. Even though the models are purported to apply to any and all countries and thus seem to make the article global in scope (although the title refers only to international marketing), the discussion is purely theoretical with no empirical data or other application to actual countries. Similarly, other articles in this issue of the *International Marketing Review*, such as "An Integrative Framework for Cross-Cultural Consumer Behavior" by Luna and Gupta (2001), present ideas or theoretical models that are intended to apply globally, but do not test the models or apply them to any real-world data.

On the other hand, a recent article in the *Journal of Marketing Research*, "Response Styles in Marketing Research: A Cross-National Investigation," (Baumgartner & Steenkamp, 2001) is a good example of an article that applies marketing research methods to empirical data – in this case, consumer behavior data from 11 countries of the EU. In our view, such an application of a market research method shows that it is feasible in the international context. Indeed, one of the emphases of the Baumgartner and Steenkamp article is on the need to adapt market research methods when applying them in other countries.

Similar to articles on theory are a substantial number of articles on e-commerce. In principle, marketing on the World Wide Web is global; in practice, nearly all these articles refer to the strategies and techniques of sellers in one country, typically the United States (although an increasing number of articles refer to West European or Asian firms). More to the point in marketing, very few articles on e-commerce analyze consumer or business buyers' responses, and the few that do are almost always buyers in one country. Our sample includes about 40 articles on e-marketing, but most of these articles describe comparisons between strategies or managerial approaches in two countries (as discussed further below).

Additionally, it may be argued that e-marketing is very much like exporting; indeed, the fulfillment function of e-marketing sometimes does involve the physical distribution or exporting of goods from one country to another. However, we place exporting in an "International Activity" category because almost all of the research articles on the subject refer to planning and other business activities of selling goods to another country or countries. A few of the e-marketing articles describe similar activities but, with the exception of articles comparing e-marketing between two countries, nearly all of the other articles on e-marketing concentrate on strategies and activities that occur in one country.

We acknowledge that some of the theoretical articles are valuable and may lead to global empirical research that proves their validity. But until such proofs are shown, we prefer to treat them as non-global. Our position is that marketing is fundamentally an applied science, so to qualify as global research a study must use global data, or at least data from a large number of countries.

FINDINGS (4): THE MOST "GLOBAL" RESEARCH ACTUALLY DESCRIBES REGIONS

Even though the word "global" is often used in articles on international marketing, especially in the late 1980s and 1990s, the largest number of countries actually researched in a handful of articles is regional, particularly the triad of Japan, North America, and the EU. A good example of this type of research is a recent article by Morash and Lynch (2002) in the *Journal of International Marketing*, "Public Policy and Global Supply Chain Capabilities and Performance: A Resource-Based View." The authors have an unusually large sample of more than 3,500 companies in North America, Europe, and the Pacific Basin, and their conclusions certainly may have important implications for these companies and for public policy in Africa, Australia, Latin America and Asia. However, despite the use of the word "global" in the title, the article really does not analyze supply chains (or any other marketing phenomena) globally.

Another interesting example of regional research is the article "The Influence of Triad Nations' Environments on Price-Quality Product Strategies and MNC Performance," in the *Journal of International Business Studies* (Brouthers, 2000). Brouthers identifies three "regional stereotypes" of price/quality relationships, based on consumer perceptions, and shows that MNC's pursuing product strategies that emphasize superior value for Japanese MNCs, premium prices for EU MNCs, and economy in the case of U.S. MNCs actually demonstrate superior performance over time. The article does not claim to be global in its applicability, but its sample of companies and consumers in the triad countries give it a wide regional scope.

While much of the literature on branding is conducted with two countries, a few studies attempt assessment across a larger block of nations. Such is the case with Hsieh's (2002) study about brand image, which analyzes results from twenty countries. The research suggests that national characteristics affect brand image perceptions, and that countries in similar states of development are more likely to be clustered in brand development. In other words, brand image is more likely to be similar in countries where economic development is similar. Brand image will thus vary in different countries based on their levels of development.

Far more studies that use some regional data refer to groups of countries. A cross-national study on color meaning and preferences (Madden et al., 2000) refers to differences between country groups. While the study suggests their implications are for global marketing managers, the data were collected in eight countries and perhaps could be stated as useful for regional decisions. Other studies use even smaller clusters of a defined world region, such as a comparison of style in Eastern Europe based on data from Bulgaria, Hungary, and Romania (Manri et al., 2001).

Another regional study used consumer reactions to advertising in the countries of Germany, the Netherlands, and France and provides insight into this field in the region of Western Europe (Backhaus et al., 2001).

This type of research should be quite useful to international marketing managers. We acknowledge that this makes an attempt to gain regional insight. Including clusters of firms in different countries on more than one continent provides insight that may be called regional or even trans-regional in nature.

FINDINGS (5): MANY INTERNATIONAL ARTICLES COMPARE OR CONTRAST MARKETING IN TWO COUNTRIES

In comparison with the country regional studies, our sample survey found a much larger number of articles that compare consumer or B2B buyer behavior between two countries or contrast marketing practices in two (or a small number of) countries. Many of those types of research are in the area of branding and may refer to "global branding." Along with the focus on "globalization" or transfer of business across national borders into many countries comes a heightened interest in global branding. Beyond Coca-Cola and McDonald's, there exist dozens of examples of brands that are found in many countries. In the automobile business, global branding has reduced competition and created a small list of major producers that compete on most continents. Most studies of international branding study some aspect of the ability of a brand to endure and thrive across borders. Managerial writing about branding often involves interviews of managers with global brands.

Research of branding across cultures is strongly influenced by studies of: (1) cultural differences; and (2) differences in language and image. Most studies may not refer to the concept of branding, which is widely accepted, but instead suggest various options for presenting brands to consumers. Studies may be considered to be related to brand globalization, given the expansion of brands throughout multiple countries and world regions. Many studies examine translation issues, visual and auditory identifiers, and brand creation as affected by language (see below). While a few look at issues such as brand protection (Gillespie et al., 2002) or brand image and degree of globalization (Hsieh, 2002), using data from many countries, studies often compare data between countries or use multiple brand images on a multicultural population within a country.

Recent research on brand name translation and product cues suggests that brand names can carry equal strength among tested populations whether translated into

a local language or remaining in a foreign language (Hong et al., 2002). This research serves as a comparative example. Brands from Singapore and Australia were collected and the research was conducted with a population from Singapore. Thus, the results contrast English - vs. Mandarin-educated populations and their reactions to brands from more than one country. Such studies assist the concept of global brands and suggest there may be less advantage in language and cues alone for local brands. Other studies have looked into imagery.

Comparing different consumers in different countries, specifically the U.S. and China, and looking at monolingual vs. bilingual consumers (Tavassoli & Han, 2002) suggest that visual brand identifiers are more easily integrated in memory with Chinese brand names, while English brand names tend toward integration into memory using auditory elements. Another study on branding uses Chinese and English names among Chinese consumers and shows that brand names and brand name translation involve linguistic factors, not the direct matching of symbols (Schmitt & Zhang, 2001). This study provides a methodology for comparison between English and other languages that could be used in other countries with other languages.

These studies on branding provide insight into and raise key questions about brand communication. This could lead to researchers in different parts of the globe expanding the comparison and contrasting of these communication elements between other nations and cultures. However, the concept of branding is broader than communication of the brand. It may involve issues that relate to brand equity, such as how changes in product under one brand name – for example, the flavor of Coca-Cola from one country to the next – affect the brand. When studying brand communication and not all aspects of branding, it is possible that some equity of what the brand stands for may still be lost. This suggests that brand research beyond two countries can be important to branding issues.

FINDINGS (6): ADDITIONAL ARTICLES ARE INTERNATIONAL DUE TO SUBJECT AREAS USING SINGLE COUNTRY DATA

One key example of international articles using data from one country would be research on exporting. While studies on exporting generally tend to be limited to the study of a number of firms' exporting practices within one country, several sub-topics are explored. Typical methodology examines exporting practices, entry modes, and influencers of a sample of firms within a nation.

Entry mode is a critical choice for a firm to make. It leads to structural changes in the firm and potential capital and human resource allocations. The entry mode

choice may be irreversible and may substantially affect the future of a firm's success in foreign markets. It may set a pattern for the way the firm "goes global," that is, moves into additional countries in the future. Entry mode may be determined by any of a number of factors: resources available to the firm, location of the firm, industry of the firm, age of the firm, or approach to cultural differences of the firm. Studies have investigated all of these factors. However, as pointed out by Datta et al. (2002) in a review, of the literature, research often examines one set of variables to the exclusion of others.

An example would be one study on market entry choices looking at high-tech firms in the U.K. (Burgel & Murray, 2000). It showed the likelihood of these firms to export first to the EU and then to the U.S. or Canada – which accounted for about 75% of all export activities. The resulting implications of this research dealt with the role of collaboration in the home market for the firms and its importance in international expansion, the resources required for service in international markets, and the use of intermediaries. Such factors as size of the firm, the firm's marketing channel in the home country, customization of products, and transaction costs were reviewed. This study also provides us with an example of taking a number of variables into consideration and providing insight into high-tech firms but still being limited due to the sample size, the tendency of such new firms to use distributors or export relationships, and the nature of the industry.

Some export studies look at factors such as the cultural dimensions proposed by Hofstede (1980), examined exporter import agent influence of such cultural dimensions Karunaratna et al. (2001), presenting a framework for the empirical testing of relationships. Another study (Dow, 2000) compared and contrasted the influence of geographic distance with psychological distance. It reviewed the literature on psychological distance and included instruments based on Hofstede's work as well as that based on others. The conclusions suggest that cultural factors are important in export decisions such as market selection.

Thus, a wide variety of factors are studied in exporting and the literature is quite varied. There appeared to be few studies comparing exporting of various multinational firms or domestic firms from a number of different countries, patterns we suggested earlier in this paper. There is clear implication for further studies using a broader context and wider geographical scope.

SUMMARY OF FINDINGS

(1) There is both a tremendous expansion of topics and growth in research about international marketing. With the expansion of new journals, the proliferation

of most topics once covered as domestic marketing are now moving into international areas.
(2) The categories of marketing in which the greatest amount of research most recently seems to be conducted are retailing, research methodology, branding, and consumer behavior. A second tier with categories of services, advertising, B2B, strategy, and new product decisions follows.
(3) Almost none of the market research studies published in peer-reviewed journals could be considered global in scope.
(4) Most research is conducted by region, between countries with some comparison or contrast, or in one country but with some aspect as multinational due to the subject (market entry decisions).

IMPLICATIONS

(1) This paper may serve to encourage global colleagues in a world with great interconnectivity to embark on some projects to provide studies that mirror the reaches and interests of the largest MNEs.
(2) Based on the current limited number of papers in the methodological category, there is ample room for additional research that compares and contrasts data in world regions. In particular this would seem to apply to research in the triad of North America, the EU, and some set of Asian countries and including Japan.
(3) Marketing managers must learn from this research and start thinking of regional similarities and differences instead of frequently trying to extrapolate to global similarities.
(4) Given the quest of truly global branding, researchers and managers will likely find it useful to bring some convergence to their investigation of similarities that may lead to global commonalities of brand yet regional differences that may lead to brand alterations by region.

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Indiana University was a principal actor in the international marketing research revolution primarily because of Hans Thorelli, who has published more than 100 articles and books on international marketing management and related topics during his forty years as a member of the IU School of Business. Dr. Thorelli was a very active member of the editorial board of the *Journal of International Marketing*, and established the first best-paper awards for it. We are proud to be a part of the IU tradition that was begun and developed by Dr. Thorelli.

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KNOWLEDGE DEVELOPMENT IN INTERNATIONAL MARKETING

S. Tamer Cavusgil

ABSTRACT

Fundamental changes in the global business environment as well as in the enterprise itself compel scholars to take a fresh look at the progress being made in developing knowledge. This article is an attempt to critically evaluate progress in international marketing research, with an emphasis on delineating worthy topics for future attention. Providing a compendium of research topics, the case is made for urgent research on selected themes, including the development and validation of a framework that identifies the underlying dimensions of a global company. A call is also made for formulating new international marketing metrics.

INTRODUCTION

Research in the field of international business focuses on the managerial process of developing local presence in distant places. While IB has always been about crossing national boundaries with products and services, increasingly it refers to integrating value-adding activities on a worldwide scale. International marketing, a subfield of IB, has concerned itself with the marketing aspects of going international. These activities usually revolve around market opportunity assessment, customer and market development, logistics, channel management, branding, and product management. As a managerial activity, it refers to "the process of defining, developing, and delivering customer value" (Webster, 2002).

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Cross-border business has experienced explosive growth over the past couple of decades. This phenomenal increase is due to a combination of factors: advances in communication, information, and transportation technologies; a shift toward market economies; privatization and deregulation in emerging markets; emergence of the global consumer; availability of transnational media; and proliferation of global products. These drivers were accompanied by the participation in IB by firms from a much larger set of countries. At the same time, we have witnessed enterprises of all sizes and experience engage in cross-border expansion. As an example, young, entrepreneurial firms – the so called "born global" firms – made their mark, especially aided by the advent of the Internet and information technologies (Knight & Cavusgil, 1996).

Of special importance in the remarkable growth of cross-border business is the emergence of a sizeable "middle class" and an accompanying purchasing power in many of the developing economies of the world. A general uplifting of living standards and the addition of masses that are able to enjoy products and services beyond the bare necessities have created tremendous new opportunities for Western marketers. Indeed, in our own work to ascertain the market potential of emerging markets, the middle class turns out to be the most significant indicator of consumption capacity in such societies (Cavusgil, 1997; globalEDGE@msu.edu). A growing and sizeable middle class not only signals the arrival of a robust market segment able to absorb a variety of commercial output, it also portends a significant rise in production capacities. It is no wonder, then, that countries such as South Korea, Malaysia, Ireland, Mexico, and numerous others are not only increasingly attractive markets for Western firms but also excellent supply bases from which to source products.

The aim of this chapter is to reflect on the evolution of international marketing as a scholarly field. First, we provide an overview of the ontological aspects of research in international marketing. Next, we discuss the progress in IM from an epistemological lens. We then comment on those limitations associated with the IM literature and discuss several promising avenues of research. Finally, we offer some concluding comments.

AN OVERVIEW OF RESEARCH IN INTERNATIONAL MARKETING

Ontological Considerations

One of the principal problems characterizing the development of a body of knowledge in cross-border settings stems from the ontological status of the topic

itself – that is, whether cross-border business exists only as a category, characterized and modified by the context in which it is embedded, or whether it is a unique phenomenon unbound by simple categorizations (such as geography, nation-state, etc.) and awaiting indigenous explanation. The rationale of the former view, the contextual categorization, requires explanations to be extended from an existing body of knowledge to cross-border cases. In contrast, the latter view requires the genesis of new ways and novel thinking to deal with the inquiries.

Early scholars perceived that tack as an extension problem and attempted to project existing marketing knowledge into the international context. In IM's infancy during the 1960s, researchers concerned themselves with explaining "marketing activities in foreign countries." A comparative framework was adopted. Often, the focus was on exploring whether marketing concepts (typically the four Ps) apply equally well in foreign and domestic markets. Early studies focused on marketing institutions (e.g. wholesalers, retailers) and the physical distribution of goods in a specific country context. Much of this work was published in a limited number of conventional business and mainstream marketing journals. Early work tended to be rather descriptive and used simple data collection and analytical techniques. There are four schools of that kind:

The Extension School

Early works in IM focused on the environmental differences and similarities of the countries in which the firm operates. Thus, the marketer's attention was on the social, cultural, political, and legal environments of the foreign market and their implications for the firm's marketing program. The idea of "Business is business regardless of where it operates" prevailed, leading to no fundamental adjustments in conducting foreign operations.

The Cross-Border School

Similar to the extension school, the cross-border perspective acknowledges the multi-country context and considers the "new" tasks that it imposes on management. These include foreign market opportunity analysis, market entry mode selection, contracting with foreign partners, pricing under inflationary conditions and foreign exchange, international logistics, and intellectual property protection.

The Interaction or Exchange School

This view recognizes the dynamic linkages between the firm and its environment. Attention is paid to the way in which the political, social, and economic environment necessitates company adjustments. Of special interest is the cultural environment, which imposes modifications to products, promotion, and other aspects of the offering.

The Internationalization Process School
This is a perspective that attempts to understand the process by which firms acquire international character over time. The focus is on the managerial decisions and enterprise behavior that account for early internationalization and subsequent expansion. In contrast to the concern over the more mature MNC, the focus is the organizational context of the smaller, new-to-export firm. Scholars of the internationalization process paradigm employ such constructs as risk-taking preferences, learning, organizational innovation, and senior management orientations.

Currently there is a tendency toward philosophical change. Recent work, although it presents close ties with the contemporary frameworks in marketing, strives to define the problems of IM as an indigenous kind. We see two strong schools along these lines:

The Relational School
This contemporary view proposes that relational assets – those benefits associated with cultivating partnerships with customers, suppliers, and channel intermediaries – are fundamental to the success of the firm because they are relatively less imitable competitive advantages. The relational school recognizes the difficulty of identifying the boundaries of the firm today, which is a node in a complex and overlapping set of networks. In the extreme case, the firm is best described as an "extended enterprise."

The Equity School
This emerging view recognizes the value generated for the firm by marketing activities. The argument is that marketing-related strategies, processes, and structure produce measurable intermediate outcomes for the enterprise. Typically, these outcomes or performance metrics revolve around customers, branding, channels, and innovation. It is proposed that these intermediate marketing program outcomes directly influence more traditional, financial performance indicators such as sales, profits, and market share. This view is elaborated later in this chapter.

In short, the pursuit of knowledge in IM began modestly, assuming growing sophistication over the years. Over the last three decades, IM's focus has shifted from work on the "borrowed" to work on the "tailored" specifically for its own inquiries. In the first stage, theories, tools, and axioms were the projection or transfer of work existing in related fields. As IM matured as a field of inquiry, however, it broadened its intellectual base from relying primarily on economic theory to incorporating theories from psychology, sociology, anthropology, statistics, and other basic disciplines. Over time, indigenous studies have begun to pave the way to better understanding of unique and independent aspects of the

field. A new line of research beyond the comparative and projective formats has emerged. Tools are being customized, research questions originated, and shared beliefs evolved. A more granular approach to research has consequently been adopted. This is important because the evolution of common and proprietary tools, values, and axioms is a sign of an emergent paradigm.

Path of Evolution

Beginning in the 1970s, marketing scholars focused their attention on firms that cross national boundaries and analyzed a variety of executive decisions and behaviors. These decisions included the initial commitment to go international, market entry modes, and the management of the marketing program once the firm established itself in the foreign market. Other scholars studied the cross-cultural interface, including country-of-origin effects and negotiations. In the meantime, cross-cultural consumer behavior has taken its own evolutionary path over the past three decades. Many studies explored such topics as country-of-origin bias in product perceptions, cross-national diffusion of products, comparative studies of buying decisions and behavior, and the influence of national culture in marketplace choices. Marketing journals grew in variety, and those that gave primary emphasis to international business (such as the *Journal of International Business Studies* and *Columbia Journal of World Business*) featured these works. During this time frame, studies took on a more analytical character, and exhibited more sophisticated and varied statistical techniques.

Paralleling the emergence of globalization in the 1980s, research in IM displayed greater maturity in terms of the topics explored (from market entry to joint ventures to product standardization), clarity of focus (e.g. managerial, conceptual, policy-oriented), and methodological depth (adherence to accepted standards for measurement, validation, and model testing). Scholars began to test explicit hypotheses and more comprehensive models of the international firm. Valuable attempts were made to describe the development of the IM field, synthesize the growing body of literature, and capture trends (Aulakh & Kotabe, 1993; Cavusgil & Li, 1992; Li & Cavusgil, 1995). Reviews of specific research streams within IM have also been offered by such authors as Anderson (1993), Axinn (1988), Baughn and Yaprak (1993), Bilkey and Nes (1982), and Ozsomer and Cavusgil (1991). Along with these efforts, more rigorous standards were adopted for measuring validity and equivalence. Research clearly gained more strategic character. By then, newer scholarly outlets such as the *Journal of International Marketing* (now published by the American Marketing Association) and *Advances in International Marketing* (annual book series published by JAI Press/Elsevier since 1986) had

arrived, providing additional exposure to a rapidly growing stock of scholarly contributions.

One common feature of this development is the unit of research analysis. Scholars' interests ranged from micro (the individual manager, the firm) to macro (industry and country). Contributions include, naturally, thought pieces, conceptual articles, and empirical studies. As one peruses this vast literature, it becomes apparent that the boundary of where IM ends and where IB begins is rather elusive.

It can also be noted that contributions to the literature have originated, increasingly, from scholars outside North America, especially from Europe. Often basing their work on in-depth, case-based research, European scholars have generated valuable insights in IM. Their work has been influential. As an example, the International Marketing and Purchasing (IMP) group – a five-country collaborative project examining buyer-seller relationships in industrial markets – has pioneered new concepts, models, and knowledge (see, for example, Ford, 1990). Indeed, the work of the IMP group in Europe during the 1980s paved the way for similar inquiries in North America often labeled as relationship marketing, networks, and inter-firm relationships. The work of the IMP group also marked the shift in scholarly research from a focus on individual transactions toward a focus on business relationships.

Like the rest of the IB literature, academic contributions in IM have closely adopted the theoretical frameworks of industrial organization (IO) theory and the resource-based view (RBV). In addition, scholars have borrowed from such frameworks as transaction cost economics (Anderson & Gatignon, 1986), agency theory, and the social network theory. More mainstream IB theories, including the internationalization process theory (Bilkey, 1978; Cavusgil, 1980; Johanson & Vahlne, 1977), the eclectic paradigm (Dunning, 1980, 1988), and the internalization theory (Casson, 1987; Hennart, 1991; Rugman, 1981), found ample applications in IM.

Shortcomings of the IM Literature

While much progress has been recorded in the pursuit of knowledge in IM, much more work remains to be done. It would be reasonable to highlight a set of conceptual and methodological limitations generally associated with the IM literature.

At a conceptual level, several limitations can be mentioned. First, many studies reported in the IM literature lack a sound theoretical foundation. Key constructs do not have firm conceptual grounding and are not linked together well. Few

agreed-upon constructs exist, and many researchers use idiosyncratic definitions. As has been noted earlier, IM does not have native theories of its own, but rather borrows concepts from other disciplines. Other conceptual limitations of the IM literature include:

- Many explanations are static in nature, shedding limited light on the dynamic nature of cross-border marketing.
- Much of our knowledge is contextual, often overlooking the effects of industry, company experience, and even culture.
- Findings of current research should be convergent, yet there is relatively little meta-analysis in the field.
- There is limited focus on market entry modes, other than FDI.
- Researchers have often examined a single perspective instead of dyadic perspectives in the buyer-seller relationship.
- There is little concern over performance effects and model testing. Superior performance and its antecedents do not get the deserved attention. In particular, strategy implementation issues are not well addressed. The issue of how firms can make their IM strategy work better warrants more attention.
- There is little emphasis on managerial implications of IM activity. In addition to descriptive research, there is a need for work from a normative angle and predictive considerations.
- Structure, process, and strategy are often treated as islands. The principles bridging the gap between them and their interaction demand more attention from IM scholars.

The field of IM also suffers from methodological limitations. Examples include:

- Studies feature poor research designs: single industry; single country; insufficient variation in focal constructs; inappropriate unit of analysis; and so on.
- Elaborated measures are limited; studies simply adopt measures developed for domestic marketing issues and employ single-item measures.
- Studies fail to assess the measurement model adequately, fail to assess the cross-cultural equivalence of measures, and rely on items that do not adequately measure the intended constructs.
- Simplistic and incomplete analysis of data is also a concern. Studies fail to check the assumptions behind the analytical techniques, and fail to adopt sophisticated techniques that may have greater statistical power. Researchers may also fail to fully report the findings of the analysis, or to interpret the findings in light of the research limitations.
- Often, performance is evaluated as a unidimensional construct. Much of the recent work focuses on only one aspect of performance. The most popular measure

of performance is economically oriented, although researchers acknowledge its multidimensional nature of performance.

As more than one reviewer noted, these limitations are not particularly unique to IM. For example, concerns about research designs, measures, incomplete measures of performance, and simplistic and incomplete analysis exist across the board for much of the "domestic" management literature. It might be pragmatic to evaluate the shortcomings in light of "realistic" limitations of doing research across borders. Concern for equivalence, for example, although genuine, limits any cross-cultural research of consumers/salespersons/managers. It is easy to discard cross-cultural research on grounds that samples are not equivalent, but the same is not questioned when samples from different industries, regions, and demographics are pooled within the domestic setting even though there might be questions pertaining to equivalence. Although there is certainly a need for better methods to ensure equivalence, realistically, cross-cultural samples can never be perfectly equivalent. Access to and availability of data are additional bottlenecks, not to mention the higher cost of gathering cross-national data (even if concerns of equivalence are relaxed).

One of the most significant methodological concerns in IM is whether the perceived similarities or differences between markets are real (see, for example, Hui & Triandis, 1985; Mintu et al., 1994; Sekaran, 1983; Singh, 1995). Such problems are placed under the umbrella term "equivalence." The equivalence problems certainly are rich in variety, and include, but are not limited to: (a) construct; (b) measurement; and (c) sample and sampling equivalences. Each of the categories has finer divisions. For example, the case of measurement embodies scale, calibration, response, and translation equivalences, whereas the case of construct equivalency involves functional, conceptual, and instrumental equivalences.

Construct equivalency pertains to "true" differences among societies on the underlying concepts and all the issues related to valid, reliable, and unbiased ways of capturing them. That requires ontological and epistemological considerations: Concepts between the cultures may or may not be transferable (Inglehard & Baker, 2000). A construct may not serve the same function across borders (a bicycle may be recreational or a basic mode of transportation); it may have different categorical interpretations (pizza may be chic in Europe but a convenience food in the U.S.) (Craig & Douglas, 2000); or the concept may not be part of the "meanings repertoire" of culture at all. Quantitative research using factor analysis and qualitative research with interpretative emphasis jointly offer promise for resolving difficulties along the construct equivalency.

Another equivalence issue is the measurement equivalence. This problem is especially challenging (Steenkamp & Baumgartner, 1998) because of:

(1) a bewildering array of types of measurement invariance that can be found in the literature; (2) the lack of an agreed-upon terminology to refer to the different kinds of measurement equivalence; (3) researchers' relative unfamiliarity with testing measurement models that use techniques incorporating latent variables; (4) the existence of considerable methodological complexities involved in testing for different kinds of measurement invariance; (5) uncertainties about the extent to which measures have to be equivalent in order for particular cross-national comparisons to be meaningful; and (6) the absence of clear guidelines as to how to ascertain whether or not a measure exhibits a cross-national invariance. Recently, structural equation modeling approaches have promised progress in tackling the problem of measurement equivalence (Myers et al., 2000; Steenkamp & Baumgartner, 1998). Starting with the simultaneous estimation of a baseline path model and then full and restricted model estimations will guide the researcher for an improved model, and hence the findings.

The third kind, sample and sampling equivalence, are neglected considerations. There are not many studies along the lines of sample-related equivalency. The scant interest in the topic stems not from the problem's triviality, but from researcher's attitude toward sampling in general. Usually, better randomization and "the affordable-largest size" are conveniently accepted as remedial for sampling problems. However, this issue deserves more attention.

A genesis of inquiries from field-specific considerations calls for developing well-defined, valid constructs that are consistent across studies. Research shows that there is no systematic inclination for any certain national sample to record high or low reliability consistency across different types of measurements or variables. The incidence of reliability differentials seems to vary according to the type of variable (for example, Davis et al., 1981). Past studies also indicate that attaining measurement equivalence in cross-national surveys is seemingly more difficult for attitudinal and perceptual variables than for demographic and other background variables (Davis et al., 1981). Nevertheless, in the light of interesting studies we can be hopeful. Progress in indigenous problems of a field, such as equivalence, is a sign of scientific maturity.

DIRECTIONS FOR FUTURE RESEARCH

The future of research in IM is very exciting. Marketing scholars confront an array of promising and intriguing research issues that can substantially enhance knowledge development. Figure 1 provides a sample of research directions worthy of investigation (see also Cavusgil, 1998). The discussion below elaborates a number of research topics that can be especially rewarding.

(1) Mainstream Marketing Management Issues

- Pricing
  - (a) Dynamics, impact, coordination, practices
  - (b) Gray markets
  - (c) Transfer pricing
- Channels and sales
  - (a) Developing and coordinating partnerships in the value chain
  - (b) Manufacturer-distributor relationships
  - (c) New channel development
  - (d) Supply chain management
- Service sectors; service quality and other issues in such diverse firms as banks, logistics firms, accounting, and advertising agencies
- Impact of information technology and the Internet on:
- Channels and direct sales
- Communication and advertising
- Knowledge transfer and learning organization
- E-Business and marketing
  - (a) On-line customer behavior; metrics; impact on marketing mix

(2) Special Challenges in International Marketing

- Country screening and selection
- Understanding the new global customer
- Customer assessment and selection (segmentation)
  - (a) Identifying and sustaining relations with profitable customers
- Worldwide coordination/integration of marketing value-added (strategy, structure, and processes): customers, branding, channels, and innovation

Fig. 1. A Research Agenda for International Marketing.

- Global branding; global account management; global product design, development, and launch; global teams and centers of excellence; knowledge portals; global IT infrastructures
- Valuation of marketing processes in the global company
- Standardization/customization
  - (a) Balance between:
    - (i) Global and local
    - (ii) Mass vs. niche
  - (b) Positioning

(3) Marketing Engineering: Performance in International Markets

- Measuring the impact of marketing strategy on performance
- Measuring key constructs in performance
  - (a) Entry, growth, share, profits, customer loyalty, lifetime value, brand equity, etc.
- Establishing empirical generalizations across existing data, studies
- Returns from international market expansion vs. business diversification

(4) Dynamic Analysis of Firm Expansion

- Interrelationships among multiple modes of involvement (e.g. offshore sourcing and exporting); examination of multiple activities in a holistic manner
- Inward vs. outward internationalization
- Firm's expansion over time, across markets

(5) Inter-firm Partnering Across Countries

- Partnering competence
- Partner selection, motivation, training, management
- International channel governance
- Consequences of "networks" and the "extended enterprise"
- Collaborative ventures (equity JVs vs. non-equity alliances)

Fig. 1. (*Continued*)

(6) Internationalization Process and Potential

- "Born globals"
- Professional service firms
- Retailers (conventional and online)
- Supernichers
- Direct marketers
- Emerging markets and transitional economies (e.g. family conglomerates in Emerging Markets)

(7) Government Promotion of International Business Activity

- Effectiveness of export promotion efforts
- Methodology of developing export capability of smaller firms

(8) Marketing's Interface with Other Functions

- Marketing vs. manufacturing, R&D, finance, supply chain, etc.
- Role of marketing in flatter, defunctionalized business

(9) Comparative Studies of Consumer and Buyer Behavior

- Across countries, cultures, industries

(10) Research Methodology in International Marketing

- Research methods across cultures
- Equivalency
- Comparable scales and measures in global environments
- Forecasting adoption/diffusion
- Meta-analysis methods and pattern recognition

Fig. 1. (*Continued*)

Standardization vs. Adaptation

Marketers have to contend with a paradox of the global marketplace. On one hand, common technology and protocols unite customers and markets. On the other hand, customers with disparate ideas and aspirations increasingly use technology for expressing individual preferences. A cultural dichotomy appears to persist. This paradox leaves the marketer with a dilemma: How should product development and

positioning be resolved in the foreign market in view of persistent customer preferences? In reality, both a mass market and a niche market may exist in individual markets side by side. Such global brands as IBM, Microsoft, Coca-Cola, Nestlé, Sony, and "Seinfeld" all command global audiences with little or no adaptation. Yet other companies thrive because they are better able to match the expectations of the discerning customer by customizing the product, the presentation, or the channel. Those opting for localizing their marketing approach do so both in response to growing competitive pressures and the sizeable nature of the market segment that is willing to pay extra for solutions that cater to their unique needs.

In this complex environment, IM scholars ought to generate decision rules and empirical generalizations that guide managers. It would appear that the new knowledge generated will have to be contextual, varying on the basis of the product, industry, country, and other contexts.

Understanding the New Global Consumer

The arrival of Internet-mediated communication has not only revolutionized the business-to-business (B2B) connectivity via private portals, it has also brought about universal consumer access to information. The emergence of a "global consumer" is also, and perhaps more important, a result of the proliferation and impact of global media networks. For example, networks such as MTV can affect the purchasing habits and trends of teenagers on a global level. Masses of consumers around the globe now have access to corporate and public databases on the Web. As a group, "global-Net" consumers are on the rise and represent a hybrid of local and global cultures (Tomlinson, 1999). Though well aware of their national identities, these consumers have a thirst for expanding their boundaries beyond their tradition-bound culture. Accordingly, international marketers are challenged to develop strategies appropriate for this segment. How should marketers relate to the "new hybrid generation" – those who possess strong self-definition and identity as a result of being steeped in local cultures, yet equally in touch with global trends?

International Channel Governance

Research on cross-border governance is rather meager, providing ample opportunities for marketing scholars. Four sets of issues deserve particular attention. First, we need a robust concept of relational governance and its value as an international channel strategy. Governance has been defined broadly as a mode of organizing

and monitoring transactions. When a relationship is orderly and meaningful, its overt manifestations have to be the expression of some covert mechanism inherent in the relationship. The concept of relational governance is then conceived as an organization's active and ongoing intent to ensure order by putting a facilitating mechanism in place through a combination of formal and informal schemes. Second, although relational governance is treated in the literature as a mechanism to regulate foreign partner behavior, its relevance as a strategic corporate asset has been overlooked. Therefore, future research may examine relational governance as a key strategic capability of the manufacturer. Third, the issue of how process and foreign market and partner factors regulate relational governance arrangements is worthy of future investigation. Fourth, researchers should explore empirical and theoretical considerations of relational governance frameworks and empirically test these in international marketing channels.

Understandably, as emphasis has been given to granular considerations of exchange such as relationship attributes and boundaries, less attention has been devoted to processes that keep the partnership viable. There is a need for deeper understanding of what makes and encourages relational equity in the cross-border context.

Valuation of Marketing Processes in the Global Company

Recently, marketing's contribution to the firm has been questioned. Just what value do marketing activities add to the organization? What is the unique contribution of marketing in the contemporary firm? In particular, what are those intermediate outcomes that can be attributed to marketing programs? In the globally active company, these issues carry much importance. There is a clear need for marketing scholars to delineate specific value-adding contributions that can be articulated as measurable outcomes.

Figure 2 provides a broad framework for studying marketing's added value to the global company. This framework posits that marketing managers respond to a set of both environmental and organizational drivers when they formulate marketing-related programs within the firm. Interpreting these signals, they engage in activities that result in a series of marketing strategies, processes/routines, and structures. Marketing activities especially critical in the global context include global account management, customer service, global procurement, global supply chain management, distributor support, sales force training, global branding, global product development and launch, market opportunity assessment, competitive analysis, price setting, and the development of global centers of excellence. Such activities should produce marketing value-added or a set of key marketing

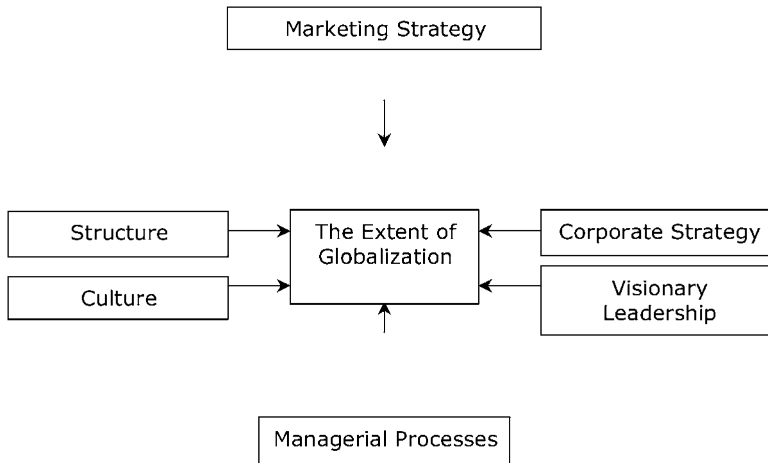

Fig. 2. Drivers of Globalization.

outcomes. These outcomes can be construed as organizational capabilities such as brand equity, customer base and loyalty, channel relationships, and new products. IM scholars need to develop metrics that are designed to capture these intermediate marketing outcomes in the global company. Marketing scholars are advised to carefully define the necessary constructs and appropriate measures that can be employed for the MNC. Once such metrics have been developed and validated, their empirical relationship to traditional, firm-level financial performance indicators ought to be investigated.

Integration of Marketing Activities on a Global Scale

While the globalization of business is not a new phenomenon, multinationals are under intense pressure to better coordinate their value-added processes on a worldwide basis, eliminate the redundancy that currently exists in a loosely-connected network of affiliates/partners, and institute mechanisms for cross-fertilization, sharing, and best-practice dissemination. For MNCs, it is imperative to closely integrate home-office and distant country operations because of a growing competitive intensity and industry consolidation. Interestingly, for the first time in history, companies now have the means to more efficiently connect worldwide operations. The Internet and accompanying IT applications are providing a powerful tool to achieve electronic connectedness. What results from this is that today's modern enterprise is "a network of interconnected responsibilities"

(Cavusgil, 2002). Network-based information is causing everyone in the enterprise to be engaged, regardless of physical or functional space.

What remains to be established is the degree to which firms are deriving value from the integration of marketing activities on a global scale. How well are MNCs rising to the challenge of coordinating price, product, branding, and channel activities around the globe? How well accepted are such practices as global account management, global product launch, and uniform pricing? How are managers relying on information-based networks to create value both from and in diverse markets as they exchange goods, services, and know-how within the enterprise and across their supply chains? How successful are they in disseminating data, knowledge, and experience across their entire networks? How useful are platforms such as knowledge portals residing on intranets for sharing and disseminating knowledge and experience within the global corporate family? These and similar issues require careful attention from marketing scholars with a view toward further theorizing marketing advantage in the modern MNC.

The Nature and Contributing Dimensions of a Global Company

The IB literature clearly elucidates the transformation of leading business organizations toward truly global companies (Kogut, 1985; Perlmutter, 1969), with much justification provided for this phenomenon (Douglas & Craig, 1989; Johansson & Yip, 1994; Levitt, 1983; Ohmae, 1989). Initial measures of the extent of globalization attempted to gauge purely quantifiable measures such as the percentage of sales occurring outside a home market, global market share, and number of foreign affiliates. More recent advances have recognized the need to measure subjective constructs such as corporate leadership's attitude toward global operations, a geocentric outlook, and cross-cultural integration. The marketing literature is particularly rich with investigations of the relative degree and performance of various global marketing strategies (Birkinshaw et al., 1995; Cavusgil & Zou, 1994; Jain, 1989; Samiee & Roth, 1992). Recent advances have coalesced the disparate measures of a global marketing strategy into a common framework (Zou & Cavusgil, 2002), and the construct of the global mindset has also been developed into a meaningful scale (Murtha et al., 1998).

Although much knowledge has been gained about those particular aspects of doing business from a geocentric perspective, a generally accepted concept and measure of what constitutes a global company is a major gap in the literature. A holistic measure of the degree of a company's globalization has not yet been captured on a defined scale. This gap impedes the advancement of knowledge. Confusion can occur because findings from different studies cannot be

meaningfully compared, it is difficult to measure firm performance due to varying measures, and assessing the relationship between the degree of globalization and firm performance is problematic.

The Interdependency between Corporate Strategy and International Diversification

Over the past decade, international markets have become considerably more open. In the more liberal international investment environment, firms now have a real choice between *international market diversification* (extending the geographic scope of their present businesses) and *intranational business diversification* (entering into new businesses in their presently served markets). An interesting research topic would be to investigate whether deconglomeration may be a consequence of the opening up of numerous international markets – i.e. an action by conglomerates to free up resources to pursue growth through more profitable international market diversification in core businesses rather than less profitable intranational business diversification (Varadarajan et al., 2001).

CONCLUSION

Despite the limitations, the scholarly work in IM has been reasonably rich, diverse, and illuminating. Although the field does not necessarily have a clear identity separate from the broader field of IB, several positive trends signal a growing recognition of IM literature; the growing number of doctoral programs specializing in IM scholarship; the growing research output; the proliferation of new publication outlets; the cross-national collaborative research projects; and the adoption of more rigorous research methods and standards. As the short list of promising research avenues offered earlier suggests, future work will be exciting and meaningful.

Marketing involves a concern for *tactics* (selling, demand stimulation), *culture* (customer orientation), and *strategy* (translating the marketing concept into action that would create competitive advantage) (Webster, 2002). All three of these thrusts are relevant in international marketing. IM managers will gain recognition within their firms by relying on these principles. It would be appropriate for them to keep a sharp focus on generating the value-added outcomes referred to earlier: customers, brands, channel relationships, and innovation. Scholars of IM, on the other hand, will gain recognition by their peers in other disciplines by keeping a sharp focus on knowledge creation. This implies a sustained effort through: conceptualizing complex relationships; proper observation and data collection;

crystallizing key constructs; specifying linkages among structure, strategy, and performance; and validation through empirical analysis.

Before the middle of the nineteenth century, many research studies were successful in linking malaria to mosquito presence, but none was able to provide the explanation for the ailment. It took the genetic laws of Mendel to delineate how the malaria parasite slows detection by the immune system while it changes the genetic makeup of the knobs it uses to hang itself to blood cells. It is hoped that IM scholars will live up to their comparable challenge. IM research will then move from symptomatic findings to powerful explanations as it untangles the unique problems of cross-border business practices. The dynamics of this endeavor are as intriguing as malaria research. The malaria organism is able to change its signature by substituting or rearranging its 150 genes, a strategy unique to the disease. A pattern of remission and relapse results from the body resistance as the immune system learns each new "code" only to have it again changed by the malaria organism; very much like the strategy in business!

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THE EFFECT OF GLOBAL FINANCIAL MARKETS ON BUSINESSES

Utpal Bhattacharya and Catherine Bonser-Neal

ABSTRACT

This paper reviews the theory and evidence on the effects of globalization of financial transactions on businesses. Two important benefits are identified. First, globalization reduces a company's cost of capital. Second, globalization improves corporate governance so that manager actions are better aligned with shareholder interests. This improvement in corporate governance further contributes to a reduction in a firm's cost of capital.

INTRODUCTION

Entrepreneurs with good ideas are constrained by the amount of capital they can raise. Although they can use their own money and borrow from family and friends, these are limited sources of capital. Eventually, if they want to make their firms achieve their potential, they have to fund growth using other people's money. They can borrow from fellow citizens under a contractual obligation to pay them back with interest – debt – or they could make these citizens co-owners, with a promise to share all the ups and downs of ownership – equity.

Today we take the existence of debt and equity as prosaic facts of economic life. We should not. The ability of firms to raise money from fellow citizens is remarkable. Equity is more of a paradox than debt. Think about it. If you buy shares (firm equity), you give money to a firm that has no contractual agreement

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to give you anything back. If you buy corporate bonds (firm debt), even though the firm has a contractual agreement to return your principal with interest, this agreement is only valid if the firm is solvent. It is no wonder, then, that in the history of finance, debt arrived before equity.[1]

If the ability of firms to raise money from citizens is remarkable, the ability of firms to raise money from foreigners is a miracle. But globalization is doing just that. Local U.S. corporate bonds and local U.S. equity held by foreign investors, or foreign corporate bonds and foreign equity held by U.S. investors, are on the order of billions of dollars. If cross-border transactions for the whole world are included, local securities held by foreign investors are on the order of trillions of dollars.

How has this globalization of financial transactions affected businesses? This paper reviews the impact on two aspects of business: the firm's cost of raising funds in capital markets (its "cost of capital"), and the extent to which the firm practises good corporate governance. We discuss the conditions under which globalization would be expected to reduce a firm's cost of capital and review the empirical evidence on whether such a decline has occurred. We then examine how globalization has improved corporate governance and how this improvement itself has led to a decrease in a firm's cost of capital. The final section concludes by discussing questions that remain to be addressed by future research.

THE EFFECT OF GLOBALIZATION ON THE COST OF CAPITAL

Firms undertaking investments necessary to their growth turn to investors for funding. When are investors willing to provide this funding? When they expect to receive a rate of return that compensates them for the risk of their investment. The greater the risk, the greater the return required to compensate them for the use of their funds. This required return demanded by investors is the firm's cost of capital. In deciding on the worthiness of an investment project, firms compare the cost of capital with the investment's expected future return. If the cost of capital rises relative to the expected return of the investment, then the project is less likely to be profitable and will be rejected. Proper measurement of the cost of capital therefore becomes critical to the correct assessment of an investment's benefits.

Globalization can affect a firm's cost of capital because it alters the risk of a firm's investment.[2] To see why, consider a small, closed economy that tends to specialize in the production of steel. If steel production is a large fraction of the country's total production, then investors have few alternative investment opportunities available to them. In this case, the variability of an investor's return on a portfolio of that

country's assets is largely determined by the variability of the return on steel. Steel producers seeking to raise capital will need to compensate investors for this risk with a higher return, which will raise the firm's cost of capital.

Suppose this economy decides to open its market so that foreign investors can invest in the country's steel firms and domestic investors can invest in other firms outside their own country. Now foreigners can assume some of the risk that, prior to liberalization, was borne fully by domestic residents, and domestic residents can diversify their portfolio holdings outside their home market. Whereas prior to liberalization the risk of a domestic steel firm was assessed relative to the other firms in the home market, now investors will assess the risk of domestic steel investments relative to an expanded set of foreign and domestic firms. If there are firms within this expanded set whose returns are not highly correlated with those of domestic steel producers, then investors are able to diversify away some of the risk of steel return variability. That is, the variability of domestic steel returns contributes less to the variability of investors' total portfolio after liberalization. Under these conditions, globalization will reduce the required return on steel investments and lower a steel firm's cost of capital.

A fall in the cost of capital could yield several benefits for the steel firms (Stulz, 1999a). Projects that previously were perceived to be unprofitable now become profitable. The increased attractiveness of investment projects may spur greater investment in the steel industry. Finally, as discussed more fully below, the attraction of new investors to the steel industry could increase the monitoring of corporate activities and improve corporate governance in this sector of the economy.

While it is easy to speculate about the beneficial effects of globalization on a firm's cost of capital, the estimation of any benefits poses a greater challenge. This difficulty arises particularly in calculating the cost of equity capital, or the required return on a firm's stock, because it requires a knowledge of whether and how investors require compensation for various types of risk.

One way to estimate the effects of globalization on a firm's cost of capital is to specify an asset pricing model that relates an asset's required return to risk factors, and then test whether a model estimated using global risk factors dominates one estimated using only domestic risk factors. An example of a model that has been tested in this fashion is the Capital Asset Pricing Model (CAPM). According to CAPM, the required return on a firm's stock depends on a single source of risk: the extent to which the firm's stock moves together with other stocks in the "market portfolio," a portfolio of all stocks available to investors. An investor will require a higher return on a stock that moves closely with the market portfolio because the opportunities for risk reduction through diversification are limited. Investors will require a lower return on stock that does not closely mimic the market portfolio because more of the firm's risk can be offset through diversification.

In the context of CAPM, globalization affects how investors determine their market portfolios. In a market completely segmented from foreign markets, the "market portfolio" is the portfolio of domestic assets. If globalization eliminates restrictions on investment, then the "market portfolio" becomes the portfolio of world assets, and a stock's required return will now be assessed by its co-movement with the world market portfolio. A test of globalization's effects therefore involves testing which source of risk – domestic market or world market – better explains the cross-section of returns.

Many studies that have tested CAPM with both global and domestic market risk factors find that a global CAPM outperforms a purely domestic one in developed countries (Chan, Karolyi & Stulz, 1992; De Santis & Gerard, 1997; Harvey, 1991; Stehle, 1977). World market risk is therefore an important component of a firm's cost of capital for these countries, and firms that use the domestic CAPM to evaluate investment projects are likely to undervalue an investment's worth. When tests of the global CAPM are applied to emerging market stock returns, however, the results indicate that local factors remain important to the pricing of emerging market stocks (Bekaert & Harvey, 1995; Harvey, 1995). These results suggest that liberalization in some emerging markets has been incomplete and in some cases not credible. As the liberalization process continues in these markets, we would expect the risk reduction benefits of globalization to translate into a lower cost of capital.

While much of the evidence indicates that a global CAPM outperforms a domestic one, studies also find that a global CAPM does not completely explain the behavior of stock returns. These pricing errors could be due to the failure of the model to account for additional risk factors, other than world market risk, that may affect required returns. Foreign exchange risk is one factor that may affect an asset's required return. When purchasing power parity does not hold, investors in different countries can pay different prices for the same good when it is evaluated in the same currency. Unanticipated changes in exchange rates therefore represent another source of risk that is priced. Recent evidence suggests that asset-pricing models that take into account foreign exchange risk perform better than those that do not.[3]

Empirical studies have also compared local and global versions of models in which multiple risk factors affect an asset's expected return.[4] Some of the possible risk factors that have been examined are the size of the firm, the ratio of its book-to-market value of equity, and the time of year.[5] The evidence on the ability of a global multi-risk factor model to outperform a single-risk factor model such as the CAPM is mixed. In addition, some tests of multiple risk factor models find that local factors remain important to the pricing of securities.[6] As with the CAPM, however, these multi-risk factor models are unable to accurately account for the behavior of returns.

To summarize, most of the empirical studies indicate the importance of global factors to the estimation of the cost of capital. However, the empirical models to date do not adequately explain the cross-sectional and time-series behavior of expected returns, and hence do not completely explain the cost of capital. It is important to remember, however, that tests of the world CAPM or global multi-factor models are implicitly joint tests of the asset-pricing model specification and of the hypothesis that financial markets are integrated internationally. Pricing errors could arise from the inappropriateness of the specification or from the existence of implicit or explicit barriers to capital movements.

An alternative way to test the impact of globalization on the cost of capital that avoids the estimation of an asset-pricing model involves specifying a proxy for the cost of capital and testing whether specific episodes of financial market liberalization affect this proxy. One proxy is the stock price. If financial market liberalization reduces the cost of capital in a country, then one would expect firms to have improved investment prospects, and their stock prices should rise. The evidence supports the hypothesis that financial market liberalization raises stock prices or, equivalently, reduces a country's cost of capital. One study of twelve emerging markets found that stock prices increased an average 26% during the eight months leading up to a country's liberalization (Harvey, 2000).[7] The change in a country's aggregate dividend yield has also been used as a proxy for the change in a country's cost of capital. Using this proxy, one study of twenty emerging market countries found that capital market liberalization reduces a country's cost of capital by slightly less than one percent (Bekaert & Harvey, 2000). These changes, while statistically significant, are smaller than what one would have expected given the extent of the liberalization in some countries. It is possible, however, that inaccuracies in the model assumptions or in the dating of the liberalizations could cause the drop in the cost of capital to be underestimated.

Firm-level studies provide further evidence of the beneficial effects of globalization on the cost of capital of individual firms. This evidence indicates that the values of emerging market stocks that are eligible for purchase by foreign investors increase and the cost of capital falls, once governments liberalize their financial markets (Chari & Henry, 2001). The stocks of firms that remain closed to foreigners however experience no such revaluation. Individual actions that firms take to globalize their financing sources, such as cross-listing their stock on foreign stock exchanges, can also reduce a firm's cost of capital. Empirical investigations of these decisions generally show a positive revaluation following the announcement or actual listing of a stock's cross listing.[8]

Taken together, the empirical evidence to date suggests that globalization alters how investors perceive the risk of their investments. When the increased investment

opportunities afforded by globalization allow investors to better diversify their risks, a firm's cost of capital falls and its stock price rises.

THE IMPACT OF GLOBALIZATION ON CORPORATE GOVERNANCE[9]

As globalization increases the ability of companies and investors to search the globe for preferred financing or investment avenues, two critical questions emerge. First, what are the ways in which the foreign suppliers of finance to domestic corporations assure themselves of getting a return on their investment? Second, what are the ways in which the foreign owners of capital try to align the interests of the domestic controllers of capital – the company managers – with their own interests? These are questions about international corporate governance.[10] We review seven general corporate governance mechanisms, with particular emphasis on how these are being affected by globalization.

The board of directors of a firm, in principle, represents the owners. Its responsibility is to monitor management, which it is supposed to do by crafting an effective "carrot and stick" incentive mechanism. This involves the design of a managerial compensation scheme that rewards the manager if the company value increases, and punishes the manager, sometimes by outright firing, if the company value decreases. One problem with boards is that managers may determine its composition. The board's independence, therefore, seems to be desirable. Globalization has accelerated the desire for board independence. Codes of best practices issued in many countries around the world have sought to move boards towards greater representation by non-executive directors.[11] The Cadbury Committee report of the U.K. has been particularly influential in this dimension. Has all of this affected the bottom line? The evidence to date is that the number of outside directors is increasing, and these outside directors have been altering board decisions in some, but not all, countries studied.[12] It is still an open question whether company value has been directly impacted.

Corporate governance is a big problem if ownership is diffuse, because then it is not in the interest of a tiny owner to bear the entire cost of monitoring but to share with every other owner the benefit of monitoring. This is a free-rider problem. So a second way to monitor management is to have active large shareholders instead of many small shareholders. One problem with active large shareholders is that, like management, they have their own self-interests. Research in the U.S. has shown a complex relationship between the size of ownership of active shareholders and company value – when ownership is small, active shareholders want to free-ride, but when ownership is big, they prefer to entrench themselves rather than promote

shareholder interest.[13] Globalization makes it possible for investors from other countries to buy significant stakes in a firm and monitor management. Although this has led to an anti-foreign backlash – note that five years after the Southeast Asian crisis, despite all the talk of cleaning up bad loans, only a handful of banks have been sold to foreigners – increasing foreign ownership of local firms is a fact. Has all of this affected the bottom line? The evidence to date has been indirect. It comes from the ADR market, where it has been documented that foreign firms listed in the U.S. are worth more than their local counterparts (Doidge, Karolyi & Stulz, 2001). We do not know whether this is true for other countries.

A third way to monitor management is through a well-functioning capital market in its role as a certifier. Commercial banks that issue loans, investment banks that help firms sell their securities, analysts who give buy/sell recommendations, rating agencies that rate bonds, external auditors who verify financial statements, the financial press that plays the watchdog role, and securities exchanges with their stringent listing requirements are all certifiers. One problem with certifiers is that they too are prone to conflicts of interest. The Glass-Steagall Act of 1933, which has now been abolished, was primarily established in the U.S. to forbid commercial banks that had close relationships with firms from holding the securities of those firms. The recently enacted Sarbannes-Oxley Act of 2002 in the U.S. attempts to prevent conflicts of interest among auditors. Globalization has dramatically increased the demand and supply of certifiers. The rating agencies, Moody's and Standard & Poor's, have vigorously expanded their activities beyond U.S. borders. Cross listing of equity in foreign exchanges has increased.[14]

A fourth way to monitor management is through a well-functioning capital market in its role as a market for corporate control. When internal corporate governance systems fail, the last resort, if a market exists, is for an outside party to obtain control of the firm. It is in the interest of the outside party to wrest control because the party could then, by instituting changes, increase company value from its current low level and share this increase with the other shareholders. The market for corporate control has been very active in the U.S. Target firms are almost always bought at a premium, thereby creating value for the shareholders of the target firm. The jury is still out on whether shareholders of the acquiring firm benefit, though the gain of the target outweighs the loss of the bidder. This leads us to the dark side of this mechanism for corporate control. An acquirer may simply be wasting corporate resources overpaying for acquisitions in order to create a business empire. Globalization dramatically increased cross-border mergers and acquisitions by U.S. firms about 500% in the 1990s. Although we have no research on whether this has been beneficial for the target companies, we do have research showing that it has been value-reducing for the acquiring U.S. companies (Denis, Denis & Yost, 2002). We do not know whether this is true for non-U.S. acquiring firms as well.

A fifth way to monitor management is by public disclosure of firm-specific information. The more information a company provides, and the stronger is its commitment to providing continuing information, the less costly it is for investors to monitor management. Laws and regulations of all countries mandate public disclosure of certain types of firm-specific information at the time of security issuance, and they mandate periodic disclosure of audited financial statements. Although these laws exist in all countries that have capital markets, there is huge variation among countries in the amount of information that is required to be disclosed, and the degree to which disclosure laws are enforced. Research has shown the U.S. to be in the top in nearly all surveys on disclosure quantity and quality.[15] We also know that if foreigners receive less information, they demand a higher return on their investment in a country.[16] Globalization has dramatically affected the demand for good information from foreign firms. A response to this demand has been the significant number of foreign firms opting to recast all their financial statements using U.S. GAAP standards or International Accounting Standards. Although it is still an open question about which of these accounting standards are better, the debate about local standards versus global standards seems to be settled.

A sixth way to monitor management is through the legal system, which plays two roles. First, it limits the ability of management to expropriate resources from investors, especially minority investors. Second, through the use of lawsuits, it provides a mechanism for owners to discourage managerial decisions that destroy company value. There has been extensive research on the effect of legal systems on corporate governance.[17] Countries have been scored on the rights they provide to their shareholders and to their creditors. Common law countries provide the strongest degree of protection for shareholders, whereas French civil law countries provide the least. It has also been found that if the law does not protect the owners from the controllers, then the owners become the controllers; the countries with the least legal protection are also characterized by a high concentration of equity ownership (in governments or in families) and poorly developed capital markets. The conflict between owners and controllers is now replaced by a conflict between dominant shareholders and minority shareholders.

The seventh method of monitoring management is to change the nature of the dominant shareholder. Except for the Anglo-Saxon countries, the dominant shareholder elsewhere is often the government or the family. That is fast changing. Beginning with the privatizations under Prime Minister Thatcher in the U.K. in the 1980s, numerous state-owned firms all over the world have been sold to the public. Research has shown that in most settings privatization "works," in that the firms become more efficient, more profitable, financially healthier, and rewarding for investors. While this holds in both transition and non-transition economies, there is more variation in the former. Especially in transition economies, the identity

of the new owners and managers is important in determining post-privatization performance.[18] Stories in the financial press reveal that family businesses are also being restructured and sold at record rates. Unfortunately, we have no systemic global research on family businesses.

What then, has been the effect of globalization on corporate governance? It has been unequivocally positive.[19]

CONCLUSION

This paper has reviewed two important benefits of globalization on businesses. First, the evidence suggests that globalization reduces the return investors require to supply capital to businesses, and hence reduces the firm's cost of capital. Second, globalization improves corporate governance so that manager actions are better aligned with shareholder interests. This improvement in corporate governance in turn contributes to a fall in the cost of capital.

It is also clear that the globalization benefits revealed by empirical research are lower than what one would expect, a result that suggests that markets are not fully integrated internationally. Indeed, investors continue to have a "home bias" in that they hold a higher proportion of home stocks relative to the weight of their home market in the world market portfolio.[20] This home bias persists across all markets even though explicit barriers to international investment have been dramatically reduced or eliminated in many markets. If foreign and domestic investors are unwilling or unable to buy stocks outside their home markets, then the risk-reduction benefits of financial market liberalization will not be obtained and cost of capital reductions will be minimal.

Possible explanations for this home bias include the existence of implicit capital market barriers, information differences between foreign and domestic investors, differences in consumption opportunities, and behavioral biases. If we are to understand globalization's effect on business, we must first understand the factors that either encourage or prevent investors from purchasing foreign stocks. Future research devoted to understanding the causes of home bias will therefore provide important insights into how globalization is likely to affect a firm's cost of capital over time.

NOTES

1. Records of two banks in Mesopotamia (around 3000 B.C.) are the first records of debt in history. The first recorded shares were of the Russia Company (U.K., 1553 A.D.).

2. Many of the points raised in this section come from Stulz (1999a, b) and Karolyi and Stulz (2002). These papers provide extensive references on the topics discussed below.

3. See, for example, Dumas and Solnik (1995) and De Santis and Gerard (1997), who find that foreign exchange risk, along with world market risk, is priced.

4. A famous version of the multi-factor model is the Arbitrage Pricing Model, or APT. See Cho, Eun and Senbet (1986) and Korajczk and Viallet (1989).

5. The latter risk factor is often included to account for the famous "January" effect anomaly.

6. Cho, Eun and Senbet (1986) reject the joint hypothesis that markets are internationally integrated and that the international APT holds, while Korajczk and Viallet (1990) find that the international APT outperforms the world CAPM. However, they also find that the domestic APT outperforms the international APT. Fama and French (1998) find that a two-factor world CAPM explains returns, while Griffin (2002) finds that a domestic three-factor model is better able to explain the time variation of country returns, and that the addition of foreign factors leads to an economically small increase in explanatory power.

7. Evidence on the behavior of closed-end country funds (funds that invest in the assets of a particular country but are priced in the U.S.) surrounding financial market liberalization is also consistent with the hypothesis that financial market liberalization increases diversification benefits and reduces a country's cost of capital. See Bekaert and Urias (1996) and Bonser-Neal, Brauer, Neal and Wheatley (1990).

8. See Foerster and Karolyi (1999), Miller (1999), and Errunza and Miller (2000). Stulz (1999a), however, notes that the revaluation effect documented in these studies can be consistent with other explanations.

9. Many of the ideas in this section come from Stulz (1999a) and Denis and McConnell (2002). The World Bank Web site http://rru.worldbank.org/Resources.asp?results=true is an excellent source for references.

10. The tension between owners and controllers was recognized even by Adam Smith (1776). Jensen and Meckling (1976) first provided a formal model for this tension in the financial economics literature.

11. During the past five years, 25 new codes of best practice were published. There are currently 39 codes operating in Europe. Most firms, unfortunately, do not comply (*Financial Times*, April 8, 2002).

12. See Denis and McConnell (2002) for a survey of the evidence.

13. Morck, Shleifer and Vishny (1988) first documented this.

14. Porsche decided to exit Deutsche Börse in favor of joining the Morgan Stanley Capital International (MSCI) Index (*Financial Times*, August 8, 2001). Lang, Lins and Miller (2001) have shown that foreign ADR listings in the U.S. stock markets serve as credible certification.

15. See, for example, the recent survey by PricewaterhouseCoopers (2001).

16. See Bhattacharya and Daouk (2002) for the link between insider trading and the cost of equity; see Bhattacharya, Daouk and Welker (2002) for the link between earnings opacity and the cost of equity.

17. La Porta, Lopez-de-Silanes, Shleifer and Vishny have a number of papers exploring this line of research. La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998) is a good introduction.

18. Conclusion drawn by Megginson and Netter (2001) from their comprehensive survey on privatization.

19. The Mercato Italiano di Borsa, Italy's stock exchange, launched the STAR1 exchange, a separate market for small and midsize companies that follow strict governance requirements. Its performance thus far provides more evidence that good governance pays.

To be listed on the STAR1 exchange, a company must float at least 35% of its new issues on the open market, include a minimum number of independent non-executive directors on its board, and ensure that the compensation of management and directors reflects its performance. These companies must also adhere to more rigorous disclosure requirements than do their counterparts on the Borsa. The STAR1 exchange now lists 37 companies, with a total market capitalization of $7.5 billion. They outperformed their counterparts on the Borsa by 16.5% from April 2001 to March 2002, and the weighted average of their market-to-book ratios is 3.8, compared with 2.1 for all companies listed on the Borsa (*The McKinsey Quarterly*, 2002, No. 3).

20. For example, holdings of foreign stocks by U.S. investors are roughly 10% of a U.S. investor's portfolio, even though foreign stocks comprise almost 50% of the world market portfolio (Ahearne, Griever & Warnock, 2001). Also see Lewis (1999) and Karolyi and Stulz (2002) for a discussion of the home bias and for an extensive list of references.

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PART IV: NEW DIMENSIONS IN INTERNATIONAL MANAGEMENT STRATEGY

OPERATIONAL AND MOTIVATIONAL EFFICIENCY IN INTERNATIONAL STRATEGY AND STRUCTURE

Anju Seth, Tailan Chi and Sarabjeet Seth

ABSTRACT

Previous studies on international competitive strategies identify a number of loosely defined strategy types and suggest that the choice among them is based on their relative productive efficiency (i.e. ability to exploit such factors as economies of scale, economies of scope, and location economies). Our analysis highlights the additional role of motivational efficiency. We propose that the proportion of available productive efficiency that is actually realized under each strategy depends on the motivational efficiency of the best possible incentive system for implementing the strategy. Our conceptual framework allows the identification of precise theoretical relationships for empirical measurement and testing.

INTRODUCTION

In their "New Manifesto for Management," Ghoshal, Bartlett and Moran (1999) urge MNEs to focus their efforts on "value creation" in lieu of "value appropriation." Value appropriation and control – the managerial tenets contained in the traditional strategy-structure-systems linkage – are described as "the deadly pincer of dominant theory and practice." This shift in focus can be achieved, they suggest, by a managerial reorientation from enforcing compliance

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to an emphasis on fostering managerial cooperation and initiative, so that "the core of the managerial role gives way to the 'three Ps': purpose, process, and people."

While we agree that it is entirely appropriate to call attention to the important role of process and people in achieving the firm's purpose, the manifesto also gives rise to a number of questions. First, why are cooperation and control considered as *opposing* logical principles underlying managerial roles? Rather, we suggest, cooperation and control play a joint role in achieving the value objectives ("purpose") associated with the firm's strategy, so that they are usefully considered as complements rather than substitutes in achieving value creation. Second, *how* might organizations accomplish the suggested reorientation toward value creation? We suggest that the manifesto lacks the requisite specificity to function as a model for research and practice in international business. We propose that organizational structure and managerial incentives are the means for achieving managerial cooperation and control and for bringing about appropriate coordinative processes for achieving the firm's goals of value creation.

Our purpose here is to provide an integrative model to explain the process of value creation in MNEs, while explicitly considering the joint roles of the "strategy-structure-systems trilogy" and the "three Ps" proposed by Ghoshal, Bartlett and Moran (1999). Our model focuses on a firm's value chain activities as the unit of analysis and explicitly compares the potential economic gains associated with a given strategy and the organization costs arising from the efforts to implement the strategy. Assuming that the firm aims to maximize its economic value – the net present value (NPV) of its future expected cash flows plus the value of its growth options – the chosen strategy and corresponding organizational structure should be one that maximizes the firm's value net of organization costs. Our model highlights the organizational incentives required to achieve both cooperation and control. Given that any incentive mechanism has both benefits and costs, we need to consider tradeoffs among these costs and benefits, in light of the specific purpose of cooperation and control, i.e. strategy underlying the employment of the incentive mechanism. However, this cost-benefit trade-off is not necessarily completely straightforward, in that an incentive mechanism to facilitate cooperation in some activities might hinder cooperation in others. We highlight the complexities associated with the tradeoff. For analytical tractability, our discussion takes the product, market, and geographic scope of the firm's value creation activities as given, although the framework is capable of incorporating these additional decisions, as explained in more detail later.

The next section presents the overall model. The third section applies the model to an analysis of the strategy-structure linkage. The last section summarizes and concludes the paper.

THE MODEL

The central logic of our model is as follows. To create economic value, the firm seeks to enter into those activities where it has a potential competitive advantage and to create complex linkages among those activities. The basis for economic gain is the presence of complementarities or synergy among the firm's value creation activities. A systematic effort to exploit a particular type of synergy constitutes a *strategy*. However, any effort to exploit the perceived synergy between two activities requires coordination between them or integrating them into one. The requirements of coordination and/or integration give rise to the need to develop an appropriate organizational structure (whereby responsibility and authority for the conduct of activities or activity sets are allocated) and an incentive system (that involves motivation and performance measurement of managers who are allocated these responsibilities). If the organizational structure and incentive system cannot perform these organizational functions perfectly, organization costs arise and reduce the realizable economic value of a given strategy. Thus, the actual competitive advantage associated with a given activity depends on the competitive strategy that is adopted, as well as the efficiency with which that strategy can be implemented. This line of reasoning parallels the argument in the strategy literature on the importance of "fit" between strategy and organization design (e.g. Govindarajan, 1988; Gupta, 1987) but provides a reconstruction of the theoretical linkages between strategy and structure.

Definitions

Before a more detailed description of the model, we first define the key concepts.

Activity

The basic unit of analysis in our model is the individual value chain activity, which can have multiple dimensions. Here we consider three dimensions that are most relevant to analyzing the firm's choice of strategy in the international context, as follows:[1]

(a) Functional dimension (including the various business functions, such as R&D, procurement, manufacturing, marketing, finance, and accounting).
(b) Product or service dimension (involving the different lines of products or services that the firm provides).
(c) Geographic dimension (concerned with the geographic location where an activity is performance, such as the assembly of telephones in Indonesia).

One may divide a firm's value creation activities into very fine categories along these three dimensions. An activity then may consist of the performance of a particular business function (e.g. marketing) involving a specific product or service (e.g. measuring instruments) in a given geographic location (e.g. Asia).

Productive Efficiency

The productive efficiency of a strategy is a monetary measure of the economic benefits potentially obtainable from pursuing that strategy. It is the potential NPV of the given strategy, assuming the presence of a perfectly efficient incentive system that is free of any organization costs.

Motivational Efficiency

In the context of a given strategy, the motivational efficiency of an incentive system is a percentage measure of how close that system comes to perfect efficiency. Thus, the motivational efficiency of the incentive system determines what proportion of the potential NPV of the given strategy is actually realized under that system.

Net Economic Efficiency

The net economic efficiency of a given strategy/incentive system combination is a monetary measure of the economic benefits actually realized through that combination. It is derived by multiplying the productive efficiency of the strategy by the motivational efficiency of the incentive system. The net economic efficiency represents the actual NPV of the given strategy, net of the organization costs of the associated incentive system.

Strategy and Productive Efficiency

Given that a *strategy* denotes a systematic effort to exploit a particular type of synergy, the basis for any economic gain from pursuing a given strategy is the presence of synergy among the firm's value creation activities. Two activities exhibit *synergy* if the economic value that can be created from the performance of one depends on how the other is performed. Any effort to exploit the perceived synergy between two activities requires coordination between them or integrating them into one. An *activity set* refers to the grouping of two or more activities in order to create the potential for synergy. The value that can potentially be obtained from the exploitation of any type of synergy depends on the extent of the synergy and the strength of the firm's resources that enable it to perform the synergistic activities. Here we identify in particular the following five sources of synergy (see Table 1).

Table 1. Sources of Synergy and Possible Strategic Responses.

Sources of Synergy	Contributing Factors	Possible Strategic Responses
Economies of Scale	Increasing return to scale due to large fixed cost and low marginal cost.	Production activities at fewer sites. Standardization of products or promotion programs. Procurement from small number of suppliers.
Economies of Scope	Applicability of an existing asset (particularly knowledge-based assets) to gainful use in multiple activities.	Application of a core technology to multiple products or services. Adoption of an effective managerial practice in multiple geographic locations.
Learning Economies	Path dependence in learning due to asset mass efficiency. Complementarity between different sets of knowledge.	Concentration of knowledge development activities in the same geographic location. Coordination of such activities.
Co-specialization	Differential location economies. Complementarity between activities in different functions.	Dispersion and coordination of different value chain activities. Close cross-functional coordination.
Market Power	Absence of outside competitors. Attempt by outside stakeholders (e.g. governments and unions) to influence the firm's activities.	Coordination of pricing across geographic areas. Dealing with local government or union with a unified voice.

(1) *Economies of scale*. A firm may realize economies of scale by combining activities that are of the same type (R&D and manufacturing) and could be performed separately on a smaller scale in a greater number of geographic locations. In this sense, the value created by the same type of activities performed in multiple geographic locations depends on how the activities are configured across the different locations.
(2) *Economies of scope*. Economies of scope exist when an asset has excess capacity and therefore carries the potential to be re-utilized gainfully in more than one activity. Essential to realizing these economies is coordination among them. So, for example, an initiative toward distribution-related economies of scope in a specific country market would require coordination among the products or businesses in that market. Furthermore, the exploitation of the synergy may entail adaptation of the asset to the different uses or its combination with other complementary assets.
(3) *Learning economies*. Although such synergy can be attributed largely to economies of scale and scope in knowledge development activities, it also has a temporal dimension that differentiates it from the other two.

(4) *Co-specialization*. Specialization of related activities creates positive or negative economic externalities that need to be managed through coordination or integration of the activities. MNEs often have contiguous stages of production performed in different geographic locations to exploit heterogeneity in factor costs across the different links of the value chain (e.g. manufacturing of different parts).
(5) *Market power*. A firm may be able to gain market power by coordinating its upstream (i.e. procurement) or downstream (e.g. sales) activities. It may also gain bargaining power over other stakeholders such as a local government or union by negotiating with a unified voice.

Note that the effort to exploit one kind of synergy may be constrained by an effort to exploit another kind. For example, if efforts to exploit potential gains from economies of scale in manufacturing entail product standardization, these efforts could be constrained by the relative gains from exploiting in-depth knowledge of customer preferences in a particular geographic region. In effect, standardization could result in less accurate targeting of products or services.

Organizational Structure, Incentives, and Motivational Efficiency

Given that the realization of the gain from a given strategy entails efficient coordination of synergistic activities, the organizational choice involves two related tasks: One is to decide which managers should make what decisions (delegation), and the other is to provide the incentives for the managers to make decisions in the best interest of the firm (Stiglitz, 1989). The task of selecting decision makers would be straightforward without the task of providing incentives since it is always better to select the manager with better information (including knowledge) to make the decision, all things being equal. So our discussion will focus on the task of providing incentive.

The interdependence between various strategies and feasible incentive systems makes the choice highly complex. Here, the concepts of organizational economics are applied to conducting a systematic analysis. Agency theory highlights the incentive problems that arise in exchange relationships in which one party (the principal) delegates an activity to another (the agent), under the conditions that: (i) there is a conflict of interest between the agent and principal; (ii) the complete set of decisions made by the agent in executing the delegated task cannot be directly observed or cannot be verified in terms of correctness by the principal (acts of omission as well as commission); and (iii) the outcome of the agent's decisions is affected but not fully determined by the agent's actions

(Arrow, 1985). Because the principal can neither fully observe the agent's actions nor infer them perfectly from the resulting outcome, there is room for the agent to act in his own interests rather than the principal's. The principal seeks to design an incentive system that induces the agent to act in the principal's interests. Under realistic conditions, the optimal incentive system reduces the initial conflict of interest to the lowest possible level, but does not eliminate it. As a result, the agent conducts the delegated activity less efficiently (in terms of achieving the principal's objective) than if the agent were conducting the activity on his own behalf.

As argued at the beginning of this section, the choice of strategy depends not only on a given strategy's productive efficiency but also on the motivational efficiency of the best possible incentive system that can be employed to implement the strategy. The optimal strategy has to be chosen jointly with a corresponding incentive system so as to maximize the net economic efficiency of the strategy/incentive system combination. To provide the right incentives for the performance of a given activity or set of activities, the incentive system must be able to measure managerial performance either by drawing inferences from the observable outcome of the activity or activity set or by directly observing managerial behavior (Arrow, 1985).

Outcome-Based Incentive Systems

Ideally, an outcome-based incentive system should contain value creation (the outcome of primary interest to the principal) as its referent outcome. However, because it is usually not possible to measure the marginal value creation of an activity manager, outcome-based control systems usually contain as their referent outcome not value creation but some measure correlated with it (e.g. profitability, production volume, sales). The cost-effectiveness of outcome-based performance measures (from the point of view of creating incentives for value creation of the firm as a whole) particularly depends on the following four factors:

- Correlation of observable outcomes from an activity or activity set with value creation in the firm – we call this *outcome measurability*. A central principle of incentive design is that in order to impute responsibility for an outcome, an activity manager should have authority over that outcome and, conversely, should not be held accountable for outcomes that are beyond his control. However, an outcome that meets this test (e.g. sales of measuring instruments in Asia) may have a low or high correlation with value creation at the firm level so that it may be more or less reliable as a measure of the ultimate outcome of interest. The lower the outcome measurability of the observable outcome, the lower its motivational efficiency is likely to be.

- *Outcome value* refers to how central the outcome of the activity or activity set is for value creation in the firm. Different activities may be differentially critical to the firm's strategic purpose, so that the motivational efficiency of the incentives that are associated with these activities is more or less important in the design of the optimal strategy/incentive system combination.
- A second factor that affects motivational efficiency is the extent of *outcome uncertainty* (Eisenhardt, 1989), which refers to the difficulty of disentangling an agent's effort from the effect of extraneous random variables. Outcome uncertainty can arise from factors such as shocks affecting demand or costs of production, competitors' actions, the emergence of new technology, changes in interest rates, etc. If agents are risk-averse, this uncertainty creates a disincentive to exert incremental effort, and the principal has to pay more in order to induce the agent to accept the outcome-based contract.
- An additional problem arises when the efforts of more than one agent jointly determine the outcome of an activity, in the context of team production (Alchian & Demsetz, 1972). It may be difficult to determine each agent's contribution to the outcome, i.e. to disentangle the efforts of different agents. In such cases, the motivational efficiency of an outcome-based control system depends on the extent to which *outcome responsibility* can be imputed to each agent. As there is greater synergy between the activity or activity set and other activities or activity sets, it becomes more difficult to assign outcome responsibility and it may be inefficient to use an outcome-based system. A similar problem arises when there are more interventions by a central authority to coordinate the activity or activity set with other activities or activity sets, so that the outcome becomes more dependent on activities beyond the manager's control.

Behavior-Based Incentive Systems

In a behavior-based control system, performance evaluation is based on behavior or effort expended (e.g. number of new R&D projects launched or sales calls made), without reference to the outcomes. The cost-effectiveness of behavior-based performance measures depends on the observability and verifiability of managerial behavior (Barzel, 1989; Holmstrom, 1979, 1982).

- *Task programmability*. Low task programmability makes it difficult to specify ex ante what is the appropriate behavior, so that it is then difficult to verify ex post whether the manager has displayed the right behavior (Eisenhardt, 1989).
- *Proximity* of the observer or monitor. A greater distance between the manager of an activity or activity set and his/her supervisor reduces the observability of the managerial behavior.

- *Expertise* of the observer or monitor: Lack of expertise on the part of the supervisor reduces his/her ability to verify whether the manager has displayed the right behavior.

Propositions

Managerial outcomes are generally more observable than managerial behaviors, but the relative efficiency of these two types of performance measures is likely to vary from one firm to another and from one type of business to another (Jensen & Meckling, 1976). Furthermore, although outcome-based measures have stronger incentive properties than behavior-based measures, they are not as motivationally efficient under certain circumstances. We make the following propositions.

Proposition 1. Firms are likely to use primarily outcome-based incentives for an activity or activity set if it exhibits limited synergy with other activities or activity sets, ceteris paribus.

The lack of synergy with other activities or activity sets makes the activity or activity set largely autonomous (Williamson, 1975).

Proposition 2. Firms are likely to use primarily behavior-based measures for an activity or activity set if it exhibits strong synergy with other activities or activity sets, ceteris paribus.

Strong synergy with other activities or activity sets causes problems with assigning outcome responsibility (Holmstrom & Milgrom, 1990).

Proposition 3a. Firms are likely to use a combination of outcome-based and behavior-based measures for an activity or activity set when it has high outcome value and exhibits strong synergy with other activities or activity sets, ceteris paribus.

Using a mathematical model, Holmstrom (1979) showed that both outcome-based measures and behavior-based measures for an agent's performance have information value for the principal so long as neither type of measure constitutes a "sufficient statistic."

Proposition 3b. When both types of measures are used for an activity or activity set, firms are likely to put more weight on the behavior-based measures when the activity or activity set is subject to more intense intervention by a central authority, ceteris paribus.

More intense intervention reduces the correlation of the observable outcomes with the inputs of the manager responsible for the activity or activity set (Hennart, 1991).

Proposition 4. Firms are likely to use primarily outcome-based measures for an activity or activity set, ceteris paribus; (i) when its individual contribution to value creation dominates the value that can be created through exploitation of its synergy with other activities; and (ii) when managerial inputs in the activity or activity set are difficult to observe or verify.

This proposition deals with the trade-off that firms often have to make between the motivational efficiency in an individual activity or activity set and the motivational efficiency in coordinating it with other activities. An example is that some MNEs forsake the potential gains from coordinating their activities across country subsidiaries in order to give their subsidiary managers strong incentives to perform by evaluating their performance on the basis of the subsidiary's profit (Chi & Nystrom, 1998).

Proposition 5. Firms are likely to group two synergistic activities into an activity set and use primarily outcome-based measures for it, ceteris paribus: (i) when neither activity exhibits strong synergy with any activity outside the set and (ii) when managerial inputs in at least one of the activities are difficult to observe or verify.

Condition (i) makes the activity set quasi-autonomous, establishing strong correlation between the outcomes from the set with managerial inputs. If condition (ii) is not met, i.e. if managerial inputs in both activities are easily observable and verifiable, behavior-based measures should work just as well. This proposition provides the basic principle for grouping activities that also applies to situations in which multiple activities exhibit strong synergy with one another (Williamson, 1985).

It should be noted that a firm's organizational competencies, particularly its human resource management system, can enhance its ability to infer from observed outcomes the quality and quantity of managerial inputs into an activity or to observe and verify managerial behaviors directly.

Our Model and Previous Approaches: A Comparison

A diagrammatic summary of the model described in this section is provided in Fig. 1. The solid lines show the process of strategy formulation and organizational structuring discussed here. The dotted lines indicate feedback that the chosen

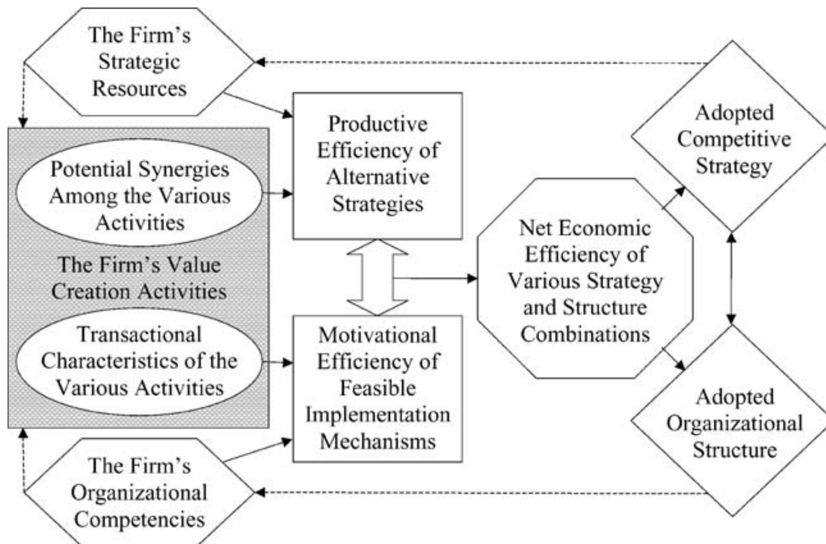

Fig. 1. Determinants of Competitive Strategy and Organizational Structure.

strategy and structure may have over time on the strategic resources and organizational competencies of the firm as well as the product, market, and geographic scopes of its activities. The following section will apply the basic model to examining the choice between global and multidomestic strategies as defined by Hout, Porter and Rudden (1982).

Building from case evidence and oriented toward managerial practice, previous authors (e.g. Bartlett & Ghoshal, 1986; Hamel & Prahalad, 1985; Prahalad & Doz, 1987) provide rich descriptions of the strategic and organizational implications of different international competitive strategy types, i.e. global and multidomestic (Hout et al., 1982) and transnational (Bartlett & Ghoshal, 1988). Global strategies exploit the cost advantages arising from treating the world market as homogeneous, whereas multidomestic strategies draw upon the countervailing benefits of regional differentiation (Prahalad & Doz, 1987). Transnational strategies attempt to achieve global cost advantages and national responsiveness simultaneously by building the capability for flexibility (Bartlett & Ghoshal, 1988).

These conceptual models of international competitive strategy types are descriptively rich. Using concepts from industrial organization economics (the structure-conduct-performance paradigm), they also offer insights into how a given factor might influence the choice of an international competitive strategy. The choice among international strategies generally is explained from an

"economic efficiency" perspective (Ghoshal, 1987). Thus, which strategy yields greater benefits is considered to be influenced by technological characteristics (e.g. economies of scale or scope), market characteristics (e.g. heterogeneity of product or factor markets), and political factors (e.g. host government regulations).

However, because this line of research primarily aims at discovering winning strategies through field work to guide managerial practices at MNEs, the models that have emerged do not have a level of analytical precision that makes them amenable to empirical verification (Devinney et al., 2000). First, at the core of each model is uniformly a typology of loosely defined strategies at a highly aggregate level (e.g. multinational, global, and transnational) that are difficult to measure empirically. Second, the theoretical determinants of the choice among the strategy types in the model are also conceptualized at a highly aggregate level (e.g. global efficiency and local responsiveness) reflecting a wide range of variables whose effects can vary widely depending on the particular permutation. For instance, differing degrees of economies of scale across different production stages (e.g. R&D, manufacturing, and marketing) can result in wide variations in the optimal configuration of the value chain activities and in the relative efficiency of the various strategies. Third, because the theories in general do not distinguish the economic objectives of a given strategy from its implementation measures, the logical linkages between the two sets of variables are left inadequately examined.

Our model allows for a more precise analysis of strategy choice in the international corporation. In the next section, we apply it to examining the effect of technological conditions on the choice of strategy. We examine how these conditions affect the strategy requirements of different activities through their impact on both productive and motivational efficiency. In the discussion below, for simplicity of exposition, we do not differentiate between different activities in different functional areas when not relevant to the discussion. We just refer to them as the activities.

THE EFFECT OF TECHNOLOGICAL CONDITIONS ON STRATEGY CHOICE IN THE INTERNATIONAL FIRM

Technological conditions that influence strategy selection include economies of scale, economies of scope, and factor cost advantages. Economies of scale influence the number of sites at which an activity is performed, economies of scale and economies of scope have implications for whether a corporation should internationalize, and factor cost advantages tend to determine where the activities

are performed. All three factors increase productive efficiency through the adoption of appropriate strategies to exploit the economies they give rise to, in that the value of a firm is high under the appropriate strategy choices in the presence of these factors. Previous approaches (e.g. Porter, 1986) suggest that the existence of these factors favors a global strategy involving centralized coordination over a multidomestic strategy involving local autonomy. It is not clear why this should be true if only productive efficiency is considered in the analysis (as is typical in previous approaches). For example, the increase in productive efficiency resulting from economies of scale depends only on production volume, but should be independent of whether a global strategy with centralized coordination or a multidomestic strategy with local autonomy is adopted. Our analysis suggests that these factors should affect strategy choice only for reasons of motivational efficiency, not productive efficiency.

Economies of Scale

In the presence of economies of scale in an activity, an international corporation will tend to expand output volume to the level at which the scale benefits accruing are maximized. Scale economies arise from cost reductions attendant to large volume, and may be associated with any activity in the value chain. Note that these economies must accrue at levels of operation which are larger than national markets to facilitate internationalization. Significant economies of scale for any activity result in its being concentrated at comparatively few locations worldwide (Porter, 1986).

A strategy based on realizing synergies from economies of scale may imply the requirement for a behavior-based incentive system or a hybrid pyramidal incentive structure. To examine this, consider an international firm with two activities: manufacturing and sales. The manufacturing activity is subject to economies of scale so that manufacturing is concentrated at a few locations. The output from each plant is shared across sales units at different locations. Two different incentive issues arise under this scenario. Consider first the project investment activity, which relates to the establishment of production facilities (as distinct from the production activity). It is difficult for investment decisions (concerning the size, location, and number of new plants) to be made at the level of any single subsidiary. Since the impact of the project is likely to be across subsidiaries, the information required to make the decision will not be available at any one subsidiary. While the information of the different subsidiaries could be pooled at one of them as easily as at the main office, turf battles and empire building tendencies will probably compromise the ability of any subsidiary to reach the decision that is actually optimal for the corporation.

In this case, key decisions will be made at headquarters and implementation delegated to the appropriate subsidiary. With decision-making and implementation unlinked, the motivational efficiency of an outcome-based incentive system decreases. It is difficult to allocate outcome responsibility for the project between the main office and the implementing subsidiary. Thus, motivational efficiency considerations favor a behavior-based incentive system for the project investment activity.

The second incentive issue concerns ongoing coordination between manufacturing and marketing activities. The optimal incentive structure depends on the interaction between economies of scale and other technological and environmental conditions. We illustrate this by considering two different scenarios.

Consider, first, that the firm operates in relatively stable environments with a product that is highly standardized across geographic locations. Eisenhardt (1989) suggests that task programmability is high when the activity is subject to little variation. Thus, product standardization not only increases the relative productive efficiency of a strategy to realize synergies from scale economies but, through its effect on task programmability, also increases the relative motivational efficiency of a behavior-based incentive system. Further, scale economies create functional interdependence between the activities. Because the output from each manufacturing unit is shared across sales activities at several geographic locations, the outcome for one activity is affected by the performance of the other. This applies not just to profits, but also to production and sales. Sales may be constrained by production output; production may be affected by sales volume. Allocating outcome responsibility between the manager of the production and sales activities is difficult. In this scenario, four factors work together to favor that the sales and manufacturing activities are grouped together into an activity set to realize the potential for synergies based on scale economies: a stable environment, product standardization, task programmability, and difficulty in assigning outcome responsibility (in the Porter terminology, this would be called a global strategy). The first two factors increase the relative productive efficiency of this strategy and the last two increase the relative motivational efficiency of a behavior-based incentive system. Note that scale economies affect the decision to centrally coordinate via a global strategy only through motivational efficiency because of the outcome responsibility problem they engender.

Under the second scenario, assume that the firm operates in relatively unstable national markets with non-standardized products (due, say, to local adaptation to demand characteristics that are differentiated by markets) but everything else remains unchanged. Now, different factors work in opposite directions. Unstable environments and non-standardization act to increase the relative productive efficiency of a strategy to realize synergies based on geographical co-specialization

(in the Porter terminology, a multidomestic strategy). Economies of scale act to increase the relative productive efficiency of a global strategy, as described above. If we restrict the choice to a global or a multidomestic strategy, the choice would depend on which factors are more important.

Our model shows how the externality arising from interdependence can be internalized under a hybrid strategy/incentive system combination. Outcome uncertainty problems associated with unstable environments, and outcome responsibility problems associated with the functional interdependence between manufacturing and marketing, reduce the relative motivational efficiency of an outcome-based incentive system for an autonomous national subsidiary. Instead, each manufacturing plant and its associated marketing units can be constituted into an integrated operating division for purposes of effectively realizing the synergies possible under these circumstances. Headquarters oversees each division following an outcome-based incentive system. The marketing activities within each division are controlled (from divisional headquarters) by a behavior-based incentive system. Note that this hybrid strategy/structure combination arises for reasons other than simply the productive efficiency of economies of scale. Through the outcome responsibility problem, economies of scale influence the behavior-based incentive system adopted by divisions vis-à-vis their internal activities.

This hybrid strategy/structure combination is neither a global strategy nor a multidomestic strategy because it contains elements of both. It would not be incorrect to classify it as a transnational strategy, but this terminology would obscure important elements of this particular hybrid form. It is more accurate to consider the hybrid strategy-structure combination we describe as *one* of many possible permutations of a transnational strategy. A strength of our model is that it unbundles the complexities of the so-called transnational strategy in an analytically rigorous manner that highlights the various unique permutations of attempts to exploit synergies and the associated incentive systems.

This specific example accurately represents what we consider to be the general effect of economies of scale. To the extent that economies of scale result in an activity being concentrated in a small number of locations, each serving multiple operations, functional interdependence arises. Difficulty in allocating outcome responsibility reduces the net economic efficiency of a design involving an outcome-based incentive system for each interdependent activity. The incentive structure that is actually optimal depends in part on additional factors such as product standardization, stability of the business environment, and task programmability. If these factors favor a behavior-based incentive system, that is optimal. If they favor an outcome-based system or increase the relative productive efficiency of delegation, the hybrid incentive system may be optimal.

Economies of Scope

Economies of scope arise when the cost of joint production of two or more goods by a multiproduct firm is less than the combined cost of production of these goods by single-product firms. Such economies arise from the shared use of inputs that are quasi-public in nature. In other words, "once the inputs are acquired for use in producing one good, they are available costlessly for use in the production of another" (Baumol, Panzar & Willig, 1982, p. 76).[2] A diversified international corporation may share physical assets (e.g. production equipment) or intangible assets (e.g. brand name, external relations with customers, suppliers and buyers, and knowledge) among its subsidiaries (Ghoshal, 1987). The existence of economies of scope may indicate the adoption of an international posture if the efficient utilization of certain key inputs is contingent on geographic diversification, and there are significant obstacles to market transfers of the excess capacity of these inputs (Teece, 1980).

As with economies of scale, economies of scope in certain activities contribute to productive efficiency through a strategy of exploiting these economies. At the same time, to realize the potential synergies from economies of scope among the activities, a behavior-based incentive system may be necessitated. For example, consider brand name reputation, a commonly cited source of economies of scope. A food franchising corporation may manage its worldwide operations by setting operating standards and goals in order to achieve consistency of products and facilities and maintain the integrity of its brand reputation worldwide. Under these circumstances, the quality control activity is characterized by high task programmability, increasing the motivational efficiency of a behavior-based incentive system. However, task programmability need not characterize other aspects of worldwide franchise operations. It may be important that area managers are free to formulate and implement strategy in the different regional zones in order to compete effectively in these markets. Under these circumstances, an outcome-based incentive system that holds each area manager responsible for production and sales performance in his territory may exist side by side with a behavior-based incentive system for the quality control activity, ensuring that the common input across geographic regions (brand reputation) is not jeopardized.[3]

Further, economies of scope may create interdependence among multiple activities and thus cause problems with allocating outcome responsibility. Note that economies of scope arise from utilizing the same resource in producing two or more products. When these are resources (tangible or intangible) whose efficient utilization is the key to the success of the international posture, allocating outcome responsibility is more likely to be a problem. For instance, for an international corporation competing in high-technology areas, economies of scope accruing

from shared R&D across products and across national boundaries are likely to be an important source of competitive advantage. Under these circumstances, it may be difficult to ascertain to what extent the performance of a given subsidiary is due to its own efforts and to what extent it stems from the benefits of shared R&D. In order to effectively implement a strategy to realize synergies from shared R&D results, a behavior-based control system is likely to be optimal not only for R&D activities but also for other activities whose outcomes are affected by the shared R&D input. Again, this strategy-structure combination is favored for reasons of motivational efficiency, not productive efficiency.

Factor Cost Advantages

Factor cost advantages result from capitalizing on intrinsic factor cost differences between countries. To obtain these advantages, the firm locates activities in its value chain in those countries with the lowest cost of the factors that the activities use intensively (Porter, 1986). As in the case of economies of scale, concentrating an activity in one location, with the outputs of that activity being shared across other activities at different geographic locations, creates interdependencies among activities. The consequences are similar to those discussed for economies of scale. However, given interdependence among geographic subsidiaries that specialize in different activities, it may not be possible to alleviate the outcome responsibility problem in the same way as could be done under manufacturing economies of scale. Just as in the case of economies of scope in R&D, the difficulty lies in creating independent divisional clusters.

Thus, in realizing the benefits from scale economies, scope economies, or factor cost differences, operations in different geographic regions become increasingly interdependent across activities. The interdependence is due to the need by the international corporation for a combined thrust to serve its shared markets. Interdependence creates problems in allocating outcome responsibility among different activities, and tends to favor a behavior-based incentive system for all interdependent activities. This effect arises from motivational efficiency reasons rather than from productive efficiency reasons. The strategy that actually turns out to be optimal is determined by both productive and motivational efficiency.

CONCLUSION

The strategies, structures, and systems employed by multinational firms to compete effectively in the international marketplace represent a critical question

of interest for researchers and practitioners in the field of international strategy. Previous conceptual models of international competitive strategy types, though descriptively rich, offer an oversimplified analytical approach of the choice of strategy in that they identify a number of loosely defined strategy types and suggest that the choice between them is based on their relative productive efficiency (in economic terms). In contrast, our conceptualization of strategy specifically focuses on types of synergy. Drawing on the organizational economics literature on which the theory of the multinational enterprise (e.g. Buckley & Casson, 1976; Caves, 1982; Dunning, 1988; Hennart, 1982; Hymer, 1960; Kindleberger, 1969; Rugman, 1981) is also based, we highlight that realizing productive efficiency from strategies to realize the different forms of synergy entails delegation and coordination, requiring an incentive system. Organizational economics suggests: (a) the optimal incentive system is never perfectly efficient; and (b) the realizable value of a strategy also depends on the efficiency of the feasible incentive system. We propose that a different proportion of available productive efficiency is realized under each strategy, depending on the motivational efficiency of the best possible incentive system for implementing the strategy. Not only do the firm's past choices affect the relative feasibility of various strategic and organizational choices today, but its current choices also influence what strategic and organizational competencies it will have in the future. Our analysis yields a theoretical framework for analyzing the MNE's strategy and structure by examining both the productive efficiency and the motivational efficiency of various strategy and structure combinations. An advantage of our model is that it identifies precise relationships between critical concepts so that it is amenable to empirical measurement and testing.

NOTES

1. In the more general context, other dimensions would also be relevant to consider, e.g., the customer dimension (concerning different customer accounts or customer types that the firm serves, such as industrial customers vs. consumers).
2. In practice, there are likely positive marginal costs associated with putting the inputs to an additional productive use. Economies of scope still exist, however, so long as the costs are significantly lower than the costs of acquiring those inputs.
3. This is not to imply that economies of scope necessarily indicate task programmability.

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ORCHESTRATING GLOBALLY: MANAGING THE MULTINATIONAL ENTERPRISE AS A NETWORK

Arvind Parkhe and Charles Dhanaraj

ABSTRACT

MNEs can usefully be conceptualized as intraorganizational networks; structurally, they often resemble loosely coupled systems. With subsidiaries possessing assets, resources, and capabilities crucial to the worldwide network, management by fiat is unlikely to be effective, and an integration of headquarters/subsidiary perspectives is necessary. Yet the MNE literature is surprisingly silent on the who, what, and how of such integration. This paper introduces the notion of "orchestration" and suggests that high performance requires headquarters to effectively manage the orchestration processes of mobilizing resources, appropriating value, and ensuring global network stability. Research propositions are developed and managerial implications are discussed.

INTRODUCTION

Once the picture is defined, everything else becomes the background.

Source Unknown

Several theoretical perspectives have been employed to study multinational enterprises (MNEs), including internalization theory (Rugman, 1981), eclectic

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theory (Dunning, 1979), market imperfection theory (Caves, 1982), transaction cost economics theory (Hennart, 1982), and organizational learning theory (Kogut & Zander, 1993). Each perspective focuses on its own set of core variables and central phenomena, with everything else relegated to the background. Often, the result is major gaps in knowledge. For example, through what processes do MNE headquarters manage assets and relationships dispersed across products, functions, and geography? In this paper, we propose that recent works rooted in network theory (Burt, 1997; Kenis & Knoke, 2002; Uzzi, 1997; Wasserman & Faust, 1994; Wasserman & Galaskiewicz, 1994) may provide the needed focus on critical aspects of MNE structuring and operation. Several scholars have focused on the structural aspects of MNEs (Birkinshaw & Hood, 1998; Ghoshal & Bartlett, 1990; Nohria & Ghoshal, 1994; O'Donnell, 2000).

We present a framework for understanding how HQs orchestrate their global networks, given the reality that subsidiaries across the globe, each embedded in unique social contexts, work more like a loosely coupled interfirm network than like a tightly knit single enterprise under hierarchical control (Ghoshal & Bartlett, 1990). We define network orchestration as the set of deliberate, purposeful actions undertaken by the HQ as it seeks to create and disburse value throughout the worldwide MNE network. An understanding of the orchestration process is critical as there are serious challenges inherent in the management of MNEs to ensure a flexible yet efficient organization (Bartlett & Ghoshal, 2000). Orchestration does not imply fiat control of the HQ over the subsidiaries; rather, it explicitly recognizes that power is distributed between HQ and the subsidiaries, and that there exists a strong interdependence between HQ and the subsidiaries, as well as among the subsidiaries, although such a distribution may be asymmetrical (Medcof, 2001).

This paper attempts to highlight how network theory can be applied to MNE organization. First, we review the existing network and MNE literatures to highlight how a network perspective can enrich the MNE theory. Next, we elaborate the three orchestration processes that HQ must perform: managing resource mobility, value appropriability, and network stability. Finally, we close with a comment on the essential duality of network structure and orchestration processes that draw value from the structure.

NETWORK THEORY AND MULTINATIONAL ENTERPRISE

Modern network theory has been influential in management research, particularly in the study of interorganizational relationships (Gulati & Gargiulo, 1999; Holm et al., 1995; Jarillo, 1988). Network theory is particularly suited to address the

complex issues of a diversified MNE because it can address them simultaneously at both the macro and micro levels (Doz & Prahalad, 1991). In an insightful article, Ghoshal and Bartlett (1990, p. 620) suggest that the network approach "is particularly suited for investigation of such differences in internal roles, relations and tasks of different affiliated units, and of how internal coordination mechanisms might be differentiated to match the variety of subunit contexts." Network theory explicitly addresses the social embeddedness of economic action (Granovetter, 1985), so it will be well suited to investigate the MNE with distributed and diverse social contexts. Figure 1 shows a multinational network with a headquarters (shown here as H) and the different subsidiaries (marked A to F). Following Ghoshal and Bartlett, we show the home country operation separately from the HQ just to streamline our conceptual thinking. In addition to this intraorganizational network, we have at each subsidiary a localized interorganizational network based in that country where the subsidiary is located, which may comprise the network of customers, suppliers, competitors, and regulatory agencies. The recent suggestion that MNEs serve as flagship firms working in concert with customers, suppliers, competitors, and regulatory agencies is in line with the network concept of MNEs (Rugman & D'Cruz, 2000). If MNEs are viewed as an interorganizational network, the nature of control relations between the MNC units "can be explained by selected attributes of the external network in which it is embedded"

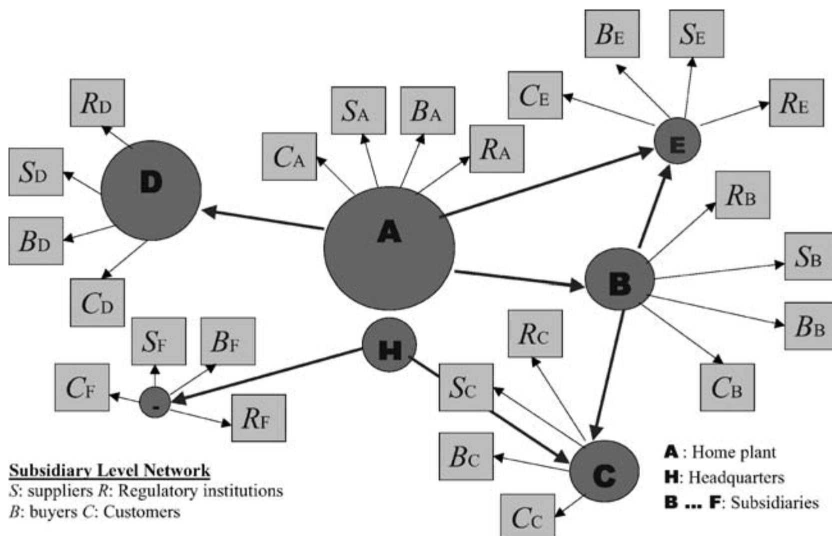

Fig. 1. Multinational Enterprise as a Network.

(Ghoshal & Bartlett, 1990, p. 604). In proposing a theory of flagship firms, Rugman and D'Cruz present empirical evidence of the internal and external networks of MNEs, which operate as flagship firms to coordinate the global tasks. While each of these studies has helped further our understanding of MNEs from a network perspective, a "complete development of theory," as called for by Ghoshal and Bartlett (1990, p. 621), still remains to be done. As a first step to building such a theory, we present here the key constructs of network theory and how they can be applied to MNEs.

Progress in network theory has been rapid in the past two decades (Marsden, 1990; Wasserman & Galaskiewicz, 1994). The network approach, developed out of analytical insights from sociometry, defines social structure in terms of relations among the units – individuals, collectives (including organizations), or nations. Moving away from the concept of networks as a sensitizing metaphor and towards its development as a research tool, this approach attempts to interpret the behavior of actors in a network in terms of their network positions (Burt, 1992). Emphasis has been placed on the constraints and the differential opportunities owing to the social capital to which actors have access (Burt, 1997). In analyzing the impact of social relations, network theory focuses on three major constructs: *network range*, *network structure*, and *network position*.

Network range typically covers both the size of the network and the diversity of the membership (Burt, 1987). This typically is treated in social network theory as a boundary specification issue, which defines the units to be included in the analysis. It is also referred to as "organizational field-net," identifying "the set of organizational actors that the researcher believes may be relevant to an empirical investigation" (Kenis & Knoke, 2002, p. 276). This translates to direct and indirect ties that a focal organization has (Ahuja, 2000; Shan et al., 1994), or board interlocks (Galaskiewicz & Wasserman, 1989; Palmer et al., 1986), or the subsidiaries in different countries in the multinational setting (Ghoshal & Bartlett, 1990; Holm et al., 1995; O'Donnell, 2000).

Network structure describes the nature of ties within the network using measures such as density and structural holes or structural autonomy. Network density is a macro-level property of a network defined as the ratio of existing linkages among the members to the number of all possible dyadic linkages. Typically, higher density leads to higher social capital (Coleman, 1990; Walker et al., 1997). Structural holes in a network refer to the absence of linkages between two actors who are linked to a focal actor (typically called "ego" in network parlance). Someone who has access to two actors not connected either directly or indirectly enjoys structural autonomy that comes from access to two non-redundant information sources, as well as the benefit of being able to enjoy a unique controlling position, which Burt (1992) terms the "*Tertius Gaudens*." For example, an HQ in a multinational network that

is linked to two different subsidiaries in two different countries, each of which has access to a local network of organizations in that country, would enjoy structural autonomy in the multinational network. Network theory posits that structural holes create an entrepreneurial opportunity, which may or may not be exploited by an actor.

Network position, a key construct in network theory and a micro-level property that assigns each actor an identity within the network, is measured using centrality or status. Drawing from graph theoretic models, network analysts consider four types of position centrality: degree centrality, closeness centrality, betweenness centrality, and information centrality (Wasserman & Faust, 1994). *Degree centrality* is typically a measure of the number of direct ties a network actor has, whereas *closeness centrality* and *information centrality* take into account the indirect ties and tend to signal the efficiency of the linkages and the information access. *Betweenness centrality* attempts to measure the extent to which an actor falls between other pairs on the shortest paths connecting them. Centrality signals the power of an actor within the network. Finally, the status of a player is typically defined by the ties of a given firm with other firms in the market, such as buyers, other producers, and the third parties who play intermediary roles (Podolny, 1993). For a producer of a given level of quality, status translates into both higher revenues and lower production costs and becomes a critical signal of trust during times of uncertainty (Podolny, 1994). Status has a broader conceptual coverage than centrality, as it considers actors outside the focal network as well as the social embeddness of the actor. For example, the status of a subsidiary is an outcome of the subsidiary's links to the local market players, whereas the centrality of a subsidiary is an outcome of the linkages within the multinational network. The network position of a subsidiary can be a powerful way to characterize its differentiated power in the network, which necessarily implies differential action emphasis from the HQ.

Network density and the structural autonomy of the actors in a network often define the network centrality, which is a measure of structural differentiation in the network. In a structurally differentiated network, it is possible to assign unique positions to actors as core, peripheral, or semi-peripheral. In a structurally undifferentiated network, every actor is connected to every other actor, leaving all the network players in identical positions (Gulati & Gargiulo, 1999; Nohria & Ghoshal, 1994). As mentioned earlier, several studies have looked at the structural design issues, but the overarching issue of how actions across the different subsidiaries are coordinated, which we call "orchestration", have not been addressed in the literature. Both structural design and orchestration are critical for overall performance. However, we focus here only on the orchestration processes and their relationship, individually and jointly, to MNE performance.

MNE HEADQUARTERS AND ORCHESTRATION

From the perspective of an HQ, value must be created and extracted from the network of distributed assets, and its effective creation and extraction hinges on certain deliberate, purposeful actions. In the particular context of MNEs, the first task of orchestration involves ensuring *resource mobility*. Resources cover a broad range of assets, particularly the knowledge and human assets of the MNE. Significant value cannot be created and MNE performance will be minimal if the specialized knowledge of each network member stays mostly locked within its organizational boundaries. Conversely, an HQ that can assess the value of relevant resources residing at different points in the network and arrange the transfer of these resources to other points in the network where it is needed (Doz, 1996; Gulati, 1999; Hansen, 1999), and that can learn from the subsidiaries and exploit resources that are made available through them (Gulati & Singh, 1998; Inkpen & Dinur, 1998; Kale et al., 2000; Khanna et al., 1998), will successfully promote resource mobility.

Targeted mobility of resources within the network leads, it is hoped, to cutting-edge, proprietary value creation. The second task of orchestration involves managing *value appropriability* (Pisano, 1990; Teece, 1986, 2000). HQ must ensure that it is privy to all the value created by its subsidiaries and that the subsidiaries do not attempt to "cheat" (Beamish & Banks, 1987; Dyer & Nobeoka, 2000; Mowery et al., 1996). Moreover, it must ensure that value is not leaked through its subsidiaries to other network actors who are linked to competing networks.

Finally, MNE networks are loosely coupled systems (Ghoshal & Bartlett, 1990; Orton & Weick, 1990), with unstable linkages among network members. Lack of cohesion among subsidiaries can exacerbate the instability, whereby peripheral actors may opt to stop collaborating with HQ and pursue independent, divergent strategies (Gomes-Casseres, 1994; Kogut, 1988; Stuart, 2000; Uzzi, 1997). Fostering *network stability* is the third task of orchestration.

Figure 2 summarizes the above discussion. Before we discuss in greater detail each orchestration process, we note that subsidiaries have a significant influence in shaping corporate strategies; thus, orchestration by HQ implies facilitating the coordination rather than treating the subsidiaries as mere implementers. By its strategic choice of linkages and new investments, HQ can significantly change the network membership (both size and diversity) and structure (density and autonomy). Through such investment and brokering activities, HQ can control its network position, maintaining its centrality and status. These structural variables and their impact on innovation have been examined elsewhere (Ahuja, 2000; Ghoshal & Bartlett, 1990; Gulati & Gargiulo, 1999; O'Donnell, 2000;

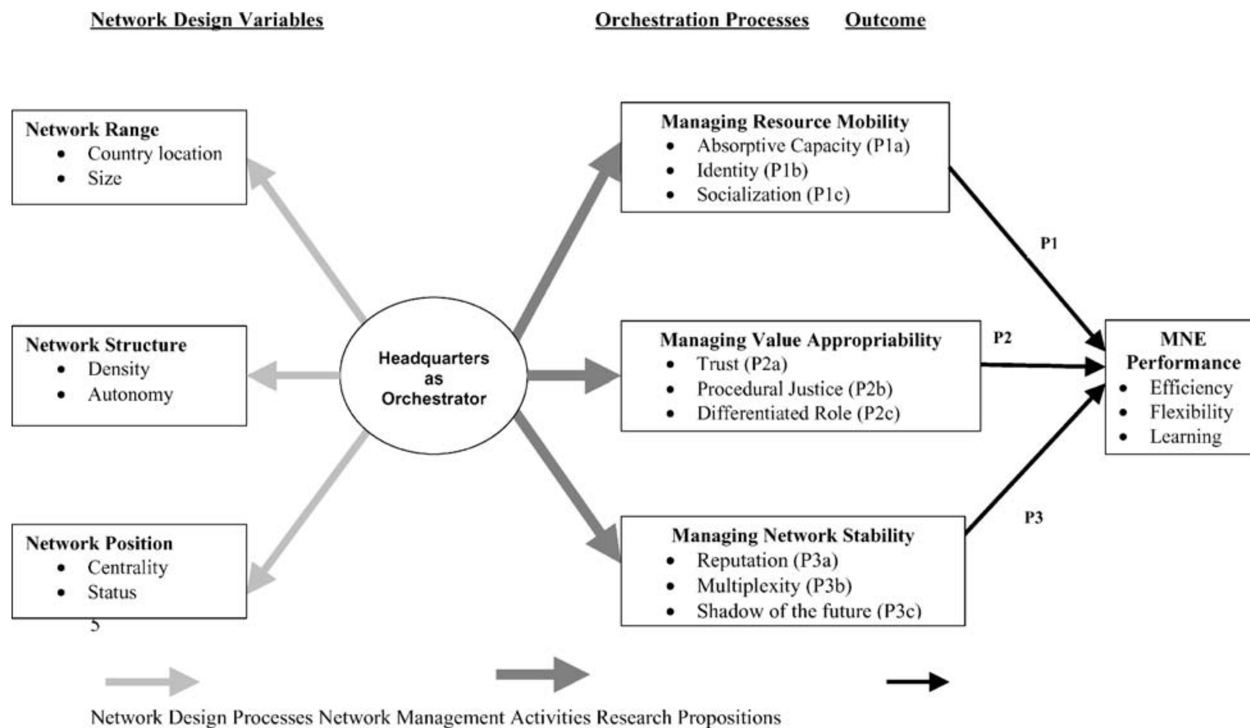

Fig. 2. A Framework for Orchestration in GLOBAL Networks.

Powell et al., 1996), so we restrict our focus here to the orchestration processes shown in Fig. 2.

RESOURCE MOBILITY

Early theories of MNEs were built around the notion of exploiting home-based advantage at overseas subsidiaries, which played a passive role as implementers of the MNE's strategy. Traditionally, these MNEs exploited scale economies or arbitraged imperfections in the world's factor markets (Buckley & Casson, 1976; Vernon, 1966). However, recent works suggest that MNEs depend on innovations and resources not only in the home market but also in a growing number of subsidiaries. Leveraging the distributed and diversified asset base for resource creation has emerged as a key factor in the global markets. The dispersed knowledge structure that induces collaborative networks also necessitates an enhanced capability within the network to learn and teach across organizational boundaries. As orchestrator, the HQ shoulders the brunt of the responsibility for enhancing resource mobility and leveraging competencies in the network. Put another way, innovation and resource creation outputs in two otherwise identical networks will differ greatly if the networks' resource mobility levels are different. Hence,

> **Proposition 1.** Resource mobility will be positively related to MNE performance.

Enhancing resource mobility requires a hub firm to focus on three specific factors: absorptive capacity, network identity, and interorganizational socialization.

Absorptive Capacity

Innovation arises out of new combinations of existing capabilities (Kogut & Zander, 1996; Schumpeter, 1961). Combining relevant technologies in novel ways requires absorptive capacity, or the "ability to identify, assimilate, and exploit knowledge from the environment" (Cohen & Levinthal, 1989, p. 569), which essentially reflects a learning capability at the organizational boundaries (Inkpen & Dinur, 1998; Lyles & Salk, 1996; Simonin, 1999). A firm may strengthen absorptive capacity by increasing its R & D intensity and the diversity of its internal projects. Failure to invest in internal R & D may lead to the erosion of absorptive capacity, which will reduce knowledge mobility in the network. On the other hand, the higher the absorptive capacity, the more effectively network members will process external knowledge, and the higher the resource mobility. Hence,

Proposition 1a. Absorptive capacity will be positively related to resource mobility and to MNE performance.

Network Identity

Although absorptive capacity provides the necessary infrastructure for knowledge mobility, far more is needed. As loosely-coupled systems, networks lack hierarchical structures. Hedlund (1986) notes that an MNE should be seen more as a heterarchy than a hierarchy. In this setting, creating a common identity among network partners is essential to "motivate members to participate and openly share valuable knowledge (while preventing undesirable spillovers to competitors), prevent free riders, and reduce the costs associated with finding and accessing different types of valuable knowledge" (Dyer & Nobeoka, 2000, p. 348). A common identity among network members creates the "logic of confidence and good faith" (Meyer & Rowan, 1977) and provides the "cohesive force" (Orton & Weick, 1990) imperative for creating an environment for knowledge to flow. Likewise, Brown and Duguid (2001) found that in communities of practice, identity provides the bond that determines whether knowledge is "sticky," making it difficult to flow, or "leaky," allowing generous flow. A strong network identity creates a shared social context and a sense of community across national contexts that actively promote value creation. Thus,

Proposition 1b. Common identity among network members will be positively related to resource mobility and to MNE performance.

Socialization

Related to network identity and conceptually distinct from it is the perspective of organizational learning that views learning as socially constructed (Brown & Duguid, 2000, 2001; Nonaka & Takeuchi, 1995). The serendipitous nature of innovation makes it impossible to predict the exact nature and timing of innovative outputs, and necessitates within a network broad socialization across organizational boundaries designed to increase social and relational capital. Interpersonal contacts are vital for achieving the MNE's goals of efficiency and innovation. The exchange of information that socialization brings about allows the various subunits of the MNE to take advantage of the opportunities for arbitrage. Chance discoveries and combinations of ideas in novel ways based on information obtained through interpersonal contacts can greatly enhance innovation. As Kale et al. (2000) argued,

relational capital between partners enhances learning capability. Recent research supports this argument, showing that social capital positively affects innovation (Ahuja, 2000; Shan et al., 1994), informal communication promotes knowledge acquisition (Lyles & Salk, 1996), and social networking facilitates sharing of tacit knowledge (Makhija & Ganesh, 1997). Thus, an HQ that provides exchange forums and formal and informal communication channels, both within and outside the immediate organizational tasks, will enhance socialization and promote resource mobilization. Hence,

> **Proposition 1c.** The degree of socialization in an MNE network will be positively related to resource mobility and to MNE performance.

VALUE APPROPRIABILITY

Knowledge mobility within a network encourages value creation. Yet HQ must take the next step to ensure that the value thus created is distributed equitably, and perceived as such by its subsidiaries. Because such distribution is often complicated by problems of differentiated roles that subsidiaries play, appropriability becomes a concern (Arrow, 1974; Schumpeter, 1942; Teece, 1986, 2000). Rugman and Verbeke (2001) point out that even when there is no opportunism, the sheer fact of bounded rationality when the subsidiary competencies are not aligned with HQ competencies means that performance evaluation will be problematic and can be a source of appropriability problems. If top subsidiary managers do not see that they receive a fair share of the value created at the subsidiaries, their willingness to participate in the value creation process will be limited. Thus,

> **Proposition 2.** Value appropriability will be positively related to MNE performance.

Evidence has repeatedly shown that a tight appropriability regime rests not so much on writing lengthy contracts and exercising litigation options (Macaulay, 1963; Williamson, 1985) as on a reliance on social interactions with subsidiaries and the use of trust, rich information sharing, and joint problem solving (Uzzi, 1997). As such, HQ can ensure equitable distribution of value and mitigate appropriability concerns by focusing on trust, procedural justice, and joint asset ownership.

Network Trust

Doz et al. (2000, p. 241) observed that in an R&D network, "a legitimate triggering entity may be required to lessen the concerns of potential participants that the costs

and benefits of collaboration will be shared 'fairly.'" This triggering entity is the HQ. The logic is straightforward: In MNEs, given the uncertainty of the value creation process and the tacitness of the shared knowledge, a crucial element of network orchestration is to play the championing role in building trust levels and in communicating clear, pre-established sanctions for trust violation. Hence,

> **Proposition 2a.** The level of trust will be positively related to value appropriability and to MNE performance.

Procedural Justice

As noted, appropriability concerns stem from two sources: (1) free rider behavior whereby an actor may not bring in the best ideas to the network but enjoys the benefits of the knowledge flow in the network; and (2) opportunistic behavior that would take away the potential commercialization of new ideas unfairly, or take advantage of the openness of the other actors in the network (Teece, 2000). In MNEs, specifically, additional challenges may arise. These include the high variability in the outcome of the research activities carried out by network partners (resulting from the high level of uncertainty in the innovation process) and differential benefits accruing to different firms in the network from the same outcome (Khanna et al., 1998). Kim and Mauborgne (1998) found that in such situations, procedural justice has a strong, positive impact on voluntary cooperation and discourages the hoarding of ideas. (Distributive justice is the fairness of the decision outcome, whereas procedural justice is the fairness of the decision process.) Thus, an HQ seeking to engage the best efforts of subsidiaries by strengthening value appropriability might employ several designing principles of procedural justice (Kim & Mauborgne, 1998), including bilateral communications, the ability to refute decisions, a full account of the final decisions, and consistency in the decision-making process. Therefore,

> **Proposition 2b.** Procedural justice will be positively related to value appropriability and to network innovation output.

Role Differentiation

A central role for the HQ is to ensure that the value is distributed equitably across the HQ and the subsidiaries. It is now increasingly known that a "United Nations" model, in which each subsidiary is treated as an equal member of the federation without regard to its unique contribution, does not serve that purpose (Bartlett &

Ghoshal, 2000). Subsidiaries will differ in their roles based on how they evolve within the network, their overall mission within the network typically assigned by the HQ, the choices they make driven by enterprise and perceived capabilities, and the local environmental determinism (Birkinshaw & Hood, 1998). Accordingly, they will vary in their size and status. Thus, the HQ's ability to differentiate its subsidiaries within its network according to their resources and capabilities and to provide a differentiated control structure rather than a unified one will enhance its capacity to distribute value equitably and should lead to an overall effectiveness of resource allocation in the MNE network. Hence,

Proposition 2c. Role differentiation across an MNE network will be positively related to value appropriability in the network and to MNE performance.

NETWORK STABILITY

A network that is unraveling or highly fluid is not conducive to value creation or value extraction, so a critical task for hub firms is to promote network stability (Ebers & Grandori, 1999; Kenis & Knoke, 2002; Madhavan et al., 1998; Palmer et al., 1986). In a multinational network, maintaining network cohesiveness so as to motivate the subsidiaries to align strategically with the HQ is paramount to achieving high performance levels. Stability poses an interesting dilemma in an MNE network. On one hand, being a loosely coupled organizational form, networks possess the virtues of adaptation and agility. On the other hand, excessive erosion of network ties can lead to instability, which in turn can significantly impair value output (Lorenzoni & Lipparini, 1999).

Network instability can occur in several ways, including isolation and goal incongruence. Occasionally there are reports of subsidiaries branching off to set off on their own. More often, we find subsidiaries whose strategies are in direct conflict with HQ. There are also instances where subsidiary top managers who are privy to the proprietary knowledge of the MNE may decide to leave the subsidiary (Beamish & Banks, 1987). The greater the instability, the lower the network's value creation capabilities (Lorenzoni & Lipparini, 1999). Therefore,

Proposition 3. Network stability will be positively related to MNE performance.

While ownership of the subsidiary entitles the HQ to a sense of continuity, the orchestration challenge is to increase the network's dynamic stability (maintain a non-negative growth over time), which it can do in several ways: enhancing reputation, enlarging the shadow of the future, and building multiplexity.

Reputation

Many market transactions are supported by a good reputation alone (Macaulay, 1963). In the presence of high levels of outcome uncertainty, as in a typical innovation process, compounded by the uncertainties of potential partner behavior, reputation provides the signaling effect of trustworthiness (Podolny, 1993). Empirical studies suggest that reputation is significant in attracting alliances and acquisitions (Dollinger et al., 1997). Maintaining and enhancing a good reputation provides twofold support to the stability of the HQ's network – it discourages actors' attempts to disconnect ties with the hub firm, and it encourages the formation of new ties, both of which work to stabilize the network structure, even in the absence of hierarchical or contractual terms. Thus,

> **Proposition 3a.** The reputation of the MNE will be positively related to network stability and to MNE performance.

Shadow of the Future

Experimental evidence suggests that although non-cooperation emerges as the dominant strategy in single-play situations, under iterated conditions the incidence of cooperation rises substantially (Rapoport & Chammah, 1965). The assumption here seems intuitively reasonable: Broken promises in the present will decrease the likelihood of cooperation in the future. By the same token, cooperation in the current move can be matched by cooperation in the next move, and a defection can be met with a retaliatory defection. Thus, iteration improves the prospects for cooperation by encouraging strategies of reciprocity (Uzzi, 1997; Wasserman & Galaskiewicz, 1994). Through expectation of reciprocity – and its corollary, anticipated gains from mutual cooperation – the future casts a shadow back upon the present, affecting current behavior patterns. This bond between the future benefits a network member anticipates and its present action is called the "shadow of the future." The longer the shadow of the future, or the thicker the nexus between current moves and future consequences, the more network stability is enhanced since forward-looking expectations of gains hold in check the proclivity toward agreement violations. HQ can fortify reciprocal behavior and make the shadow of the future an effective promoter of cooperation by lengthening the time horizon, increasing the frequency of interaction with network partners, and promoting behavior transparency (Parkhe, 1993). Hence,

> **Proposition 3b.** The shadow of the future will be positively related to network stability and to MNE performance.

Multiplexity

Network multiplexity is defined as two or more types of relationships occurring together (Kenis & Knoke, 2002). Increasing multiplexity (e.g. a hub firm undertaking additional joint projects with network members, or encouraging other network members to do so) expands the scope of existing relationships. As firms interact more broadly and deeply with each other, they better understand each other's capabilities and idiosyncrasies, leading to more robust relationships and heightened network stability. Park and Russo (1996) found empirical support for the proposition that alliances with a broader scope are more stable, reinforcing Kenis and Knoke's point that "multistranded relations reinforce the ties among the field's members, making them more resistant to dissolution than are ties in a single stranded network" (2002, p. 284). Hence,

Proposition 3c. Multiplexity will be positively related to network stability and to MNE performance.

CONCLUSION

Within the MNE literature, the study of mechanisms to coordinate the growing number of dispersed yet interdependent subsidiaries has been a critical issue for both researchers and managers. The structural focus has moved over the past three decades from a decentralized federation to a centralized hub to an integrated network (Martinez & Jarillo, 1989). As Ghoshal and Bartlett (1990) point out, much of the *network* discussion has been more metaphorical rather than systematically applying the powerful analytical tools that network theory provides. While several studies have hinted at an approach to build such a theory (Ghoshal & Bartlett, 1990; Holm et al., 1995; Nohria & Ghoshal, 1994), we have presented here an integrated framework for orchestrating the MNE as a network. By highlighting the processes of managing resource mobility, value appropriability, and network stability, we have provided a powerful way of integrating the network concepts with the MNE literature on coordination mechanisms.

The orchestration processes highlighted here should be seen in the context of the network structure within an MNE. The use of network constructs to define a subsidiary's role and its strategy can provide effective tools to analyze the structure; thus, the full power of the orchestration framework can be seen when it is integrated with the structural component – a task for future research. We want to emphasize here that the analytical structure and the orchestration processes provide a unified theory of MNEs which can throw open new ways of

resolving the conflicting demands of flexibility and efficiency, responsiveness and integration.

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INTERNATIONAL JOINT VENTURES IN TRANSITIONAL ECONOMIES

Marjorie A. Lyles

ABSTRACT

Many theorists describe organizational learning as having three stages: learning, unlearning, and innovation. Little is known, however, about the details associated with each stage, or the impact on performance. We attempt to fill this gap by reporting on a ten-year study in Hungary of the knowledge acquisition process, foreign parent contributions, and new learning capabilities. In transitional economies, firms facing the obsolescence of their socialist managerial skills must learn new approaches quickly. Private firms such as international joint ventures (IJVs) and small to medium enterprises often develop competitive advantages by learning from their foreign parents and creating new learning processes.

INTRODUCTION

Whether the newly created private firms and international joint ventures (IJVs) in the transitional economies have become competitive is of great interest to researchers, policy makers, and business people. Theorists have suggested that the most important asset for the firms is knowledge, and the most important capability is how to learn (Grant & Baden-Fuller, 1995). Yet this is exceedingly challenging since the IJVs and their foreign parents are operating in an unstable institutional context (Meyer, 2002).

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This chapter reports on portions of a current project being funded by the U.S. National Science Foundation (Grant SES0080152) and builds on the prior work of the principal investigator. In 1993, I was asked by Prof. Paul Marer (Indiana University) to assist the Hungarian Blue Ribbon Commission which consisted of a group of international scholars and Hungarians convened to make recommendations to the Hungarian government regarding public policy issues. I collected data on the private sector in Hungary through surveys of entrepreneurial firms and IJVs. This data serves as the base for this further research.

In 1996, I was asked to assess the needs of the private sector by the U.S. Agency for International Development. I resurveyed the firms to determine how they had changed since 1993, if they had survived, if they had learned from their foreign parents, and what strategies they had followed. This project was also supported by funds from the Carnegie Bosch Institute.

The current project was begun in 2000 and builds on these earlier rounds of surveys, resulting in a longitudinal perspective on the knowledge acquisition process of IJVs in Hungary. In addition to the surveys, the research includes in-depth interviews with eight IJVs. We report here on models of the longitudinal process of knowledge acquisition by Hungarian IJVs from the foreign parent.

KNOWLEDGE-BASED THEORY OF THE FIRM

One assumption driving the knowledge-based theory of the firm is that over the long run, firms develop capabilities for enhancing their learning through the evolution of internal processes as well as for assessing and transferring their knowledge assets. Learning capabilities involve the ability to diffuse knowledge within the firm, to integrate it with organizational activities, and to generate new knowledge. Theorists suggest that learning capabilities entail highly tacit, socially embedded knowledge, and entail the acquisition, assimilation, transfer and utilization of knowledge (Cohen & Levinthal, 1990; Shenkar & Li, 1999).

Such learning capabilities are especially important in multinational corporations (MNCs), which consist of many component parts working together as an extended network. Knowledge is created and transferred to the various parts within this network, including their JV arms (Gupta & Govindarajan, 2000; Hedlund, 1986). Hansen (2002) develops the concept of knowledge networks within an MNC in which the units are related and share inter-unit knowledge. These are networks of lateral and horizontal units that have common goals. His results indicate that units that share knowledge are able to complete their projects faster and more effectively.

Several researchers have addressed knowledge management and transfer issues in transitional economies (Child & Markoczy, 1993). Tsang (2002) and Simonin

(1999) appear to be among the researchers that address knowledge transfer from the viewpoint of the foreign parent as the receiver of the knowledge. Most authors have studied the transfer of technology, knowledge, and management practices from the parent firm to the joint venture (Lu & Bjorkman, 1997). These studies suggest that a more fine grained understanding of the knowledge process is still needed, and that knowledge transfer both to and from firms in transitional economies can be of strategic importance (Tsang, 2002; Uhlenbruck & De Castro, 2000) and can affect the survival of the firms (Steensma & Lyles, 2000).

Transfer of Knowledge from Foreign Parent to Hungarian IJVs

In the case of Hungarian IJVs, the foreign parent may be a vital source for both tacit and explicit knowledge. Transfers of technical know-how might occur relatively rapidly at the outset of an IJV, but for Hungarian IJV managers and employees to absorb and adapt the administrative and managerial skills of their Western parents, it will require active involvement of managers from the foreign parent(s). Thus, local employees can develop a knowledge base from being exposed to ideas, concepts and processes over time (Nonaka, 1994). Active participation is also commonly associated with having parents with equal or nearly equal equity participation (Killing, 1983; Salk, 1996). The concern is with the knowledge acquired from the foreign parent and whether it is either tacit or explicit knowledge, or a combination thereof.

Some of the first research done on IJV learning from foreign parents has focused on the structures and processes needed. Lyles and Salk (1996) report that an IJV's capacity to learn is associated with the flexibility of its structure, as well as the use of articulated goals and objectives to focus both IJV and foreign-parent managers on the knowledge to be transferred. They further assert and find that active involvement by the foreign parent – in terms of providing management training in the IJV and having a division of labor that explicitly mandates transfers of competencies and technology from the foreign parent – is significantly associated with both learning and measures of IJV performance. Cultural conflicts appeared to have a negative impact on learning from the foreign parent, but only significantly in the case of 50/50 equity arrangements. Finally, the high learners (upper one-third) made significantly more use of foreign parent expatriates than did low learners.

A learning intent and commitment to the IJV assist in targeting the knowledge to be transferred. Transfers of personnel, the relationships between the IJV organization and its parents, and relationships between the parents are important. Prior research suggests that two aspects of those relationships – trust between the

parents and the IJV's capacity for learning – may play a particularly significant role in facilitating parent-IJV learning (Lyles et al., 2002).

Lane, Salk and Lyles (2001) use the concept of absorptive capacity to study knowledge transfer in Hungarian joint ventures. Cohen and Levinthal (1990, p. 128) formulate "absorptive capacity," as a firm's ability "to recognize the value of new, external knowledge, assimilate it, and apply it to commercial ends." They suggest that absorptive capacity is a by-product of prior innovation and problem solving, and is itself dependent on the absorptive capacities of the organization.

Lane and Lubatkin (1998) extend the absorptive capacity concept by providing evidence that an organization's capacity to learn is not absolute but varies with the learning context. Hamel (1991) has observed that alliance partners vary in the "transparency" of their organization and of their skills, and argues that this transparency influences learning between partners. A "student firm's" ability to learn from a specific "teacher firm" is dependent on: (a) its familiarity with the new knowledge offered by the teacher firm; (b) the compatibility of the student and teacher firms' values and norms; and (c) the similarity of the student and teacher firms' operational priorities or "dominant logics" (Bettis & Prahalad, 1995; Prahalad & Bettis, 1986). Thus, effective knowledge transfer is largely determined by the recipient firm's relative absorptive capacity.

Lane, Salk and Lyles (2001) expand this further by assessing the knowledge transfer from foreign parents to their Hungarian joint ventures. They develop the three aspects of absorptive capacity and measure the impact on the knowledge acquired by the joint venture. These three aspects are: identification, assimilation, and utilization. Lane et al. (2001) show that the first two aspects of absorptive capacity directly influence knowledge acquisition. In particular, they find support for the knowledge understanding and application predictions, and partial support for the knowledge assimilation prediction. Cultural compatibility, IJV-foreign parent relatedness, flexibility, foreign parent training, and prior knowledge from foreign parents are significantly related to knowledge acquisition. Unexpectedly, the results suggest that trust and management support from foreign parents are associated with IJV performance but not learning. Thus, trust, management support, current knowledge acquired, strategy and IJV training are associated with IJV performance.

We revisit the model of analysis of Lane, Salk and Lyles with the current 2001 data set and use it as a method to assess the current IJVs based on their reported knowledge transfer process. We consider IJVs from a knowledge-based perspective and assess how the foreign parent support plays a role in the IJV performance. This knowledge-based perspective considers the resources and capabilities of the IJV and, in particular, the transfer of critical know-how from the foreign parent to the IJV (Mowery et al., 1996). Such a perspective presents the view that an

organization's idiosyncratic know-how and its ability to exploit and replicate knowledge are fundamentally responsible for organizational success. Cohen and Levinthal (1990) would describe this as the assimilation and utilization of knowledge.

A question that is frequently raised is: what is the impact of the domestic parent on this process. Unfortunately, 64% of the IJVs in the 2001 database had difficulty responding to questions focusing on domestic parents, their relationship with the IJV, and their contribution to organizational learning. The main reason is that as the transition in Hungary has progressed, the local Hungarian parent frequently became solely an investor and was not actively involved in the management of the joint venture. In the remaining 36% of the cases, responses of "not similar" were predominant, even in regard to industry sector. Thus, most of the IJVs indicated that they had little knowledge transfer from their domestic parents.

Hypotheses

Figure 1 shows an adaptation of the Lyles and Salk (1996) and by Lane, Salk, and Lyles (2001) models indicating the variables and their relationships. Note that the current sample is a subset of the previous studies, specifically those IJVs that participated in the 1993 and 1996 surveys. Thus, where Lyles and Salk (1996) and Lane, Salk, and Lyles (2001) tested their predictions using a relatively young

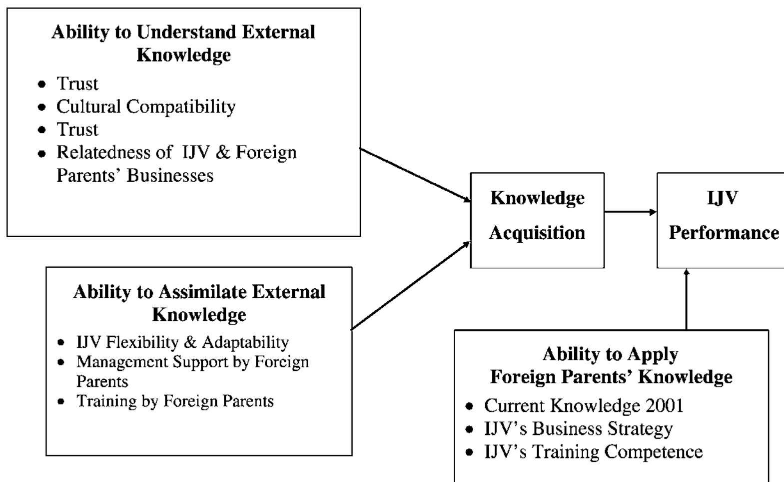

Fig. 1. An Absorptive Capacity Model and Performance in IJVs. *Adapted from:* Lane, Salk & Lyles, *SMJ* (Dec), 2001.

sample, we utilize a 2001 sample of firms, most of which were established at the time of the transition and were about eight years old at the time of data collection. Below are the hypotheses for the current study:

H1. Learning structures and mechanisms, including organizational flexibility and adaptability, relatedness, and managerial involvement by foreign partners will be positively associated with knowledge acquisition and performance.

H2. Trust, management support, current knowledge, strategy, and training by the joint venture will be positively associated with IJV performance.

H3. Those IJVs indicating a process of high or continual knowledge acquisition will be better performers than those IJVs that indicate little knowledge acquisition.

METHODOLOGY

Survey Data Collection

Phase I involved the collection of empirical data from approximately 200 IJVs in Hungary at three different time periods (1993, 1996, and 2001). Analysis of earlier results of the data collection are reported in Lyles and Salk (1996), Steensma and Lyles (2000), and Lane, Salk and Lyles (2001). This paper reports some of the first results of the 2001 data analysis that document the status of the IJVs previously surveyed in 1996.

The original approach to the sampling technique generated a stratified sample comprised of representative small- or medium-sized JVs, based on industry and the foreign partner's country-of-origin. The initial sampling criteria and sample were developed with the assistance of a Hungarian government agency and stratification was based on statistics by Hungary's Central Statistical Office. These statistics furnished the percentage of IJVs in each industry as well as the percentage involving firms from the various foreign locales. The firms that participated were identified through directories, contacts, and our database of the IJVs that participated in the 1996 survey. Thus, the current analysis is based on 120 IJVs from the 2001 survey.

Data Procurement and Administration

The survey 2001 data was obtained through structured interviews. Care was taken to minimize the chance of interviewer bias by using a structured and standardized

interview process. In brief, the structured interviews resulted in the accumulation of data for each IJV, detailing its founding, management, control and ownership, competitive strategy, parental relationships, and performance. Where possible, we attempted to improve on the measurement of the variables but not to vary from the spirit of the concept being measured.

Management of the project involved cooperation between the researchers, an institute in Hungary, and a group of carefully selected and trained Hungarian interviewers. The interviewers were bilingual and could conduct the interviews in the language most comfortable to the IJV manager. The informants were the presidents, general managers, or managers of the IJVs. Ideally, multiple informants would have been used but given the size and nature of the study, this was prohibitive. There is, however, previous support for relying on the IJV general manager (GM) for subjective data. Lyles and Salk (1996) and Geringer and Hebert (1989) find a significant correlation between the parent's and the GM's assessment of IJV performance.

Like a preponderance of other survey research, this study relies on data collected from a single respondent raising the possibility of common method variance (Harrison, Mclaughlin & Coalter, 1996). Steps have been taken to both limit and assess these effects. For one, multiple item constructs are used. Response biases have been shown to be more problematic at the item level than at the construct level (Harrison et al., 1996).

Variables

The measures are gathered from the 2001 contact with the IJV. For those measures comprising scales constructed from multiple questionnaire items, consistency is assessed using confirmatory factor analysis.

Flexibility and Adaptability

This scale is adopted from Lyles and Salk (1996) who use it as a scale of capacity. It is measured using a three-item scale of Likert-type items based on the extent to which the IJV is flexible and adapting to change, is creative, and rewards performance (alpha = 0.67). Since this construct was used in the previous surveys, we decided to include it even though it is slightly below the recommended alpha value of 0.70.

Foreign Parental Management Support

Support is a seven-item scale that summarizes the extent to which the foreign parent contributes to the IJV in the following areas: managerial resources, administrative

support, emotional support, product-related technology, manufacturing-related technology, ongoing manufacturing support, and time (1 = little, 5 = extensive; alpha = 0.86).

IJV Learning from the Foreign Parent
This six-item Likert-type scale summarizes the extent to which the IJV has learned from the foreign parent (Lane, Salk & Lyles, 2001; Lyles & Salk, 1996). The items ask: to what extent have you learned from your foreign parent: (a) new technological expertise; (b) new marketing expertise; (c) product development; (d) knowledge about foreign cultures and tastes; (e) managerial techniques; and (f) manufacturing processes (1 = little, 5 = to a great extent; alpha = 0.78).

Foreign Parent Training
The extent to which managers in the IJV have been given education and training by foreign parents is measured by two items (1 = little, 5 = great extent; alpha = 0.72).

Cultural Compatibility
The cultural compatibility of the domestic and foreign parents is measured by a two-item scale on the extent to which cultural misunderstandings and cultural differences have been issues in the IJV. It results in a negative variable (alpha = 0.87).

Relatedness of IJVs and Foreign Parents' Businesses
This variable is measured by the extent to which managers agree that the JV relates to the foreign parent along four measures: technology, customers, products, and industry (1 = very different, 5 = very similar; alpha = 0.84).

Strategy
Lane, Salk and Lyles (2001) argue that a differentiation strategy is most appropriate for small-to-medium sized IJVs. We use their definition to further test the model. The degree to which the IJVs' business strategy entails differentiation is measured using a six-item scale of 5-point Likert-type items on the degree to which the IJV has emphasized over the past two years: developing new products, promotion and advertising expenditures above industry average, a broad product line, extensive customer service capabilities, highly trained personnel, and strong influence over the channels of distribution (alpha = 0.72; possible range 6–30).

IJV Training and Development Competence
This is measured using a two-item scale of 5 point Likert-type items on how effective the IJV has been in the prior year in providing adequate

worker training and improving management skills (alpha = 0.72; possible range 2 to 10).

Foreign Parent Decision Influence

We collected measures of the degree of influence over specific areas and issues of joint venture management (Child et al., 1997; Lin, Yu & Seetoo, 1997). The JV managers were asked to evaluate the influence that the Hungarian parent, foreign firm, and IJV managers have over eight issues by dividing 100% influence across the three groups. The issues of interest include: financing, product technology, process technology, operations, sales/marketing, management decisions, administrative support, and pricing decisions. The values on these issues for the foreign parent are combined (alpha = 0.89).

Trust Between IJV and Foreign Parent

The *trust* variable includes four items developed by Nooteboom et al. (1997). These five-point Likert-type items are focused on the IJV manager's confidence that participants in the IJV relationship will not act opportunistically. The managers were asked to rate the following statements as true in terms of their relationship with their foreign parent: (1) Because we have been doing business for so long, we can understand each other well and quickly; (2) In our contacts with the foreign parent, we have never had the feeling of being misled; (3) In this relation, both sides are expected not to make demands that can seriously damage the interests of the other; and (4) In this relation, informal agreements have the same significance as formal contracts (1 = little, 5 = to a great extent; alpha = 0.86).

Performance

Past research has indicated a correlation between objective and perceptual measures of performance (Geringer & Hebert, 1989; Hansen & Wernerfelt, 1989). Thus, performance is measured by asking the respondents to rate their IJV performance at time one on a scale of (1) poor to (5) excellent for a seven-item Likert-type scale, including increasing business volume, increasing market share, achieving planned goals, and making profits. This scale is then standardized (alpha = 0.82).

Models of Knowledge Transfer

The models of the knowledge transfer process are obtained by asking the managers to indicate which of ten different diagrams best illustrates the knowledge acquired from the foreign parent since the beginning of the joint venture to now. The models are then combined by the location of the end points as high or low knowledge transfer (see Fig. 2).

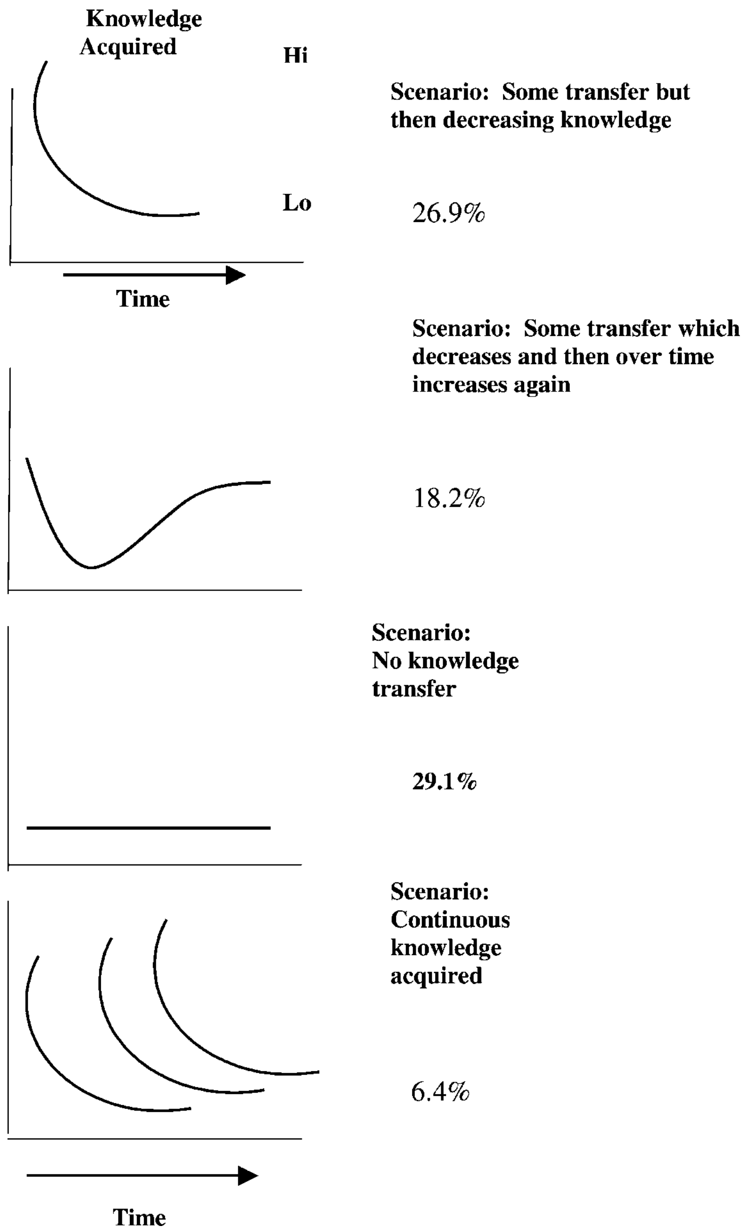

Fig. 2. Diagram that Best Illustrates the Knowledge Acquired from the Foreign Parent.

Control Variables

The sample selection process controlled for employee size and location. All of the IJVs are small- to medium-sized and started around the time of economic liberalization. Thus, we consider three control variables: industry, age, and size. To facilitate the estimation of a manageable model relative to our sample size, we initially examined the relationship between the control variables and IJV outcomes. Preliminary cross-tabs analysis indicated that firms from one industry, services, had outcome rates that significantly differed from the outcome rate of the overall sample. Thus, this dummy variable (0 = not a member of industry, 1 = member of industry) has been integrated into the overall model. Size is measured as the log of the IJV's capitalization in forints (the Hungarian currency).

Data Analysis

We test propositions 1 and 2 using hierarchical regression. Our analysis is divided into two parts. The first stage tested hypotheses 1 and 2 by including several stepwise regressions using knowledge acquired as the dependent variable. We do depart somewhat from the Lane et al. (2001) model: we use multi-item measures of trust and of relatedness and do not use the variable of prior knowledge. The second stage regresses knowledge acquired, strategy and IJV training against IJV performance. Hypothesis 3 is tested by grouping the sample based on their indication of the process of knowledge acquisition and using ANOVA or chi-square tests to determine differences among the firms using each model.

RESULTS

Table 1 reports the means, standard deviations, and correlation coefficients between the dependent, independent, and control variables. The hierarchical regression results with knowledge acquisition and performance as dependent variables are presented in Tables 2 and 3, respectively.

The change in explained variance among the four models testing the dependent variable knowledge acquired from the foreign parents and performance is significant across both dependent measures. This provides general support for the absorptive capacity model as a means of assessing knowledge acquisition and JV performance.

Hypothesis 1 predicts that the *relationship of* understanding and assimilating foreign parent knowledge to IJV knowledge acquired and performance will be

Table 1. Descriptive Statistics and Correlations.

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Cultural compatibility	3.55	2.05													
2. Total current learning	14.74	7.3	−0.16												
3. Performance	25.40	5.41	0.07	−0.11											
4. Trust between IJV & foreign parent	16.42	3.79	−0.36***	0.50***	0.08										
5. FP decision influence	121.81	174.85	0.11	0.19†	0.11	−0.04									
6. Flexibility of IJV	12.22	2.34	−0.22*	0.19	0.44***	0.44**	−0.25*								
7. FP training	4.01	2.35	−0.11	−0.02	0.09	0.31***	0.26*	0.06							
8. Management support	15.19	7.21	−0.08	0.63***	0.16	0.38***	0.45***	−0.01	0.74***						
9. Strategy	20.61	4.81	−0.07	0.14***	−0.09	−0.01	−0.01	0.14	0.18†	0.07					
10. JV training	6.63	1.53	−0.14	0.01	0.50***	0.21†	0.15	0.38**	0.28**	0.16	0.15				
11. Relatedness	14.78	4.86	−0.12	0.26*	0.16	0.16	0.14	0.07	0.35**	0.26*	−0.02	0.24*			
12. Size (log)	10.35	2.47	0.05	−0.01	0.14	−0.15	−0.01	−0.01	−0.04	−0.09	−0.04	−0.01	−0.20†		
13. Age	14.28	18.88	0.12	0.06	−0.13	0.12	0.08	−0.19†	0.15	0.19†	0.09	−0.01	0.15	−0.20†	
14. Service/financial	0.05	0.24	0.04	−0.05	−0.06	0.22*	−0.10	−0.16	0.02	−0.05	0.01	−0.02	−0.01	0.08	0.05

$^{\dagger}p < 0.10$.
$^{*}p < 0.05$.
$^{**}p < 0.01$.
$^{***}p < 0.001$.

Table 2. Multiple Regression Analyses for Knowledge Acquired from Foreign Parents.

Variables	Model 1 β	Model 2 β	Model 3 β
Controls			
Size (log of capitalization)	0.12	0.05	0.08
Age	−0.12	−0.05	−0.13
Service industries	0.06	0.07	0.11
Understanding foreign parent's knowledge			
Trust between IJV's parents	0.46***		0.34**
Cultural compatibility	−0.01		0.02
Foreign parent decision influence	0.18*		−0.03
Relatedness of IJV & foreign parent	0.12		0.05
Assimilating foreign parent's knowledge			
IJV flexibility & adaptability		0.14†	−0.01
Management support by foreign parent		0.46**	0.36**
Training by foreign parent		0.20†	0.16
Adjusted R^2	0.28	0.39	0.46
F	5.55***	11.02***	6.53***

†$p < 0.10$.
*$p < 0.05$.
**$p < 0.01$.
***$p < 0.001$.

significant and similar to the results obtained by Lane, Salk and Lyles (2001). In partial contrast to hypothesis 1, our results indicate that trust, foreign parent decision influence, flexibility, management support, and foreign parent training are at least moderately significant when run in the individual models. When run together, trust and management support contribute the most to the relationship

Table 3. Multiple Regression Analyses for IJV Performance.

Applying foreign parent's knowledge	
Current knowledge from foreign parent	−0.01
Strategy of IJV	−0.18*
Training competence of IJV	0.53**
Adjusted R^2	0.31
F	5.82***

*$p < 0.05$.
**$p < 0.01$.
***$p < 0.001$.

with knowledge acquired. Neither of these is significant in the Lane, Salk and Lyles (2001) analysis.

An explanation may be that as the IJVs mature, there may be less reliance on the foreign parent for training and less impact of the factors proposed by Cohen and Levinthal's absorptive capacity model. An extension of our study would be to test these in terms of direct longitudinal data to see if they change over time. Trust, on the other hand, is a different measure than that used by Lane, Salk and Lyles (2001), who used only a one-item measure. Our measure may be capturing a truer measure of the trust between the IJV and its foreign parent. There is a rich source of literature suggesting that trust should influence the sharing of knowledge so our results support those studies (Das & Teng, 1998; Inkpen & Currall, 1997).

For Hypothesis 2, we find that strategy and IJV training competence are significant predictors of IJV performance, but that current knowledge from the foreign parent is not. Furthermore, the variable strategy is negatively related to performance. Lane et al. (2001) suggest that in a transitional environment, it is better for the small IJVs to use a differentiation strategy. Our results may be capturing the maturation of the institutional environment and a change in the competitive capabilities of the IJVs so that the firms have overtime developed competitive capabilities for different strategy approaches – not just a differentiation strategy. Again this lends itself to future research exploration. What we find most surprising is that current knowledge acquired is not significantly related to IJV performance. This differs from the results of both Lyles and Salk (1996) and Lane et al. (2001).

Models of the Process of Knowledge Acquisition Over Time

Hypothesis 3 suggests that those IJVs that confirm having knowledge acquired from the foreign parent should perform better than those saying that they had no knowledge transfer. Figure 2 presents four models identified by the respondents as representative of the process of knowledge acquisition by the IJV over time. The top diagram (Some), depicting a high level of knowledge transfer in the beginning and then little knowledge transfer recently, represents 26.9% of the firms. The second diagram (High) shows that the knowledge transfer did go down initially but has rebounded and increased over time for approximately 18% of the firms. The third diagram (None) shows a steady line indicating little or no knowledge transfer over the life of the IJV; 29% of the firms used this classification. The bottom diagram (Continual) shows a series of learning curves and a continual learning pattern. Only six percent of the firms chose this as representing their knowledge acquisition process.

Table 4. Models of Knowledge Acquisition and Absorptive Capacity.

Absorptive capacity	No knowledge transfer	Some knowledge transfer	Continual knowledge transfer	High knowledge transfer	Sig.
Recognize					
FP decision influence	49.54*	111.32	56.67	245.22	0.01
Related business	10.93*	16.22	17.00	16.27	0.01
Cultural compatibility	3.29*	3.84	3.78	3.47	n.s.
Trust	16.63	16.63	15.67	17.63	n.s.
Assimilate					
Flexibility	11.75	12.63	12.67	12.19	n.s.
FP management support	10.34*	16.62	16.33	19.44	0.01
FP training	2.51*	4.55	4.89	5.03	0.01
Utilization					
Strategy	19.48*	21.79	20.67	20.63	0.01
JV training	6.41	6.68	6.33	6.94	n.s.
Performance	24.98	25.85	24.83	25.59	0.01
JV knowledge acquired	8.19*	17.84	17.33	18.72	n.s.

*$p < 0.05$.

Table 4 shows the results of the ANOVA and chi-square tests to determine the differences in the characteristics among the four groupings. Basically, it seems that the firms who report "none" knowledge acquisition are significantly different from the others in terms of foreign parent decision influence, related business areas to the foreign parent, cultural compatibility, foreign parent management support, foreign parent training, strategy and of course, knowledge acquired. These firms have significantly different relationships with their foreign parents than the other firms.

What is surprising, however, is that there are no significant performance differences among the groups. In other words, the "None" knowledge acquired group appears to perform as well as the other groups, and slightly better than the "Continual" group. Thus, hypothesis 3 is not supported.

We attempted some further analysis to determine the description of the "None" group (see Table 5). It is not significantly different from the other groups in terms of industries or type of firm (manufacturing vs. service). One characteristic that seems plausible is that in the "None" group, 66% of the firms had a majority domestic ownership, meaning foreign involvement would be low. In an in-depth interview with one of the firms in this category, the JV manager said:

Table 5. Descriptions of IJVs with "No Knowledge Acquisition from Foreign Parent."

	Frequency	(%)	Valid (%)	Cumulative (%)
Industry				
Valid				
Chemical/pharmaceutical	3	7.3	7.3	7.3
Electronics	2	4.9	4.9	12.2
Transportation	2	4.9	4.9	17.1
Agriculture	3	7.3	7.3	24.4
Construction	3	7.3	7.3	31.7
Service/financial	3	7.3	7.3	39.0
Computer/software	2	4.9	4.9	43.9
Machinery	10	24.4	24.4	68.3
Automobile/components	1	2.4	2.4	70.7
Food processing	2	4.9	4.9	75.6
Textiles/clothing	2	4.9	4.9	80.5
Other	8	19.5	19.5	100.0
Total	41	100.0	100.0	
Type of company				
Valid				
Manufacturer	25	61.0	61.0	61.0
Service	11	26.8	26.8	87.8
Retailer	2	4.9	4.9	92.7
Wholesaler	2	4.9	4.9	97.6
Construction	1	2.4	2.4	100.0
Total	41	100.0	100.0	
Domestic/foreign equity distribution as of 2001				
Valid				
>51% domestic	27	65.9	65.9	65.9
>51% foreign	12	29.3	29.3	95.1
50/50 JV	2	4.9	4.9	100.0
Total	41	100.0	100.0	

> We do not deal with this firm {the foreign parent} because it does not participate in the every day life of our company. This investor attends the annual meetings, gets its money and does not care about what and how we do. Our investor always receives its considerable dividend and that's all.

Regarding the IJV's capabilities, he said:

> . . . we had already exported almost 90% of our products since 1977–1978. More than half of our export was directed to West Europe. Thus, we produced for western markets already in the 1970s that required a business-oriented way of thinking.

This firm is depicted as having very strong skills even at the time of the transition. The manager further explained that even though the IJV did not have much learning from their foreign parent, their main customer in Germany transferred a lot of knowledge to them and trained them in Germany.

CONCLUSION

The results of our analysis indicate that the absorptive capacity concepts have a significant relationship with the dependent variables of knowledge acquisition and IJV performance. Although we show some differences from the Lane, Salk and Lyles (2001) model, the same basic premises apply.

The one major change from their analysis is that we find no direct relationship between knowledge acquired and IJV performance. We show this in the regression results in Table 3 and through the performance of the "None" model. We hypothesize that one of the reasons for this surprising finding is that the IJVs are developing their own internal knowledge development capabilities and do not need to rely on knowledge acquired from their foreign parents as much as they did at the beginning of the transition.

We continue to be enthusiastic about the knowledge perspective as applied to MNCs and to foreign firms investing abroad. We demonstrate that active involvement of the foreign parent is critical to the transfer of knowledge to the joint venture. We still do not know, however, how the reverse knowledge transfer works and whether the joint ventures have to be closely linked to the parent firm for knowledge to flow upward. The perspective of time and the longitudinal nature of knowledge processes are critical elements within the knowledge-based theory of the firm; this remains an area open to future research.

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A STRATEGIC CONTEXT APPROACH TO INTERNATIONAL HUMAN RESOURCE MANAGEMENT RESEARCH

Joseph L. C. Cheng and Danielle L. Cooper

ABSTRACT

Existing international human resource management research tends to omit context in investigating the HR needs of MNCs, and gives little attention to the role of IHR managers in strategic decision making. Building on prior works in "context-embedded" research, this paper incorporates an MNC's strategic context into the analysis of its HR needs and identifies four new research directions that will help advance the academic study of IHRM and its contribution to practice, particularly for firms pursuing a global or transnational strategy. The rationale and significance of each research direction are discussed, and some preliminary propositions are offered to guide future investigation.

About twenty years ago, in response to the call for conducting organizational research that has greater practical relevance, Cheng and McKinley (1983) argued for the systematic investigation of an organization's task environment as a critical factor in determining the appropriate structural design for its effective performance. Building on the contingency perspective (Galbraith, 1977), they demonstrated through an empirical study that this research approach meets the

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requirement of generalizability in theory advancement for academics and also addresses the concern of situation specificity in knowledge use for practitioners. Later, Cheng (1989, 1994) extended this reasoning to the cross-national study of organizations, and proposed a contextual approach to theory development that incorporates characteristics of the society as analytical variables in explaining organizational variation across countries. He argued that the resulting theory would not only add new insights to the field but also have global relevance and cross-national applicability, which are lacking in most of the existing models. More recently, Rhee and Cheng (2002) strengthened the predictive power of the internationalization theory (Johanson & Vahlne, 1977) by including industry and host-country factors as explanatory variables of firms' incremental expansion decisions. In all three cases it was shown that context matters, and management scholars would make greater contributions to theory and practice by doing "context-embedded" research (Cheng, 1994; Child, 2000; Whetten, 2002).

As an emerging area of academic study, international human resource management (IHRM) is going through similar stages of development that the organization studies field experienced, including the need for greater integration of theory and practice. In a recent review of the IHRM research literature, which included 304 published articles in nine high-impact academic and eight high-circulation practitioner journals during the last decade (1991–2000), Wasti and Robert (2003) found substantial divergence between academics and practitioners in their research approach and focus as well as an absence of interaction between the two groups as assessed from citation patterns. Among other things, they reported that the academic literature focused on individual attitudes and behaviors, whereas the practitioner literature focused on overall firm performance and competitiveness, as the primary dependent variables. Also, the preponderance of academic research was designed to test for generalizability of established management theories/practices across countries, rather than developing new models that incorporate the societal context as an analytical variable. Conversely, a majority of the practitioner articles treated the internationalization of HRM as an important development in its own right, and designed research to investigate related economic and intercultural issues of concern to the firm. This disconnect between academics and practitioners has limited the realization of IHRM as a source of competitive advantage for MNCs (Ferris et al., 1999; Schuler & Florkowski, 1996).

To help further enhance the academic study of IHRM and its contribution to practice, this paper applies a strategic context perspective to examine the changing international business (IB) environment within which IHRM is conducted and identifies some new directions for future inquiry. Unlike existing research, which tends to adopt a "context-free" approach to investigating IHRM

policy and practice, our approach adopts the view of the top management team and incorporates an MNC's strategic context into the analysis of its IHRM needs. Additionally, this perspective considers IHRM a full partner in *both* the formulation and implementation of MNC strategic decisions, including those on foreign market entry, cross-border mergers and acquisitions, partner selection for international joint ventures, and the appointment of senior executives at the headquarters and subsidiary levels, among others. Finally, our analysis gives special attention to MNCs that pursue a "global" or "transnational" strategy (Bartlett & Ghoshal, 2000). This complements existing IHRM research, which tends to focus more on "international" and "multidomestic" firms.

EXISTING APPROACHES TO IHRM RESEARCH

Three main research streams can be identified in the IHRM literature (Ferris et al., 1999). The first addresses the convergence/divergence debate in management theory and practice, with a focus on HRM functions (e.g. staffing, performance appraisal, training and development, compensation, etc.) as they are employed across different countries and societal settings. While the early work was largely designed to assess the transferability of HRM practices developed in the United States, the more recent effort has been directed toward the understanding of local practices and how they may be applied in other countries. In both cases, the primary objective is to design "context-free" HRM systems that can be transported from the headquarters to foreign subsidiaries.

The second stream investigates specific HRM functions as they apply to expatriate managers working in foreign subsidiaries. Its objective is to identify the various factors that affect their success in completing the international assignment, which usually covers a short duration ranging from a few months to several years. Much of this work focuses on individual characteristics such as cross-cultural skills and adaptability, and does not pay much attention to the subsidiary's context (e.g. its mission or strategic role within the MNC) as a critical factor in determining the appropriate selection criteria for expatriate managers. In fact, many companies are looking for a universal set of attributes that they can use in making international assignment decisions, such as the one developed by the Personnel Decisions Research Institute (see Schuler & Florkowski, 1996, p. 363).

The third research stream, which started only about a decade ago, seeks to align IHRM policy and practice with the strategic goals of an MNC (Taylor et al., 1996). The objective here is not to identify the best IHRM system, but rather to achieve the optimal fit among a firm's external environment, its overall strategy, and its HRM policy and implementation (Adler & Ghadar, 1990). Compared to the other two

streams, this approach has more of a performance focus and concerns the entire firm's operation. From a strategic management perspective, however, it only deals with the strategy implementation side of the equation. No recognition is given to the involvement of IHR managers in MNC strategic decision making.

As described above, the first and second research streams give little attention to context as a critical factor in determining appropriate IHRM policy and practice for MNCs and their subsidiaries. Although the third research stream does include an MNC's strategy as a factor of consideration, it does not address issues concerning the involvement of IHR managers in MNC strategic decision making. While these limitations might have been acceptable in the past when most MNCs were pursuing an "international" or "multidomestic" strategy, they need to be corrected now if IHRM research is to contribute significantly to effective MNC functioning.

THE CHANGING CONTEXT OF IHRM

In their seminal work analyzing the changing IB environment during the last twenty-five years, Bartlett and Ghoshal (2000) argued that important shifts in political, social, economic, and technological forces have combined to create new challenges for MNCs that are fundamentally different from those faced before. They pointed out that in the past most MNCs were able to compete on one of three core competencies, on the basis of which they classified the firms: international, multidomestic, and global. Specifically, international firms compete by being able to leverage home-based innovations abroad; multidomestic firms are those that can best respond to local market demands; and global firms outperform others by developing "global" products that can be sold and manufactured through standardized procedures worldwide. Under the current IB environment, however, this single core-competency model is no longer effective. To be competitive, MNCs need to develop capabilities in all three areas of global efficiency, local responsiveness, and worldwide learning and innovation. Bartlett and Ghoshal called those firms that possess all three core competencies "transnational."

These four models of MNC competition provide different contexts for conceptualizing IHRM and the kind of research issues that need to be addressed. For international firms, because of their reliance on home-based innovations, the main function of IHRM is to facilitate the transfer of these competencies abroad and assist in their application in local markets with minimum change or modification (see the arrow lines extending from the headquarters to subsidiaries in Fig. 1). This would be best accomplished by using home-country expatriate managers who are familiar with the parent company's policies and values and having them implement the same or similar systems in the foreign subsidiaries. This approach

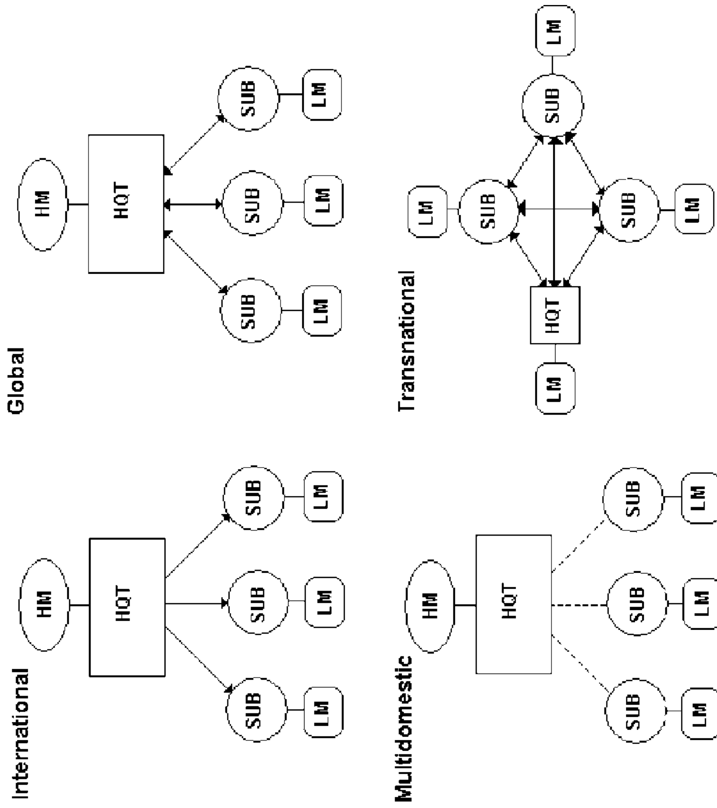

Fig. 1. Models of MNC Competition.

is reflected in the first and second research streams in IHRM described above, which focus on HRM convergence/transferability and expatriate management, respectively.

For the multidomestic firms, because of their emphasis on local responsiveness, there is little for IHRM (or other functional areas) to do at the headquarters level except to decentralize its activities to the subsidiaries and provide support for local development and implementation. This is illustrated by the dotted lines connecting the headquarters and subsidiaries, as shown in Fig. 1. While there is still use of expatriate managers for short-term assignments, most of the key positions in the subsidiaries are filled with local hires that know the host markets best. This decentralized approach to IHRM is addressed by the third research stream described above, which focuses on achieving optimal fit between an MNC's strategy and its management systems. It is also covered by the first research stream through its investigation of local HRM practices.

While the IHRM needs of international and multidomestic firms have been addressed by existing research, the literature has not been as attentive to those of global and transnational firms. Specifically, for the global firms, the key to success is being able to develop products that have worldwide appeal and to market and manufacture such products through standardization to maximize economies of scale. To do this, they need to have an IHRM system in place that promotes and supports two important behaviors: (a) systematic subsidiary input into the strategic decision-making process at headquarters, particularly on matters concerning local market demands and consumer preferences; and (b) full company-wide implementation of global policies through standardized procedures at both the headquarters and subsidiary levels in all major functional areas (e.g. manufacturing, R&D, sales and marketing, etc.). While this "bottom-up and then top-down" approach to organizational management (see the double-headed arrow lines in Fig. 1) has been most common among Japanese firms, it is a new practice for many non-Japanese firms, and not one that existing IHRM research has paid much attention to.

Finally, transnational firms – which seek to develop simultaneous capabilities in all three areas of global efficiency, local responsiveness, and worldwide learning and innovation – rely heavily on network decision making involving frequent and substantial intersubsidiary (including the headquarters) exchange of information, material, and personnel, as indicated in Fig. 1 by the double-headed arrow lines going in all directions. This approach to organizational management is fundamentally different from the other three models described earlier and requires the development of a new corporate culture and methods of management for its effective implementation. Apart from recognizing the need for research to investigate the new demands placed on IHRM under the transnational model (e.g.

Adler & Bartholomew, 1992), not much empirical work has been done so far in this area by either academics or practitioners.

PROPOSED IHRM RESEARCH AGENDA

To help fill the void that addresses the special concerns of global and transnational firms, and also to promote greater integration of theory and practice, we propose a research agenda that seeks to incorporate an MNC's strategic context into the analysis of its IHRM needs. The agenda identifies four areas of inquiry, each focusing on a particular IHRM capability critical to effective MNC functioning. To illustrate the potential of these new research directions, preliminary propositions on specific issues are presented for further evaluation and development.

Managerial Competencies Identification

Because global and transnational firms differ in fundamental ways from the traditional models of MNC operation, it is important to identify the managerial behaviors and the corresponding competencies required for effective performance in these strategic contexts. Given that task responsibilities are likely to differ across the three groups of business, country, and functional managers, who are the key drivers of an MNC's operation (Bartlett & Ghoshal, 2000), this research also needs to investigate possible between-group differences in the required competencies. The findings from this research will not only help in managerial staffing decisions, but also assist in the design of various IHRM policies to ensure effective performance at both the headquarters and subsidiary levels, including training and development, reward/compensation, career planning, and personnel planning.

To illustrate the potential of this line of inquiry, we examine the position of the country manager and how the competencies required for that position differ depending on the strategic context. Compared to their counterparts operating in the traditional international and multidomestic firms, whose primary responsibilities are, respectively, to implement home-based policies abroad and to manage subsidiary operations as local businesses, the country managers of global and transnational firms have more complex tasks. Specifically, those working in global firms perform the dual role of: (a) contributing information to and participating in strategic decision making at the headquarters; and (b) implementing the resulting strategy in the subsidiaries they represent. In the case of transnational firms, country managers do all the things their counterparts do in global firms and more. They function as an integrated player in the organizational network and take

part in joint decision making at both the headquarters and intersubsidiary levels (Bartlett & Ghoshal, 2000).

The above analysis suggests that country managers working in global and transnational firms would need different competencies from those working in international and multidomestic firms. Specifically, global and transnational country managers would need to have strong communication and political skills to effectively represent the subsidiary interests in strategic decision making at either the headquarters or intersubsidiary level, which is not part of the normal routines of international and multidomestic country managers. Also, when compared with one another, transnational country managers would need to have greater multicultural skills (language and relational) than global country managers because they participate more often in meetings involving subsidiary members from two or more countries. Finally, among all four groups of country managers, those working in transnational firms would need to have sufficient knowledge about the other subsidiaries' roles and capabilities as well as their local market demands in order to effectively perform their roles as integrated network players. This knowledge is not as critical for the other country managers because their subsidiary operations are not interconnected (notice the absence of interconnecting lines among subsidiaries in international, multidomestic, and global firms in Fig. 1). These ideas can be summarized into the following propositions:

P1. Greater communication and political skills are required of global and transnational country managers for effective job performance compared to their counterparts working in international and multi-domestic firms.

P2. Greater multicultural skills (language and relational) are required of transnational country managers for effective job performance compared to their counterparts working in global firms.

P3. Greater knowledge about other subsidiaries' roles and capabilities and their local market demands are required of transnational country managers for effective job performance compared to their counterparts working in international, multidomestic, and global firms.

Multicultural Team Management

As mentioned earlier, there is greater involvement of managers in multicultural team decision making among global and transnational firms relative to the traditional international and multidomestic models. For global firms, this involvement is more extensive at the headquarters than at the intersubsidiary level, where

country managers and headquarters officers meet periodically to determine global strategies in product, manufacturing, marketing, etc. For transnational firms, however, involvement in multicultural team decision making takes place at both the headquarters and intersubsidiary levels. It also occurs in much greater frequency because most decisions are made jointly by headquarters and subsidiary managers, which is a core feature of a network organization.

Although having managers with multicultural skills will be helpful, this alone will not ensure the best results; there are other factors that may influence effective multicultural team decision making, such as team composition, leadership style, task characteristics, and the organizational culture of the firm. The fact that much of the team decision making that takes place in global and transnational firms involves senior managers from headquarters and subsidiaries makes the situation even more challenging. These individuals are mostly high achievers with strong personalities and are sensitive to status differences, which have been shown to affect members' participation in group settings (Silver, Troyer & Cohen, 2000). Given the important role that multicultural teams play in the functioning of global and transnational firms, we need to know more about the factors that affect their effective performance.

To explore the potential of this line of inquiry, we examine the issue of information sharing among members of a multicultural team. This is a critical factor in effective group decision making, as members bring to the team certain unique information from their own countries or cultural settings. For the multicultural team to make effective decisions, its members must share their unique information with one another and work toward the development of an integrated solution that incorporates the views of each member. This is best illustrated in the case of a global product development team, whose task is to design a product with worldwide appeal by integrating local market and consumer information supplied by subsidiary managers from various countries and regions (Subramaniam, Rosenthal & Hatten, 1998). Knowing the factors that facilitate or impede members' sharing of unique information in a multicultural setting is important to the effective functioning of global product development teams.

Our preliminary analysis suggests that members' cultural background and group composition are important determinants of unique information sharing in a multicultural team. Individuals brought up in cultures that are high on uncertainty avoidance, for example, are less likely to share unique information because they would experience a higher level of anxiety when presenting it in a group, as compared to individuals brought up in low uncertainty avoidance cultures. Similarly, compared to people with an individualist cultural background, those with a collectivist background are less likely to share unique information in a group because of their concern about "showing off" in front of others. This concern extends from

the importance of belongingness and conformity in collectivist cultures (Hofstede, 2001; Triandis et al., 1988). These cultural effects, however, are moderated by factors associated with group composition. Specifically, groups whose members are already familiar with one another, perhaps through prior interactions in other social or business settings, are not as affected by the cultural influences described above. Moreover, a designated moderator who monitors and promotes equal participation among members can help minimize the negative effects of uncertainty avoidance and collectivism on unique information sharing. These two group composition factors suggest specific actions IHRM can take to help enhance multicultural team functioning. The following propositions summarize this analysis:

P4. Greater involvement in multicultural team decision making is required of headquarters and country managers working in global and transnational firms than their counterparts working in international and multidomestic firms.

P5. Individuals shaped by high uncertainty avoidance and collectivist cultures are less likely to share unique information when involved in multicultural team decision making.

P6. The more familiar the group members are with one another, and the greater the presence of a person designated as a discussion moderator, the less the negative effect of uncertainty avoidance and collectivism on unique information sharing.

Strategic Decision Involvement

Compared to their counterparts in other functional areas such as marketing, manufacturing, R&D, and finance, HR professionals are less frequently involved in strategic decision making at a firm's top management level (Schuler, 1990). Even when they are included in the process, their role is often limited to strategy implementation rather than strategy formulation, as reflected in both the general and international strategic HRM literatures (Bird & Beechler, 1995; Schuler & Jackson, 1987). While this practice might not be as harmful to firms pursuing an international, multidomestic, or global strategy, it is detrimental to transnational firms whose success depends on their effective engagement in worldwide learning and innovation, which, as explained below, can benefit greatly from having IHR managers participate in strategic decision making. Knowing when and how such participation will contribute to MNC effectiveness is a critical area of research for IHRM.

In order for transnational firms to function effectively, they need to develop capabilities that enable them to be globally efficient, locally responsive, and first movers in products and/or technologies. To achieve this, they engage in worldwide learning and innovation activities, which provide the critical knowledge and resources needed for new projects and meeting new demands placed on the firm, many of which result from resolving conflicts between the competing requirements for global efficiency and local responsiveness. To be effective in worldwide learning and innovation, transnational firms need to have deep knowledge about various cross-national and cross-cultural differences in order to scan and identify local opportunities that have global implications. These opportunities may concern the location of global manufacturing centers for the production of key product components, the selection of a local partner for market entry or resource supply, the transfer of high-performing managers from one subsidiary to another for knowledge transfer, or the consolidation of R&D labs in different countries into a regional or global technology center to create better synergy.

These decisions all have important strategic impact on the firm, both in terms of implementing existing strategies as well as shaping future strategies, and would benefit from the involvement of IHR professionals who can provide the cross-cultural knowledge to complement the expertise of the other functional managers. This knowledge is particularly important in situations where the decision outcome may result in the integration of HR systems (e.g. in a merger and acquisition) or the teaming of personnel (e.g. in a joint venture) from firms operating in countries with opposing cultural characteristics (e.g. Japan with a collectivist and the U.S. with an individualist culture). Having IHR professionals involved in the decision-making process would lead to a more comprehensive and accurate cost-benefit analysis of the various decision options. However, in order for the IHR managers to be effective contributors to strategic decision making at the top management level, they need to know enough about the business side of the firm to be able to articulate their ideas within the context of MNC functioning. Schooling in HRM usually has a strong social science focus with specialization on topics concerning employee attitudes and behaviors, with little emphasis on the business or MNC context. IHR managers who have business training will be better able to contribute to effective strategic decision making within MNCs.

The ideas discussed above are summarized into the following propositions:

P7. Greater participation of IHR managers in MNC strategic decision making will result in higher quality decisions when cross-cultural issues are involved.

P8. The performance impact of IHR managers' participation in MNC strategic decision making will be greater for transnational firms relative to international, multidomestic, and global MNCs.

P9. IHR professionals with business training will be more effective contributors to MNC strategic decision making than those without such background.

Organizational Culture Development

As has been emphasized in the preceding discussions, global and transnational firms differ in major ways from the traditional international and multidomestic models of MNC operation, requiring new behaviors and interaction patterns among managers at both the headquarters and subsidiary levels. Because many of these new behaviors are based on tacit knowledge and thus are difficult to teach or monitor (e.g. unique information sharing, HR's involvement in strategic decision making), these firms need to create and maintain a supportive organizational culture that promotes and reinforces the desired behavioral patterns. Discovering effective ways to develop organizational culture within an MNC is another important area for future IHRM research.

Substantial research has been done on the topic of corporate culture in recent years, which shows that leaders with vision and charisma, supported by reinforcing HR practices in selection, training, and compensation, are needed for effective culture creation and maintenance (e.g. Cabrera & Bonache, 1999; Schein, 1992). Most of this research, however, was conducted on firms operating in a single country or societal context where it is easier for organizational members to agree on basic values and observe their behavioral manifestations. Because MNCs are made up of geographically dispersed units operating in diverse societal settings, the task of culture creation and maintenance becomes much more complicated. Recent research by the GLOBE project (Den Hartog et al., 1999), for example, shows that the very concepts of effective leadership and charisma do not have entirely the same meaning or behavioral attributes across different societies. This suggests that many of the research findings based on experiences from domestic firms may not be applicable to MNCs.

In the absence of prior research and theory, we will focus on personnel selection and explore how this HR function can best be conducted to facilitate the creation and maintenance of a new corporate culture within MNCs. According to the person-organizational fit literature (Kristof, 1996), a match between employees' goals and values and those of the firm is likely to lead to individual effectiveness, as well as the creation and maintenance of the desired organizational culture. To achieve this, both parties need to engage in self-assessment and evaluation to identify their respective goals and values and communicate them to one another. This information will provide a basis for making effective employment decisions on both sides. Applying this logic to the MNC context, one can expect that those firms

that incorporate a value-based matching approach to personnel selection will be more effective in organizational culture development. This approach is particularly important at the subsidiary level, where cross-national differences make the task of culture creation and maintenance more difficult. It has been observed that many U.S. developed selection instruments are commonly used overseas without local validation, including the use of home-based criteria for job interviews in foreign subsidiaries (Arvey et al., 1991; Lai & Wong, 2000). This practice would not only result in poor operating performance, but also hurt the effort of organizational culture development at the subsidiary level.

One important consideration in the validation of selection instruments is the cultural effect on value expressions. Members of an individualist culture, for example, give priority to their individual goals and accomplishments and thus would be more willing to discuss their personal achievements in a job interview. On the other hand, members of a collectivist culture, because of their emphasis on social interdependence, may be reluctant to discuss matters concerning themselves. Instead, they would focus on highlighting group accomplishments and give credit to other members' contributions instead of their own efforts. While both job candidates demonstrate their valuing of achievement, they express this value very differently. Thus, IHR managers must take into account the differences in value expressions in the local culture in order to select individuals whose values match those of the MNC. These ideas suggest the following propositions:

P10. Organizational culture development will have a greater impact on effective MNC functioning among global and transnational firms relative to international and multidomestic firms.

P11. MNCs that incorporate a value-based matching approach to personnel selection will be more successful in organizational culture development than those that focus only on skill and competency requirements.

P12. MNCs that locally validate their personnel selection instruments involving value expressions with be more successful in organizational culture development at the subsidiary level.

DISCUSSION AND CONCLUSION

In examining the management challenge under the new IB environment, Bartlett and Ghoshal (2000) observed that little attention has been paid to the roles and responsibilities of MNC managers. The risk of this neglect is that "without effective managers in place, sophisticated strategies and subtle organizations will

fail, and . . . [companies will be implementing] third-generation strategies through second-generation organizations with first-generation managers" (p. 705). While this is a potential problem for all MNCs, it is particularly acute for those that seek to compete as global and transnational firms because of the new behaviors and interaction patterns required of their managers.

The literature review presented earlier shows that the existing research approaches tend to adopt a "context-free" perspective in identifying the IHRM needs of MNCs, and give little attention to the role of IHR managers in strategic decision making at the top management level. Building on prior works in "context-embedded" research (Cheng, 1994; Child, 2000; Whetten, 2002), we incorporated an MNC's strategic context into the analysis of IHRM and identified four new research directions that help advance the integration of theory and practice, particularly in addressing the needs of global and transnational firms. Our analysis also revealed opportunities for IHR managers to play an important role in *both* strategy formulation and strategy implementation. As discussed below, completion of the proposed research agenda will contribute not only to advancing the study and practice of IHRM, but also to the larger IB field and other related areas.

First, we propose that managers operating in global and transnational strategic contexts will require different competencies from those working in international and multidomestic firms. Additionally, these competencies are also likely to differ by the type of managerial position (business, country, and functional) the person holds. This research approach fills an important void in the existing IHRM literature, which focuses primarily on universal competencies required for expatriates and MNC managers without considering the strategic or task context within which they function. Furthermore, this approach contributes to the IB literature by extending the original work of Bartlett and Ghoshal's typology and responding to their call for research into its implications for HR policies and practices, as mentioned at the beginning of this section.

Second, given the extensiveness of multicultural team decisionmaking in global and transnational firms, we propose future research to address factors that affect their processes and performance. Examining determinants of effective multicultural team functioning could contribute to the IHRM literature by revealing means through which multicultural teams can be managed through HR practices, such as selection and training for team members and leaders. Additionally, this knowledge contributes to the group dynamics literature in organizational behavior by demonstrating how certain factors, such as cultural background, affect interaction patterns in the group setting, and how these relationships can be further influenced by contextual factors, such as group composition and corporate culture.

Third, we explore how the involvement of IHR managers in strategic decision making may affect MNC functioning, particularly among transnational firms.

Examining this issue in the MNC context reveals areas in which IHR managers are likely to make a contribution to performance, such as when cross-cultural issues are likely to affect the success of the decision, or when a strategic decision requires the integration of HR systems from firms operating in contrasting cultures. This contributes to work in the domestic HR area (e.g. Buyens & De Vos, 2001; Schuler, 1990), which suggests that HR managers should have a larger role in strategy formulation as well as strategy implementation, by specifying areas in which HR managers can make a distinct contribution.

Finally, because organizational culture is a key means of coordination in MNCs, particularly for global and transnational firms, we propose future research into how IHRM policies and practices facilitate its development within MNCs. This fills a major void in the organizational culture literature, which is dominated by research findings based on experiences from domestic firms. Research into this area could also further advance our understanding of the connection between HR policies and the creation and maintenance of organizational culture, as well as the role of both the strategic and societal context in this relationship.

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PART V:
NEW ISSUES IN GLOBAL AND REGIONAL STRATEGY

REGIONAL MULTINATIONALS AND TRIAD STRATEGY

Alan M. Rugman and Alain Verbeke

ABSTRACT

We demonstrate that even the world's most international multinational enterprises (MNEs) operate from home bases within each part of the "triad" of the EU, North America, and Japan. First, we develop a theoretical framework which distinguishes between the locus of MNE decision-making power and actual product characteristics. Second, we find the twenty MNEs with the highest foreign-to-total (F/T) sales ratios and their intra-regional sales, compared to the sales of the home region of each MNE. Only six actually operate across the triad; the others are bi-regional or home-triad oriented. This empirical evidence reveals that most MNEs operate on a regional/triad basis, rather than globally.

INTRODUCTION

Today, much economic activity, both in manufacturing and services, is location-bound, taking place in clusters in the "triad" of the EU, North America, and Japan. The geography of location has been summed up in the phrase "sticky places," and these rigidities influence the strategic management decisions of firms, including multinational enterprises (MNEs). In fact, the choice of entry mode and choice of location are complementary strategic management decisions of profound importance to MNEs.

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The key theoretical driver behind this theme is the insight from MNE scholars such as Dunning (2001), Enright (2000), and Rugman and Verbeke (2001) that in most triad clusters of value-added activities the MNEs are embedded as leading participants. The most extreme articulation of this viewpoint is that of Rugman and D'Cruz (2000), who argue that MNEs act as "flagships" to lead, direct, coordinate, and manage strategically the value-added activities of partner firms in a business network, including key suppliers, key customers, and the non-business infrastructure. While Dunning refers to flagships as leaders of only vertical clusters (as in autos), Rugman and D'Cruz also include horizontal clusters (as in textiles, financial services, etc.).

The new thinking explored here is the extent to which the largest MNEs are "regionally" based, i.e. operate across the borders of nation-states in the triad, in the spirit of Rugman (2000). Examples will be examined from the North America (U.S.-Canadian) context and from within the EU. We provide empirical evidence demonstrating that in reality the majority of even the most "global" MNEs operate on a triad/regional basis. Of the world's 20 MNEs with the highest internationalization of their activities, only six can be considered candidates for the status of MNEs with a global strategy; the remainder are home-triad based and need regional strategies.

A FRAMEWORK OF TRIAD/REGIONAL BUSINESS ACTIVITY

Figure 1 presents a framework that distinguishes between global, regional and national strategies for MNEs with geographically well-dispersed sales, assets, and employees. The vertical axis represents the actual product characteristics (ex post) of an MNE at these three levels: world (or "global") product; regional (or triad) product; and nation-based product.

The extent to which products are standardized at the global, regional, or national level represents the "revealed preferences" of MNEs to institutionalize a particular approach at the world scale or to adapt to the requirements of national/regional markets. In contrast, the horizontal axis is more a reflection of "stated preferences," i.e. the extent to which MNE managers view strategic decision making as a process concentrated in one home base or dispersed across regions or countries.

More specifically, the horizontal axis represents the location of decision-making power (ex ante) for corporate, business, or functional strategy issues. Here, the question to be answered is whether all of an MNE's key strategic decisions (e.g. choice of product/market niches, choice of strategic management tools to outperform rivals, key decisions made in each functional area, including R&D,

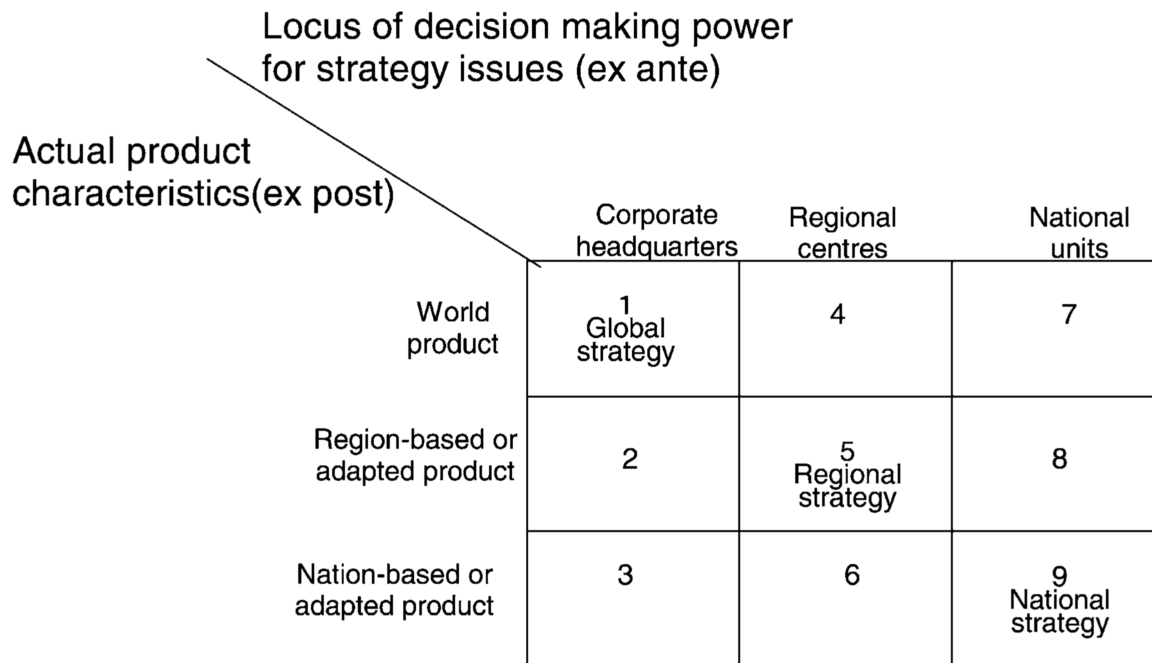

Fig. 1. A Framework for Analyzing "Globalization."

production, marketing, distribution, and human resources management) are made in a single location, or whether at least a substantial portion of these decisions are made in several "home bases" at the national or regional levels.

Figure 1 is an adaptation of Rugman and Verbeke's (1993) framework on "global" strategies. They argued that the truly important decisions to be taken by MNEs are related to two parameters: (1) the number of home bases within which they function, i.e. the number of locations where important strategic decisions are made (equivalent to the horizontal axis of Fig. 1, where the number of home bases determines strategic decision making); (2) the use of non-location-bound versus location-bound company-specific advantages (FSAs) (equivalent to the vertical axis of Fig. 1, whereby the nature of the MNE's FSAs determines its product offering). The former allow various approaches to standardize the MNE's product offering across borders and to earn benefits of integration (related to scale, scope, and benefits of exploiting national differences). The latter provide the potential to gain benefits of national responsiveness.

The difference with Rugman and Verbeke's (1993) resource-based perspective on the integration-national responsiveness model is that Fig. 1 explicitly introduces a regional dimension to the analysis. This is now needed due to the emerging empirical work, Rugman (2000), which suggests that "global" strategies are not appropriate for most MNEs that actually operate on a regional/triad basis. More specifically, on the horizontal axis this regional dimension implies that a number of strategic decisions are left to region-based headquarters rather than nation-based ones. The vertical axis implies the development of FSAs useful at the level of the set of nations that form the region. These are region-bound company strengths; they can contribute to survival, profitability, and growth beyond the geographic scope of a single nation. But these "regionally responsive" strategies are still location bound in the sense that they cannot be deployed globally (Morrison, Ricks & Roth, 1991; Morrison & Roth, 1992). In this context, Yip's (2003, p. 7) view that a global company "has the capability to go anywhere, deploy any assets, and access any resources, and it maximizes profits on a global basis," may be a useful normative message, but one that applies to very few, if any, MNEs in practice. Indeed, most MNEs rely largely on sets of location-bound and region-bound FSAs as the basis for their competitiveness.

Figure 1 helps identify some of the more important mistakes made by proponents of globalization and a global strategy for MNEs. These proponents view as a reflection of a global strategy not only cell 1, but also cells 2, 3, 4, and 7 (where other strategies than globalization are required). In cells 2 and 3, they focus on the decisions and actions of corporate leaders, typically the CEO, the top management committee, and the board of directors. It is undoubtedly the case that most key financial decisions in MNEs are made at that level. However, even if all major

corporate strategy decisions are made centrally – typically in the home country (left column of Fig. 1), as is the case for many companies in, e.g. the computer business (both hardware and software) – cells 2 and 3 reflect the existence of substantial regional and national responsiveness, respectively, regarding the product offering (including its service component) that actually is provided to the market.

In other words, MNEs that tailor their product offering to regional and national circumstances do not pursue a simple global strategy as suggested by cell 1. Considerable resources must be allocated to allow for the required level of sub-global responsiveness in terms of what is being delivered to the market. In addition, even if the MNE's product offerings are largely global, this does not necessarily imply that all important decisions on market penetration, distribution, advertising, etc. can be made centrally. Bounded rationality constraints are likely to force corporate management to delegate important decisions to the regional and national levels, thereby positioning the firm closer to cells 4 and 7.

This point is vitally important because, at the other end of the academic and policy-oriented spectrum, many anti-globalization critics suffer from a similar misperception: they view MNEs as centrally directed, profit-maximizing entities eager to sell standardized products around the globe. Anti-globalization critics state that MNEs are insensitive to host-country and host-region demands, especially those of host-country governments. In fact, the presence of intense international rivalry and the unfortunate reality that every MNE from one region does face an important liability of foreignness in the other regions of the world, force MNEs to be particularly sensitive to the requirements of host-country governments and other salient stakeholders (Rugman & Verbeke, 1998).

Of course, this does not imply that MNEs can or should adopt the approach in cell 9 and be fully polycentric, with products carefully tailored to each national market and most strategy decisions left to host-country subsidiary managers. Much conceptual and empirical evidence suggests that a "multi-national" approach leads to overlapping efforts and duplication in innovation, inconsistent national strategies, opportunistic behavior by subsidiary managers, and more generally a waste of resources and lack of clear strategic direction (Bartlett & Ghoshal, 2000). The great strength of an MNE is to overcome market imperfections characterizing national markets and to develop systemic, network-related rather than asset-based FSAs (see Dunning & Rugman, 1985). Even for MNEs with a polycentric administrative heritage, cells 6 and 8 are likely much more relevant than cell 9. In cell 6, attempts are made to achieve decision-making synergies across markets, e.g. by developing pan-European or pan-American strategies in particular functional areas (Rugman & Verbeke, 1992). In cell 8, the national subsidiary managers persue economies of scale and scope by standardizing at the regional level their product offering across those national markets that have strong similarities in

demand. In that case, subsidiary initiative is critical (Birkinshaw, 2000; Rugman & Verbeke, 2001).

The strategy and international management literature has done a good job of distinguishing between cells 1 and 9, but it has not addressed most of the other cells. For example, the basic matrix of integration (cell 1) and national responsiveness (cell 9) popularized by Bartlett and Ghoshal (1989) distinguished between a pure global cell 1 strategy and the "act local" national responsiveness strategy of cell 9. In addition, the key contribution of their "transnational solution" framework was the prescription that MNEs should usefully combine strategies in cells 1 and 9. MNEs should attempt to develop appropriate strategies for each separate business, for each function within that business, and for each task within that function along with the capability to implement either a national or a global approach.

The Bartlett and Ghoshal framework thus can usefully explain cell 3 (centralized, global strategic decision making combined with local product offering), i.e. the think global/act local approach. It also allows the analysis of less common cases in cell 7, whereby rather powerful national subsidiaries are responsible for delivering global products but choose which products have the most potential in their national markets and largely take responsibility for the delivery – an approach found in many global professional services. Yet their framework cannot handle cell 5 triad-based strategies very well, nor the intermediate cases of cells 2, 4, 6 and 8, i.e. all cases in which the regional level is important.

Here we report data suggesting that an increasing number of MNEs operate largely at the regional level. Therefore, regional elements are becoming increasingly important in many MNEs, either in terms of strategic decision making or actual product offering. If, as the empirical evidence provided in the next sections suggests, many MNEs are at least partially operating in cell 5 on a triad basis, then any strategy-related analysis of the MNE's functioning first needs to take into account the requirement to decompose its strategic decision-making processes and product offering along global, regional, and national lines, building a more complex analytical tool than a conventional integration-national responsiveness matrix. Only then can a correct analysis be performed of the actual extent of triad-based decision-making power and the rationale for region-based and/or adapted products/services from these MNEs be properly investigated. If the theoretical construct itself of a "regional solution" (cell 5 in Fig. 1) is neglected, little can be expected from empirical research on strategy and structure in MNEs to portray accurately the present importance and future potential of the regional approach.

It is important to observe here that the regional approach has sometimes been described as the mere outcome of a global strategy. The best-known articulation of this perspective can be found in Yip (2003, p. 222), who argues: "Before deciding

whether and how to do business in a region of the world, a company needs to have a clear global strategy [which includes] the core business strategy, the competitive objectives for the business, and the extent to which the business will be operated as one integrated business or a looser collection of geographically independent units. Next, a company needs to decide on the overall role of the region within the global strategy." Yip's view assumes a particular sequence and hierarchy in MNE strategic decision making. In practice, however, the global-regional sequence is unlikely to occur.

The regional solution of cell 5 should be viewed as an efficient corporate response to several factors. First, internal information-processing requirements are critical. If the "rules of engagement" are different in each region (different industry structure, different regulatory system, different competitive position of the firm, different optimal expansion pattern, different product scope, different strategy tools required to outperform rivals, etc.), intra-regional information processing must be sufficiently dense so as to permit affiliates to cope optimally with shared external circumstances and to develop regionally consistent strategies. Second, customer requirements may differ vastly across regions, depending on the level of economic development, culturally determined preferences, and so on. Third, region-based cluster requirements may impose specific types of behavior on firms in order for those firms to be perceived as legitimate within the context of regional clusters, especially suppliers, related and supporting industries, the non-business infrastructure etc. Here, region-based isomorphic flexibility may be critical for firms to function effectively as true insiders in the region. Finally, political requirements at the regional level are increasingly important. It could be argued that regional cooperation agreements such as the North American Free Trade Agreement (NAFTA) and the European Union (EU) single market measures mainly represent the elimination of trade and investment barriers and therefore allow MNEs to devote less attention to government policy; in fact, regional agreements usually imply not merely the elimination of national regulation, but also a shift of regulatory authority to the regional level, and thus the need to allocate company resources to monitor and manage relationships at that level.

The rigidity of the triad has been explored in Rugman (2000). It is reinforced by the new trade regime of the World Trade Organization (WTO) which has to devote enormous managerial resources to arbitrate triad-based trade disputes and trade-remedy law type protectionism (as in the bananas, beef hormones, export subsidies, and steel cases). The new protectionism of health, safety, and environmental regulations is preventing an open world market and reinforcing triad markets. NAFTA is being expanded into the Free Trade Agreement of the Americas (FTAA), and thirteen countries are in negotiation to be added to the

EU. These political developments reinforce the triad and the need for regional government policies and triad-based firm strategies.

EMPIRICAL EVIDENCE ON TRIAD ACTIVITY

As a test of the strength of the triad/regional focus of strategy, over a global strategy, let us consider the most favorable possible case for the global strategy viewpoint. This would classify as "global" all MNEs with a foreign-to-total (F/T) sales ratio above, say, 50% and/or with some significant activity in each part of the triad. Such MNEs are easy to identify; UNCTAD reports the F/T ratios for sales, assets, and employees on an annual basis for the world's largest 100 MNEs, ranked by foreign assets. The UNCTAD *World Investment Report* for 2001 lists the largest 100 MNEs by foreign asset size. For these 100 MNEs, we then calculate the F/T sales ratios where foreign sales are sales by subsidiaries and exports by the parent MNE. Of these, the top 20 MNEs ranked by F/T sales are reported in Table 1, as F/T sales.

As Table 1 shows, these 20 MNEs have the highest F/T sales ratios among the top 100 MNEs. They are mostly from small, open economies such as Canada, Australia, and Switzerland, or they are members of the EU such as Finland, France, the UK, Germany, and Sweden. There are no U.S. MNEs in the most international global firms – which is not all that surprising given the huge size of the U.S. home market. There is one Japanese MNE in Table 1.

Nevertheless Table 1 disguises a very important point. While these 20 MNEs have the majority of their sales outside the home country, many are still very regional. Most of these foreign sales are still mainly in their home-triad regional market. This point is demonstrated in Table 2, where MNEs are ranked according to their intra-regional sales percentages. By intra-regional we mean sales within Europe (and usually within the 15 member states of the EU) for MNEs from those countries and within NAFTA for Canadian and U.S. MNEs. In the case of Asian-Pacific MNEs, intra-regional refers to Asia, excluding Australia. The result of this home-triad ranking is shown in Table 2.

The data in Table 2 reveal that about half of the world's allegedly most global MNEs are, in fact, operating mainly in the home-triad market. For example, the French MNEs Pernod Ricard (81.7% intra-regional sales) and Vivendi (68%) are clearly "European" MNEs in their sales, because more than two-thirds of their business is within Europe. They need a European-based strategy, not a global one. The same is true for several other MNEs that are allegedly global; in fact these MNEs are operating in their home-base triad for the majority of their sales: Thomson Corporation (84.4%); Stora Enso (69.2%); Akzo Nobel (63%); Volvo (55.1); ABB (54.0%); and Philips (53.2%). Two other MNEs are very

Table 1. The World's Most International MNEs.

Rank	Company	Country	F/T Sales
1	Seagram	Canada	104.2
2	Roche	Switzerland	98.4
3	Nestlé	Switzerland	98.3
4	ABB	Switzerland	97.5
5	Electrolux	Sweden	95.9
6	Philips	Netherlands	94.9
7	Thomson Corporation	Canada	94.8
8	AstraZeneca	United Kingdom[a]	94.7
9	Stora Enso	Finland	93.5
10	British American Tobacco	United Kingdom	91.2
11	News Corporation	Australia	90.2
12	Holcim	Switzerland	90.1
13	Volvo	Sweden	88.7
14	Unilever	United Kingdom	87.3
15	Diageo	United Kingdom	86.3
16	Michelin	France	86.2
17	Glaxo Wellcome	United Kingdom	85.5
18	Nippon Mitsubishi Oil Corporation	Japan	83.8
19	Akzo Nobel	Netherlands	81.8
20	DaimlerChrysler	Germany	81.1

Notes: This table is constructed from the UNCTAD (2001) source which lists the world's largest 100 MNEs by foreign asset size. The foreign and total sales of these 100 MNEs are also reported so F/T sales ratios can be calculated. Then the top 20 MNEs on F/T sales are included.
Source: UNCTAD, World Investment Report, 2001. Data are for 1999.
[a] UNCTAD lists AstraZeneca as a U.S. company but its headquarters is in the United Kingdom.

home-triad based: Electrolux (47%) and Michelin (47.2%). These data could not be constructed for Nippon Mitsubishi Oil Corporation. This leaves only 10 of the top 20 (actually the 21 included in Table 2, due to Vivendi's purchase of Seagram and then Pernod Ricard's purchase of part of Seagram's liquor business) as allegedly global MNEs that could possibly be global, with global strategies.

Of these, several are highly focused in one part of the triad, but not their home triad. These include U.S.-based MNEs such as:

- Newscorp (9% sales in Australasia, 74.7% in the United States, and 16.3% in the United Kingdom);
- AstraZeneca (32% in the United Kingdom 52.8% in the United States, and 5.2% in Japan, and 10% in the rest of the world);
- GlaxoSmithKline (26.5% in Europe, 52.5% in the United States, and 21% in the rest of the world);

Table 2. Home Region Distribution of Sales of the World's TNC Index, 2001.

Company	Home Country	2001 (%)		1999 UNCTAD F/T
		Intra-regional	Extra-regional	
Vivendi[a]	France	68.0	32.0	NA
Pernod Ricard[a]	France	81.7	18.3	NA
Roche	Switzerland	37.0	63.0	98.4
Nestlé	Switzerland	31.6	68.4	98.3
ABB	Switzerland/Sweden	54.0	46.0	97.5
Electrolux	Sweden	47.0	53.0	95.9
Royal Philips	Netherlands	53.2	46.8	94.9
Thomson Corporation	Canada	84.4	15.6	94.8
AstraZeneca	United Kingdom	32.0	68.0	94.7
Stora Enso	Finland	69.2	30.8	93.5
British American Tobacco	United Kingdom	26.3	73.7	91.2
News Corporation	Australia	9.0	91.0	90.2
Holcim	Switzerland	33.0	67.0	90.1
Volvo	Sweden	55.1	44.9	88.7
Unilever	Netherlands/United Kingdom	38.7	61.3	87.3
Diageo[a]	United Kingdom	31.8	68.2	86.3
Michelin	France	47.2	52.8	86.2
GlaxoSmithKline	United Kingdom	26.5	73.5	85.5
Nippon Mitsubishi Oil Corporation	Japan	NA	NA	83.8
Akzo Nobel N. V.	Netherlands	63.0	37.0	73.7
DaimlerChrysler	Germany	29.9	70.1	81.1

Notes: Intra-regional refers to Europe in the case of European companies and North America in the case of North American companies. In the case of DaimlerChrysler, Europe refers to the EU. Ericsson reports Europe, Africa and the Middle East as one region.
Source: Individual Annual Reports, UNCTAD, World Investment Report, 2001.
[a] Purchased Seagram.

- Daimler Chrysler (29.9% in the European Union 60.1% in NAFTA, and 10% in the rest of the world).

The more balanced MNEs, operating across at least three regions of the triad, number only six in total (out of 21):

- Nestlé (31.6% in Europe 31.4% in the Americas, and 37% in the rest of the world);
- Holcim (33% in Europe 22% in North America, 27% in Latin America, and 18% in the rest of the world);
- Roche (37% in Europe 38% in North America, and 25% in the rest of the world);

- Unilever (38.7% sales in Europe 26.6% in North America, 15.4% in Asia, 12.7% in Latin America, and 6.6% in the rest of the world);
- Diageo (31.8% in Europe and 68.2% in the rest of the world);
- British American Tobacco (26.3% in Europe and 73.7% in the rest of the world).

These six MNEs are much more diversified across the triad; they can be regarded as global firms to the extent that they have global strategies and structures. Yet it should be recognized that even in this select group, each company may also exhibit some regional features in corporate strategy and structure. Therefore, in the overall set of 20 highly internationalized MNEs, the case of a global strategy and structure can be made for only six firms, with the additional observation that even these firms exhibit regional elements. The others are either strongly home-triad-based or are from small countries peripheral to the triad and are focused in one of the other triad markets. Most of the other 80 of the top 100 MNEs are even less global and are either domestic or home-based MNEs. Location and region matter even to MNEs.

One possible modification to this triad-based strategy message is that, for some MNEs, the strategy may need to be adjusted by strategic business unit (SBU). While it is even more difficult to find data on SBU sales by triad, for the UNCTAD 100 largest TNCs, some examples may help. Table 3 reports data on the SBUs of Vivendi Universal. Some SBUs, such as CANAL, have 96% sales in Europe, while others have a larger U.S. presence, such as the Universal Studios Group (57% U.S.), Publishing (35% U.S.), and Music (42% in the United States, 40% in Europe). Vivendi's water business is part of the Environmental Services SBU, which is still 73% in Europe.

Table 3. Vivendi Universal, 2001 Revenues by Region (%).

Area	Europe	U.S.	ROW
Music	40	42	18
Publishing	55	35	10
Universal Studios Group	28	57	15
CANAL+ Group & Other	96	2	2
Telecoms	87	–	13
Internet	47	53	–
Total Media and Communications	62	26	12
Environmental services	73	19	8
Non-core businesses	67	–	33
Total Vivendi Universal	68	22	10

Note: Vivendi purchased Seagram in 1999 and the combined operations are reported here.
Source: Vivendi Universal Annual Report.

Table 4. The Largest U.S. Retailers, Number of Stores, 2001.

Company	U.S.	Canada	Mexico	North American Triad%	International	%	Total
Wal-Mart	3,118	174	499	90.5	398	9.5	4,189
Sears	2,167	511	–	100.0	–	–	2,678
Kmart	2,105	–	–	100.0	–	–	2,105

Notes: In addition to Sears' Canadian retail stores, the company has over 2,157 Sears Catalogue Stores. These are independently owned catalogue stands that operate mostly in remote areas across Canada.

Source: Wal-Mart Annual Report 2001; Sears Annual Report 2001; www.sears.com; Kmart Annual Report 2001.

The large retail organizations are even more triad-based than the manufacturing MNEs. Table 4 reports data showing that the large U.S. retailers Wal-Mart, Sears, and Kmart are all North American based. The latter two have no stores outside the United States, and Wal-Mart has only 10% of its stores and revenues outside the NAFTA region. These and some other retailers are now discussed in more detail.

- Wal-Mart has 4,414 stores, of which 3,244 are in the United States, 196 in Canada, and 551 in Mexico. Only 423 are in international markets, i.e. 9.6% of the total stores. Nevertheless, Wal-Mart is the most international large-scale retailer from the United States. In 2001, foreign sales as a percentage of total sales were 16.26% ($35.4 billion of a total of $217.7 billion).
- Sears operates only in Canada and the United States.
- Kmart recently divested itself of its operations in Canada and Mexico. Its 2,105 stores are all in the United States. There is a Kmart Australia, but it is owned by an Australian company.
- Target has 1,381 stores in the United States only.
- JC Penney has 3,700 stores in the United States only.
- Daiei has 8,609 stores (which includes 7,432 convenience stores). It is mainly a Japanese operation, but the company also has stores in China and the United States.
- Groupe Pinault-Printemps of France makes 52.5% of its revenue outside of France. However only 30% comes from outside Europe.
- Carrefour of France has about 9,200 stores in 30 countries. Yet only 19% of its revenue originates from outside Europe (see Table 5). Clearly, Carrefour needs to be analyzed on a European regional level; it is not a global organization.

Turning to financial services, the world's largest financial MNE, Citigroup, is also very regional. Table 6 reports Citigroup's consumer banking group, where total revenues are 72.7% in North America, Accounts are 77.1%, and only

Table 5. Carrefour's International Locations, 2001.

Country/Region	No. of Stores	% of Total
France	3,367	36.6
Europe (excl. France)	4,870	52.9
Spain	2,719	29.6
Italy	918	10.0
Belgium	442	4.8
Greece	375	4.1
Portugal	332	3.6
Poland	62	0.7
Switzerland	11	0.1
Czech Rep.	11	0.1
Total Europe	8,237	89.5
Americas	645	7.0
Argentina	391	4.3
Brazil	226	2.5
Mexico	19	0.2
Colombia	5	0.1
Chile	4	0.0
Asia	109	1.2
China	27	0.3
Japan	3	0.0
South Korea	22	0.2
Taiwan	27	0.3
Thailand	15	0.2
Malaysia	6	0.1
Indonesia	8	0.1
Singapore	1	0.0
Other & non-specified	209	2.3
Total	9,200	100.0

Source: www.carrefour.com

Deposits are more diversified, at 45.5%. Credit cards are part of the Accounts in Citigroup's consumer banking group, and over 76% of accounts in the United States are credit card accounts. While over 70% of Citigroup's revenue and accounts are in the United States, only 45% of average consumer deposits are there. Table 7 shows that this regionalization is common across all the major business groups of Citigroup, except in commercial loans, which is 27% U.S.-based. While Citigroup makes large commercial loans to foreign companies, it is not as active in foreign consumer loans; 65.6% of its consumer loans are in

Table 6. International Operations of Citigroup, 2001: Consumer Banking Division Percent of Total.

Country/Region	Revenue	No. of Accounts	Deposits
NAFTA	72.7	77.1	45.5
Japan	8.9	3.3	10.2
Other Asia	5.8	6.2	24.2
Western Europe	6.8	6.4	9.1
Latin America	3.6	4.5	7.1
Other	2.2	2.5	4.0
Total	100.0	100.0	100.0

Note: Numbers might not add up due to rounding.
Source: Citigroup, Annual Report, 2001.

Table 7. Selected Indicators of Citigroup's International Scope.

Indicator	U.S.	Foreign	U.S. as a % of Total
Investments	95,781	38,822	71.2
Brokerage receivables	25,058	2,517	90.9
Trading account assets	81,241	37,304	68.5
Trading of federal funds and securities	104,150	34,087	75.3
Consumer loans	151,837	79,782	65.6
Commercial loans	53,834	91,867	36.9
Employees	149,000	123,000	54.8

Note: Average volume in millions of dollars.
Source: Citigroup Annual Report, 2001.

the United States. Overall, these data reveal a very home-based North American business. Indeed, Citibank became less global after the merger with Travellers in 1999 because the latter's insurance business was very localized, which offset much of Citibank's banking diversification in South America and Asia.

CONCLUSIONS

There is abundant empirical support for the Rugman (2000) proposition that large MNEs operate on a triad basis rather than a global one. The old-fashioned view of "global" MNEs operating in an integrated and homogeneous world market with globalization as the predominant form of international business needs to be replaced. The world's 100 largest MNEs are mainly triad-based regional players,

not global ones. They operate on a strongly segmented regional/triad basis, and a relevant framework to analyze MNE strategy needs to recognize this. In short, management strategy as taught in business schools today needs to refocus from a simplistic global strategy and globalization perspective to the more empirically accurate one of triad market activity and the regional MNEs.

Our findings are partially confirmed in work on the triad-based nature of the automobile sector by Schlie and Yip (2000). However, those authors argue that most MNEs first follow a global strategy, then some selectively regionalize. In other words regionalization is a sequential process. We have not observed this; rather, MNEs of today follow strategies that allow them to succeed in their home region of the triad; only a few MNEs operate across the triad and can be considered global.

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INTERNATIONAL BUSINESS EDUCATION IN THE GLOBAL ECONOMY

Richard W. Wright

ABSTRACT

This paper identifies sweeping transformations taking place in the contemporary IB environment and discusses their impact on IB education. We focus on two overarching trends: (1) the demise of the nation-state as the relevant unit around which IB activity is organized and conducted; and (2) the demise of the stand-alone firm, with a hierarchic distribution of power and control, as the principal unit of business competition. We then discuss the range of new skills business managers will need to operate successfully in this new environment, emphasizing the need for cross-cultural awareness, entrepreneurial skills, and networking capabilities.

INTRODUCTION

The global business environment is changing dramatically. Two developments in particular, are revolutionizing the management policies and competitive strategies of large and small firms alike. One is the demise of the nation-state as the primary macroeconomic player, or the principal unit around which international economic activity is organized and conducted. The other is the demise of the stand-alone firm as the primary microeconomic player, or the basic unit of competition. We

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will discuss each of these transformations, and consider their implications for the future of IB education.

DEMISE OF THE NATION-STATE AS THE PRIMARY MACROECONOMIC PLAYER

For centuries, the nation-state was the basic unit around which international economic activity was planned, organized, and conducted, regardless of the origin of firms. Even business activities that appear highly "international," such as traditional foreign direct investment (FDI), have been molded strongly by the boundaries of nation-states. The *multidomestic* model of FDI, for example, which has typified foreign investment by European multinationals such as Ericsson, Nestlé, Philips, and Unilever, manages highly autonomous subsidiaries, each conforming to local or national environments. The so-called *international* model, characteristic of the foreign involvement of many American multinationals such as Procter & Gamble, is a more ethnocentric arrangement in which products and technology are generated mainly by the parent company, but with national subsidiaries in each major (national) market to produce the parent's products for that market. Many Japanese firms, including Komatsu, Matsushita, Sony, and Toyota, have followed a more *global* approach. In this model, production may be centralized – often at home – to achieve large production runs of standardized products, but the parent firm still retains a highly national orientation in its structure and control. Traditional practice and traditional theories thus conform to the prevailing paradigm of the times, reflecting a macroeconomic environment in which international economic activity is shaped and constrained largely by the power of individual nation-states.

The Trend Toward Supra-National Powers

The traditional models of business involvement, in which business activity is organized largely around the segmentation of factor and product markets into distinct nation-states, is giving way to a new paradigm in which the firm – regardless of where the parent company happens to be based – will obtain various elements of value from wherever in the world they may be most efficiently obtained, combine or assemble them in whatever location may be the most cost-effective, and then distribute them to wherever appropriate demand conditions exist, almost without regard to national boundaries. We see examples throughout the world of the decline in the segmentation of product and factor markets by individual nations, as power evolves from nation-states to higher, supra-national units. This occurs in

regional trade blocs such as the EU, where increasing degrees of power are shifting from the individual member nation-states to the pan-European level, as well as in broader international agreements such as the World Trade Organization (WTO).

The upward evolution of national powers to higher levels means that firms everywhere now face increasing global competition, without the domestic-market protection formerly afforded by national governments. Even if a small, "local" firm prefers not to enter international markets, it must achieve world-scale efficiencies in order to remain competitive and viable in today's open markets. The integration of product and factor markets implies further that any firm operating outside its domestic environment – or even one seeking to obtain world-scale efficiencies without leaving its domestic market – more and more will need to interface with suppliers and customers in other national cultures. The firm can no longer operate solely within its domestic environment, nor can it de-centralize its activities into discreet national profit centers in which managers often need to be sensitive to a single local economy or culture. Therefore, managers of large and small firms alike will need intercultural awareness and skills as never before.

The Trend Toward Localization of Powers

While economic power and sovereignty are clearly seen evolving from national to supra-national levels, we are simultaneously witnessing another important, albeit less obvious, diminution of the traditional powers of nation-states in the opposite direction: from nation-states to local or regional levels. This is especially true in the realm of political and cultural sovereignty.

This trend toward the fragmentation or devolution of national powers is most dramatically evident in the abrupt disintegration of the Soviet Union and the former Yugoslav federation. However, devolution of national powers on a more gradual and rational basis is seen elsewhere as well, most obviously in Western Europe:

- In the United Kingdom, significant new legislative and cultural powers are being decentralized to Scotland and Wales.
- In Spain, the linguistic and cultural assertiveness of regions such as Catalonia, the Basque Region, and Galicia are becoming far more pronounced than before.
- Despite the unification of East and West Germany, much greater local autonomy is devolving to the individual German *länder*, or states.
- Even in France – long considered a bastion of centralized power in the nation-state – a new, semi-autonomous status has been granted to Corsica; and there is a notable resurgence of regional languages and culture, such as Languedoc or Provençal in the south and Breton in the east.

- In Canada, the province of Quebec is enjoying greater cultural and political autonomy than ever before.

While globalization may contribute toward the "homogenization" of cultures and tastes, it is evident that in much of the world, local and regional cultural distinctions are becoming *more* pronounced, rather than less so. The consolidation of economic power at increasingly high, supra-national levels may enable internationally oriented firms to achieve new productive efficiencies; but the growing devolution of cultural and political sovereignty to local and regional jurisdictions means that large firms may need to rely increasingly on smaller, localized firms to achieve the cultural sensitivities they need for local adaptation.

DEMISE OF THE FIRM AS THE PRIMARY MICROECONOMIC PLAYER

The profound change occurring at the microeconomic level is the demise of the company as the primary unit of competition. Management has long viewed the company as a "black box": a self-contained unit with clearly defined parameters within which the various management functions take place. Emphasis has been on *internalizing* value-added functions, to bring them more fully within the control of the firm's management, and on building walls around the firm to help secure the retention of its internal proprietary advantages from competitors. In the new competitive environment, however, firms – large and small alike – are often incapable of acquiring and retaining control of the full range of value-added functions on their own. Increasingly, we see firms forming collaborative alliances with other firms, even with potential or actual competitors in the same industry.

Traditional Internationalization Models

Traditional approaches to internationalization focused on a unipolar (centralized) and hierarchic distribution of power and control. Internalization theory (Buckley & Casson, 1976; Morck & Yeung, 1991, 1992; Rugman, 1979, 1981; Teece, 1985) taught us that by investing in its own foreign subsidiaries a firm could expand operations while maintaining control at head office. Likewise, the Eclectic Paradigm (Dunning, 1973, 1977, 1980, 1988) focused on ownership-specific advantages and location-specific advantages that a firm can enjoy while maintaining centralized control.

A unipolar scenario is implicit as well in the Stage Models of incremental internationalization (Bartlett & Ghoshal, 1989; Bilkey, 1978; Bilkey & Tesar, 1977; Buckley, Newbould & Thurwell, 1988; Cavusgil, 1980, 1984; Cavusgil & Nevin, 1981; Johanson & Vahlne, 1977, 1990; Johanson & Wiedersheim-Paul, 1975; Leonidou & Katsikeas, 1996; Newbould, Buckley & Thurwell, 1978). Internationalization could be achieved without giving up power and control; the internationalizing firm could maintain its unified distribution of power and control, albeit at a heavy capital cost. Internationalization, under this model, was expensive because ownership and unipolar decision making led to huge, integrated factory complexes. Iron ore entered a plant from one end, and automobiles drove out the other. Nowadays, even Ford has decentralized operations into a multipolar structure. The factory where 100,000 employees used to produce 1,200 cars a day is down to 3,000 employees making 800 cars a day, leading us to a new paradigm of international business through networks.

THE NEW PARADIGM OF MULTIPOLAR COMPETITION

An alternative to the unipolar paradigm of internationalization assumes a multipolar distribution of power and control. Rather than focusing on the internationalization of an individual centralized firm with a unipolar distribution of power and control, we can focus on a multipolar network of firms. Power and control are divided among independent firms that cooperate voluntarily for increased efficiency and profit. Networks result in the demise of the stand-alone firm (with a hierarchic distribution of power and control) as the principal unit of business competition. Literature pertaining to this networking perspective includes Acs and Dana (2001), Axelsson and Easton (1992), Bodur and Madsen (1993), Brüderl and Preisendörfer (1998), Chetty and Blackenburg-Holm (2000), Coviello and Munro (1997), Dana (2001), Fontes and Coombs (1997), Gomes-Casseres (1996), Gynawali and Madhaven (2001), and Holmlund and Kock (1998). In addition, Stabell and Fjeldstad (1998) discuss reciprocal interdependence.

Examples of this move toward global alliances among large firms abound in a variety of industries. In the airline industry, for example, Northwest and KLM used to be true competitors. Each tried to take away market share from the other; each used to advertise to encourage consumers to *select one over the other*. Marketing by one firm actually hurt the other. It was a zero sum game with a limited pie. Today, the former rivals engage in symbiotic marketing. By acting together, the two firms increase the attractiveness of flying *either* airline. In other words, it is no

longer a zero sum game. We are no longer dealing with two isolated unipolar firms but with a multipolar network – in this case, an integrated interline product. People who otherwise would not fly decide to fly, thanks to the new convenience. In other words, symbiotic management yields an enlarged pie. It is possible, therefore, to play a non-zero sum game (Casti & Karlqvist, 1995; Jarillo, 1993; Webster, 1992; Zineldin, 1998). Leading alliances in the airline sector include the Star Alliance (fourteen airlines) and Oneworld (eight airlines).

Similar alliances among major firms in other industries abound. Examples include:

- An alliance among IBM (USA), Toshiba (Japan), and Siemens (Germany) in electronics;
- Another alliance in electronics among ATT (USA), Philips (Netherlands) and Olivetti (Italy);
- An automotive alliance among Ford (USA), Mazda (Japan), Jaguar (UK) and Volvo (Sweden);
- Another automotive alliance among GM (USA), Toyota (Japan), Daewoo (South Korea) and Saab (Sweden);
- A network of alliances between Millennium Pharmaceuticals (USA) and nearly 700 partners. (For a discussion of alliances in this industry, see Pangarkar and Klein (1998).)

The Alliance Imperative for Large Firms

A rich literature has been developed on collaboration among large firms. Among the most prominent contributions are Doz and Hamel (1997), Forrest (1992), Gomes-Casseres (1994), Kanter (1994), Parkhe (1997), Stafford (1994), and the three-volume series edited by Beamish and Killing (1997).

There are several reasons why alliances are becoming not just a convenience but also an imperative for large firms competing in the global arena:

- *High fixed-cost threshold*: Formerly, companies could expand or contract freely by adjusting their variable costs – especially their cost of labor. However, the relative cost of labor to total value has diminished dramatically in many industries; labor now accounts for only 12–15% of the cost of producing electronic goods, for example and the portion of labor to the total cost of a Japanese car has been reduced to only 10%. Increasingly, a minimum threshold of large fixed costs must be incurred if a company is to become a serious player on the world scene. These include major investments in plant and equipment, R&D, brand-name development, distribution systems, etc. Developing a

new car model today costs $3–5 billion; a new aircraft some $7–10 billion. The magnitude of these costs and risks is often beyond the ability of large multinationals to absorb; alliances can share the costs and risks.
- *Rapid product life cycle*: The increasingly rapid dispersion of technology requires swift access to major markets – especially those of the triad (North America, Europe and Japan) – before a firm loses its proprietary advantage. Yet few if any of even the largest firms can achieve instant market presence in all the triad areas on their own. The urgent need for speed to markets dictates reliance on others.
- *Need for related technologies*: Complex systems today often require the fusing of technologies across industry lines. IBM, for example, uses Lotus for software, Microsoft for operating systems, and Intel for chips. Similarly, technologies from the computer, telecommunications, and entertainment industries are fusing across industry lines. Access to related technologies increasingly requires collaborative linkages with other firms.
- *Global standards*: More and more, rival technologies vie for adaptation as the world standard. An early example was the rivalry for a worldwide VCR standard among Matsushita, Philips, and Sony, each with its own format. Although it originally lagged behind Sony and Philips, Matsushita was able to achieve enormous cost economies – and consequently to get its VHS format accepted as the world standard – largely through collaborative arrangements with other firms (including the U.S. subsidiary of Philips!). A current example is the struggle to establish a worldwide standard technology for high-definition television (HDTV). By allying with other firms, even competitors, a firm may enhance the likelihood of establishing sufficient market presence to become the accepted world standard.

The Alliance Imperative for Small Firms

For small firms, perhaps even more than for large ones, partnering with other firms through various forms of collaborative arrangements is becoming imperative:

- Small- and medium-sized enterprises (SMEs) often lack the resources for gradual, "stages" progression into the international arena over time, particularly within a time frame needed to exploit increasingly short-lived proprietary advantages.
- SMEs need to achieve world-scale efficiencies, even if they are not entering world markets, in order to withstand new competition from abroad.

As a consequence of these new imperatives, small firms are also benefiting increasingly from mutual interaction, both with other small firms (Bartels, 2000;

Chetty & Blackenburg-Holm, 2000; Coviello & Munro, 1995, 1997; Holmlund & Kock, 1998; Perrow, 1992; Sadler & Chetty, 2000; Welsh et al., 2000) as well as with large firms (Etemad, Wright & Dana, 2001).

Relationships of one form or another have always been at the core of competitiveness. Increasingly, however, firms are finding that networks of relationships need not necessarily be "internalized" or controlled by direct ownership and internal hierarchies to be effective. What we are witnessing today is a shift in paradigm from traditional forms of international business collaboration taught in business schools – in which the locus of control lies in formal control through ownership and internal hierarchy – toward newer forms of collaboration in which mutual control emanates from interdependence and mutuality of benefit. This represents a significant departure from past traditions.

IMPLICATIONS FOR INTERNATIONAL BUSINESS EDUCATION

These sea-changes in the global business environment have far-reaching implications for business education. To operate effectively in this new competitive paradigm, managers will need new skills and competencies, many of which are not adequately addressed in business schools today.

The Need for Cross-Cultural Awareness

We have noted a trend toward larger units at both the macroeconomic and microeconomic levels. Both the state and the firm have yielded control in exchange for the advantages inherent in being a part of a larger entity. Simultaneously, at both the macro and micro levels there is a trend toward greater specialization and local expertise. Governments feel growing pressure to delegate political and cultural powers to local jurisdictions, while firms benefit from increased focus and specialization in their business activities.

Both of these trends generate urgent needs for sensitivity to other cultures and other business systems. The integration of product and factor markets implies that any firm operating outside its domestic environment – or even one seeking to obtain world-scale efficiencies without leaving its domestic market – will need to interface with suppliers and customers in other national cultures. The firm can no longer operate solely within its domestic environment, nor can it decentralize its activities into discreet national profit centers in which managers can be sensitive to a single local economy or culture. As a consequence, managers of large and small

firms alike need greater awareness than ever before of business opportunities and practices in other countries. While many business schools offer a cross-cultural management course to students concentrating on IB, the new realities suggest that cross-cultural awareness and sensitivity is becoming imperative for *all* managers, whether their firms seek to "go international" or to remain essentially at home.

At the same time, the devolution of traditional powers from nation-states to local or regional levels implies that adequate cross-cultural training should extend well beyond sensitivity to national cultural characteristics, toward understanding regional and local cultural distinctions as well. A manager seeking, for example, to market products or to interact with suppliers in Spain needs to be aware not only of "Spanish" culture but also of the distinct regional differences in, say, Catalonia, the Basque Region, and Galicia. The need for proper cross-cultural awareness and training assumes far more importance today than before, not just for managers of internationally oriented firms but for all managers.

The Need for Entrepreneurial Skills

The new competitive paradigm is dramatically changing the role of small and/or entrepreneurial businesses in the global competitive arena. Traditionally, competition in international markets was the realm of large companies, while smaller businesses remained local or regional in scope. This assumption still governs the curriculum of most business schools. However, the removal of government-imposed barriers that segregated and protected domestic markets, as well as recent technological advances in manufacturing, transportation, and telecommunications, allow even the smallest firms access to customers, suppliers, and collaborators around the world. Small companies and/or entrepreneurial enterprises – both domestically and internationally – are increasingly fueling economic growth and innovation. Reynolds (1997) noted that the recent expansion of markets has not been associated with an expanded role for larger firms. Instead, smaller firms are filling niche roles (Buckley, 1997). Firms of all sizes are beginning to share the same competitive space. Symbiotic arrangements are evolving through which smaller firms enter the value chains of larger firms, to the benefit of both sides (Etemad, Wright & Dana, 2001).

This development implies a dramatic reorienting of IB education away from its traditional focus on large, multinational enterprises. An adequate IB education today should also include an understanding of the management policies and strategies of small businesses. As large firms begin to rely more on smaller firms for specialized services and access to niche markets, managers of even the largest multinationals need to understand the mind-set and practices of the

small companies with which they increasingly interact. In response to this need, an entirely new sub-field of international entrepreneurship is emerging, which should be integrated more fully into IB curricula.

The Need for Networking Capabilities

In the newly emerging competitive paradigm, the main unit of competition is no longer the individual firm, but rather networks of firms collaborating interdependently for higher mutual benefit than their respective independent operations can yield. In this network-centered system, business firms can specialize on a set of capabilities, competencies, knowledge, and skills much needed by the network in order to generate higher benefits both to themselves and their network partners than any of them could by operating independently.

Traditional IB curricula focus on unipolar management, in which resources and control are retained largely within the individual company. But in the new paradigm, business organizations are moving toward a multipolar distribution of power and control, involving intercompany networks. While networking provides new opportunities for firms to acquire resources, it also adds complexity to the tasks of managers. Entirely new skills are needed to manage relationships and networks: defining individual and joint objectives among collaborating companies; measuring performance; monitoring cross-flows of information; interfacing different management cultures; etc. The "old and the proven" models, based on centralized control and stand-alone competition, are largely incapable of capturing the newly emerging paradigm of global competition based on relationships and collaborative alliances. Business schools need to train managers to identify network-based opportunities for developing the capabilities and acquiring the specialized resources needed to compete in today's global marketplace, and to understand their own strategic value in the context of networks as an interdependent, rather than an independent entity. Just as business schools introduced and diffused a new dimension of *interpersonal* skills into their curricula over the last decade, they now need a major new effort to develop *interorganizational* skills and competencies in the managers they are training for today's global competitive arena.

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SUBNATIONAL IB POLICY IN AN AGE OF REGIONAL TRADE INTEGRATION

Larry Davidson

ABSTRACT

This paper explains, illustrates, and defends the importance of an international business (IB) policy for any government jurisdiction affected by international regionalization and globalization that is lacking in direct control of traditional international trade and investment policies. It describes efforts in Indiana that comprise much of the state's IB policies, explains the basic foundation or rationale for such policies, defends the general case for subnational IB policy, uses Indiana as a case study of the need for such policies, and presents conclusions and recommendations for subnational policy.

INTRODUCTION

A rising tide of exports to Mexico and Canada suggests that globalization and regional international integration has had a benign impact on the United States, as well as Indiana and many other states. Exports can lead to more jobs in the short run and stronger competitiveness in the long run. Foreign companies, especially European ones, opened up shop in Indiana, and these new U.S. affiliates of foreign companies widened the export base, provided new jobs, and created more competition for local companies. Some domestic firms closed their doors and moved their factories to Mexico, China, and Brazil. Immigrants – mostly from Mexico and other parts of Latin America – are increasingly moving to Indiana and

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the rest of the Midwest. They fill both skilled and unskilled positions, sometimes taking the place of a Hoosier worker, other times taking jobs that no qualified applicants could be found to fill.

In short, globalization and regional international integration have come ashore and promise to continue to affect Indiana, other U.S. states, Canadian provinces, Mexican counties, and other subnational jurisdictions. These impacts will have both desirable and undesirable outcomes. Some will be real and felt directly by companies, workers, and communities. Others will be opportunity costs – a failure to take advantage of opportunities means that a state will have fewer jobs or less income than it "could have had."

So what does a state do to take advantage of regional and global opportunities while minimizing the anticipated negative effects? One response is to continue doing what it always has done: rely on the federal government's international trade policies while it continues to address traditional domestic issues of competitiveness. A second response is to be more assertive – design and implement an effective state international business (IB) strategy and policy. This recognizes that the traditional approach is not enough. The people of Indiana might not be best served by U.S. exchange rate and trade policies. They might not be best served by the domestic tax and subsidy policies that have guided state economic development for decades.

The question is: Is state international business policy a misnomer? Is it a non sequitur? I think not, and this paper is meant to explain, illustrate, defend, and propagate the importance of such an international policy for any government jurisdiction affected by international regionalization and globalization that is lacking in direct control of traditional international trade and investment policies. The following sections describe efforts in Indiana that comprise much of the state's IB policies, describe the basic foundation or rationale for such policies, explain the general case for subnational IB policy, use Indiana as a case study of the need for such policies, and present conclusions and recommendations for subnational policy.

INDIANA'S INTERNATIONAL BUSINESS POLICY

Indiana has an IB policy that is primarily composed of programs from state and federal governments augmented with assistance from private businesses and universities. The Indiana Department of Commerce has an International Trade Division (ITD) whose goal is to stimulate state export sales. According to its Web site, "the International Trade Division helps Indiana companies find new markets overseas through its 13 foreign trade offices. ITD also encourages

businesses to visit those markets through the Trade Show Assistance Program, which helps companies attend international shows to promote their goods and form new partnerships."[1] In addition to the foreign offices and its Trade Show Assistance Program, IT offers export assistance to firms, publishes a directory of Indiana exporters, publishes the *Quarterly Indiana Export Report*, connects companies to international trade leads, and helps them find international finance assistance.

The U.S. Commercial Service has one office in Indiana to administer the federal government's export assistance to Indiana companies.[2] This office offers the full range of federal programs, including assistance with market research, education and training, international trade data, consulting, advocacy, trade events, and finding international partners. Closely affiliated with the U.S. Commercial Service's U.S. Export Assistance Centers, 56 District Export Councils (DECs) combine the energies of more than 1,500 exporters and private and public export service providers throughout the United States. DEC members volunteer their time to sponsor and participate in numerous trade promotion activities, as well as to supply specialized expertise to small and medium-sized businesses that are interested in exporting.

The Global Business Information Network (GBIN) at the Indiana University Kelley School of Business is an example of a local university program that brings education and consulting expertise to Indiana companies.[3] GBIN has been holding international trade conferences for Indiana businesses since its inception in 1995. Its services have been offered through partnerships with many of Indiana's leading global companies. The Economic Development Group at Cinergy, Inc. is one of several Indiana businesses that provide services (i.e. trade leads, conferences, export sales data) and leadership in business assistance for Hoosier companies.[4]

Despite the impressive array of available programs offered by these and other organizations, there is much to be done to improve the awareness, delivery, and impact of the state's IB policy and program offerings. Below I describe what can be done to build on this base.

STATISTICS, INFORMATION, AND POLICY

Statistical information is never perfect but it is useful. It is a lot easier to buy a pair of pants if you know your waist size. You can decide on how many people to hire if you estimate how many goods you are going to sell. You decide what clothes to wear when the weather forecast tells you the temperature. You might be a centimeter off in your measurement; you might have sold more than you thought

you would; and the weather forecaster might miss by a few degrees. Nevertheless, most of us like the fact that data are collected and made available to us.

Government policymakers feel the same way. Alan Greenspan and his colleagues at the Federal Reserve (Fed) collect a lot of numbers each week, which they use to make decisions about monetary policy. The U.S. Census collects income and spending data that is used to make decisions about the nation's policies. The President and the U.S. Congress use a mass of statistics collected by the Bureau of Labor Statistics and the Commerce Department when deciding on tax and spending policy. The Fed and the government are pleased to have information on many economic time series that help them formulate monetary, fiscal, regulatory, and international trade policies.

Not all policy is done at the federal level of government. The happiness and livelihood of U.S. residents are also affected by the policies of state and local governments. When it comes to the area of economic and business development, we know that state and local governments have many tools through which they can attract and retain companies. These tools are the implements of policies that are greatly influenced by economic goals. For example, special local tax considerations might be implemented and designed to raise the state's employment and income. If state employment, for example, is less than optimal, then state government knows it must approach this fact with a better policy.

That gets us to where we began in 1992 when the Indiana Center for Global Business determined that the state's business and economic development policies might be improved if business and government leaders knew more about the state's export sales. International competitiveness is recognized as an important determinant of a state's income and employment. States whose businesses do not compete well globally are in jeopardy. States with unattractive business environments are at risk.

Although burgeoning international competition makes knowledge about state IB activities ever more important, today we remain in virtual ignorance of Indiana's international transactions. This article is the culmination of our efforts to demonstrate this simple yet important point. In 1992 we began disseminating information about Indiana's export sales of merchandise. Since then we have produced regular reports on export sales and have augmented that information with special studies that have looked into various aspects of Indiana's international activities, including sales of agricultural products and services, immigration, and inbound foreign direct investment (FDI). Our special studies have also examined such topics as the impact of exports on employment, special estimates of indirect export sales, and reasons why Indiana's export sales have grown so much faster than the nation's.

Despite this work, however, we still remain pretty much in the dark. Special reports shed light for a moment, but without follow-up and continuity their

relevance soon fades. Our policymakers are trying to gather information about many things that will affect the state's competitiveness – education, productivity, and much more. This information can be analyzed and brought to bear on the challenge of economic development. We hope that this summary article will help these leaders understand why more and better information and analysis of standard international transactions are indispensable parts of the IB policy data set.

INDIANA AS A CASE STUDY FOR OTHER SUBNATIONAL GOVERNMENTS

Our conclusions go beyond Indiana for three reasons. First, most of the papers compare Indiana to the nation and to six other states. We coined the term ENC+ to describe an economic region of states that includes the regular U.S. Census East North Central region plus two other states that have much in common with Indiana: Kentucky and Tennessee. The ENC+ states are considered throughout this article and individuals interested in these states can also benefit from our work. These states include: Illinois, Indiana, Kentucky, Michigan, Ohio, Tennessee, and Wisconsin.

Second, though our focus is largely on Indiana, the lessons and policy recommendations can be appreciated and used by any jurisdiction that shares a common currency and a common economic policy with others – whether U.S. states, Canadian provinces, or European countries. These entities are drawn together into this common need for information for several reasons:

- Their destinies are influenced by international transactions and competition.
- They lack direct control over the value of the currency and therefore cannot use currency or monetary policy to solve their own problems.
- They may lack direct control over other traditional policy instruments used to affect trade (e.g. tariffs).
- Being part of a bigger whole, they may not be accustomed to collecting IB information at their jurisdictional level.

Third, the process of researching these international trade topics uncovered many statistics and reports bearing on state international trade that are largely unknown and not well distributed. For example, our work discovered new sources of information about Indiana's foreign-born population and inbound FDI. In our ten or more years of analyzing Indiana's exports, we had never heard about these information sources. Policy makers and other interested parties will benefit from the many paper and electronic resources noted here.[5]

INDIANA'S INTERNATIONAL PROFILE

The papers that form the basis for this summary article were written over a two-year period as special in-depth reports to accompany the *Quarterly Indiana Export Report*. Original versions were published as Web reports at http://www.in.gov/doc/publications/NewQuarterlyExportReport/. The statistics quoted here from these reports remain essentially as originally published except for additions and changes that were required to conform with the structure of this article. The reader will find that the statistics reported are the ones that were available at the time of the original publication, despite the fact that some updates now exist. This is true for all the Internet links as well.

Indiana's Export Sales In 2001

Figure 1, taken from our year-end *Quarterly Indiana Export Report* for 2001, shows ENC+ export sales in 2001 ranging from \$32.4 billion in Michigan to \$9 billion in Kentucky.[6] Indiana, one of the smaller ENC+ states in terms of population and export sales, had direct exports of \$14.4 billion. Figure 2 (which presents index values of state exports using 1996 as the base year) shows that most of these states registered export sales declines in 2001. This was the first full year (our records go back to 1988) that export sales decreased in Indiana. In

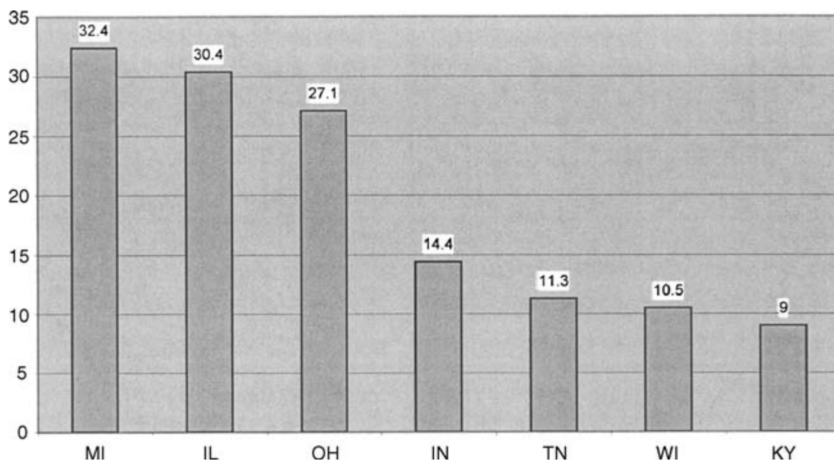

Fig. 1. Indiana and Selected States Exports 2001 (in \$ billions).

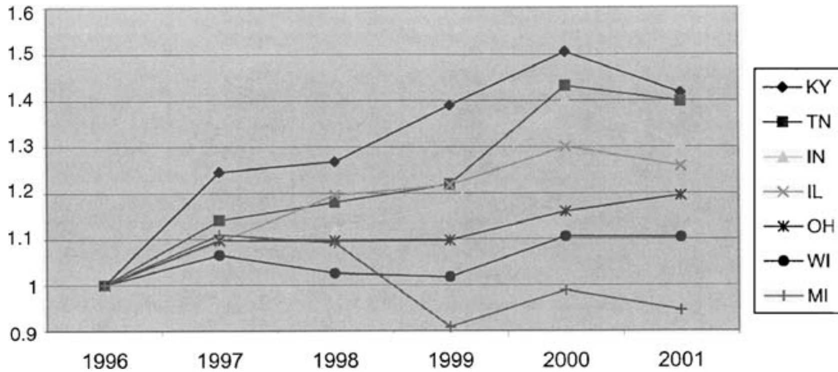

Fig. 2. Indiana and Selected States Annual Change in Exports 1996 through 2001 (Value is Export Sales Relative to Value in 1996).

that year, Indiana's sales were down their previous year peak of $15.4 billion. In 2001, Indiana was the 15th largest exporting state in the nation.[7]

Despite the $1.1 billion decline in 2001, Indiana actually fared pretty well – better than most other large exporting states. This illustrates how a state's economic performance and policy needs can diverge significantly from those of other states and the nation. Only five from among the top 20 exporting states had increased exports in 2001. U.S. exports fell by more than 6% that year. Furthermore, Indiana's $1.1 billion export decline in 2001 only partially erased the huge $2.5 billion increase of the year before. In other words, Indiana exports of $14.4 billion in 2001 were lower than in 2000, but still considerably higher than the $12.9 billion of 1999. Chart 2 shows that Kentucky and Tennessee have led the ENC+ states in growth since 1996 with increases of approximately 40%. If Indiana's exports perform differently from those of other states, then a one-size-fits-all IB policy would not be in Indiana's best interest.

Figure 3 shows the importance of regional integration to Indiana's exports. Canada and Mexico accounted for 54% of all Indiana export sales in 2001, which is actually down from a more normal share that would exceed 60%. The last column in Table 1 shows how much Indiana exports to the state's top ten country destinations have increased since 1996. Notice that export sales to Mexico rose by 89% *per year* since 1996. Figure 4 shows Indiana's export sales broken down by industry in 2001, clearly revealing the importance of vehicles and machinery in Indiana's international transactions. Together these two industries were responsible for about 48% of all Indiana exports in 2001.

As the above statistics show, the main reliable regularly published statistical source of international information for a state is its export sales of manufactured

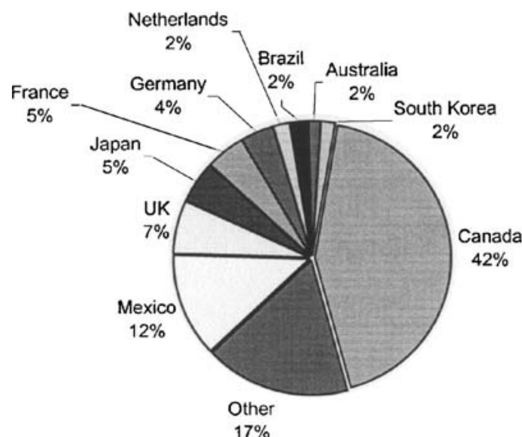

Fig. 3. Top 10 Indiana Export Destinations.

products. One problem is that we may have "too much" of that kind of information. Although much of the data are collected and published by the U.S. Census Bureau, far too little is understood about the differences in the several published versions. Some of the information comes from the U.S. *Survey of Manufacturers*, an annual survey that asks manufacturing companies to report many items of information to the Census Bureau. A second and very different source of information about merchandise export sales comes from published data that aggregate information

Table 1. Top 10 Indiana Export Destinations: Value of Exports in 2001.

Change	Exports (in $) 2001	Annual Percentage		
		2000–2001	1999–2000	1996–2001
Canada	6,200,986,536	−12.7	1.5	2.8
Mexico	1,770,135,793	−12.9	176.5	88.9
UK	940,980,046	12.0	2.7	10.6
Japan	700,788,661	−14.9	17.2	−2.0
France	668,990,788	30.6	24.1	41.9
Germany	553,822,731	30.2	11.1	11.3
Netherlands	307,065,859	−45.0	112.1	1.4
Brazil	290,537,450	−4.3	40.6	15.0
Australia	235,428,735	−10.4	29.2	4.4
Korea	220,903,365	22.3	22.7	2.2
World	14,365,374,961	−6.6	19.2	6.2

Note: Annual percentage change in 2001 and 2000, and average annual percent change from 1996 to 2001 (in $ and percent).

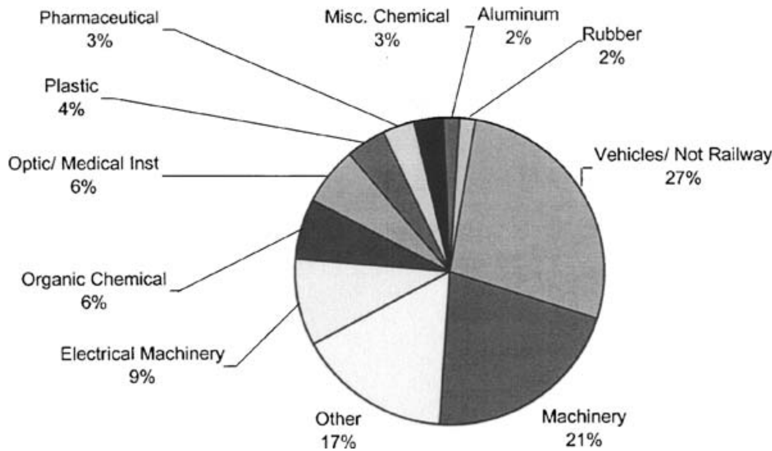

Fig. 4. Top 10 Indiana Export Industries 2001 (percent).

from Shipper Declaration Forms (SEDs) completed when companies transact cross-border shipping services. These sources of export sales information do not always agree. For example, in 1997 the U.S. Census had two estimates for Indiana exports: according to the SEDs, Indiana export sales were $12 billion; according to the *Survey of Manufacturers*, they were $16.5 billion.[8]

But the differences go further. The Census Bureau publishes two forms of the SED-based state export data: the origin-of-movement series (OM) and the exporter location series (EL). These two variants are possible because there are two places on the SED that require a state address.[9] One refers to the address of the company asking for the shipping services; the other is the state in which the shipper believes the merchandise started its journey. The Massachusetts Institute for Survey and Economic Research (MISER) takes the SED-based export data from the Census Bureau and allocates non-state-assigned data (resulting from errors or omissions on the SEDs) among the 50 states. In 1997, their estimate for Indiana exports was $13.1 billion.[10]

As if that was not complicated enough, in 2001 the federal government discontinued publishing the Standard Industrial Classification (SIC) state export statistics and introduced the North American Industrial Classification (NAIC) codes to replace the SIC codes.[11] NAIC codes attempt to unify the industrial reporting systems of Mexico, Canada, and the United States. Like SIC codes, they relate to industries. For many years, however, U.S. exports of goods have been duly recorded by product (rather than industry) with Harmonized Tariff Schedule (HS) codes. These "Schedule B codes" have been used by the U.S. customs service to

process, track, and tax products crossing the U.S. border. Only in 2001 were state export sales first widely published on the basis of these codes. As a result, making comparisons of exports by industry or commodity became more complicated and cumbersome.

ACCOUNTING FOR INDIANA'S EXPORT SALES RAPID GROWTH RATE, 1996–2000

A theme running through our reports is that Indiana does pretty well compared to other states in its export sales growth. In our special report for the first quarter of 2002, we explained why this is the case.[12] When examining Indiana, the other six ENC+ states, and six other nearby states (Arkansas, Iowa, Mississippi, Missouri, New York, and Pennsylvania), we analyzed why Indiana's export growth was so much faster than the nation's (between 1996 and 2000 Indiana export sales grew by 40%, whereas U.S. exports increased by only 25%). From among the twelve comparison states, Indiana's growth rate was the third highest. This research was designed to broaden and otherwise overcome limitations of previous studies that had, in our opinion, overemphasized the impact of industry determinants of export success. Our approach showed that export success went beyond industry-centered effects and was related to both past and present efforts to maintain and enter foreign markets. We explained Indiana's margin of +15% with the following six facts:

(1) National exports to *Canada* were strong and Indiana was well positioned in Canada in 1996.
(2) National exports of *pharmaceutical goods* were strong and Indiana was well positioned with pharmaceutical goods exports in 1996.
(3) Indiana exports to *Mexico* grew faster than national exports to Mexico between 1996 and 2000.
(4) Indiana exports of *vehicles* grew faster than national exports of vehicles between 1996 and 2000.
(5) Exports of vehicles were strong for Indiana because vehicle exports to *Mexico* grew faster than Indiana exports of all goods to Mexico.
(6) Offsetting the strength of Indiana's exports of vehicles was a large positioning in *Canada* of all goods in 1996 – but poor growth of Indiana exports to that destination between 1996 and 2000.

Mexico and Canada figured heavily in Indiana's successes. Surely both national and state government efforts to assist U.S. firms affected state export sales gains. State private and government efforts to facilitate market entry may be

behind our results, which showed a much larger role for export destinations in explaining a state's export sales growth. Of course, having world-class companies in the pharmaceutical and vehicles industries are part of the complete picture of Indiana's above-national export sales growth.

DIRECT AND SUPPORTING EXPORTS: ESTIMATES OF SALES AND EMPLOYMENT

When confronted with facts about export sales, the average person wants to know more about the impact of these sales. Our paper, "Export-Related Sales and Employment in Indiana, 1997" reports how export sales affected the state's employment.[13] It also investigates a heretofore neglected aspect of export sales: *supporting export sales*. It turns out that the "usual" export sales figures measure only goods that are produced in Indiana and shipped directly to another country. A very important part of Indiana's manufacturing and export strength is intermediate goods – those items that are produced in Indiana, shipped to another state (say for assembly purposes), and then shipped abroad from that state. In effect, Indiana intermediate goods go abroad, but the route is indirect and the usual statistics assign the total value of the export sale of such intermediate goods to the state that shipped the final good.

Both direct and supporting export sales create employment. The Office of Trade and Economic Analysis estimated that Indiana direct export sales required 66,900 employees, whereas supporting exports required another 57,400 jobs. That means that 124,300 of Indiana's total manufacturing employment base of 625,700 workers were accounted for by products that were either directly or indirectly sold to foreign destinations. Thus, exports accounted for approximately 20% of Indiana's manufacturing jobs. The new estimates of supporting sales yielded insights into the relative importance of Indiana's export sectors. For example, Table 2 shows that both the primary and fabricated metals industries, though relatively small employers for direct export sale, were the top employers of the supporting export sectors. This raises their relative rankings significantly when ordering industries by total employment (direct plus supporting) export sales. Combining the export-related employment of these two metal industries resulted in their being ranked as the largest Indiana export sector. Given transportation equipment's relatively small contribution to supporting export jobs, it is the second-ranked Indiana export industry despite its very large employment of workers involved in direct export sales. An estimated 21% decline in U.S. supporting export-related manufacturing jobs between 1991 and 1997 very much reflected a movement to foreign sourcing – replacing U.S. suppliers with

Table 2. Indiana Export-Related Manufacturing Employment in 1997. Supporting, Direct, and Total (in thousands).

	Supporting	Direct	Total
All manufacturing	57.4	66.9	124.3
Primary metals	14.4	4.5	18.9
Fabricated metals	12.4	3.4	15.8
Transportation equipment	5.4	27.7	33.1
Rubber & plastics	4.5	3.9	8.4
Machinery	4	10.5	14.5
Electronic equipment	3.1	3.2	6.3
Chemicals	3	2.6	5.6
Computers & electronic products	2.5	3.6	6.1
Sum top industries	49.3	59.4	108.7

foreign ones. Indiana's smaller decline (about 1%) reflected the ability of Hoosier firms to compete against both foreign and domestic sources of intermediate goods.[14]

CORRECTING MISLEADING STATE AGRICULTURE EXPORT SALES

While statistics about supporting export sales and employment have been largely out of the public view, other data have either been reported incorrectly or not at all. Our report, "Indiana's Agricultural Exports in 2000: New Estimates," deals with the problems of correctly assigning agricultural export sales to states.[15] This assignment problem occurs because many agricultural crops are commingled and stored at ports before being shipped internationally. Indiana corn becomes indistinguished from Iowa's in a Chicago grain elevator. Our report shows that the true value of export sales of Indiana agricultural products is greatly underestimated. The U.S. Census, the usual source for state export sales, reported Indiana agricultural exports in 2000 to be $289 million. The report shows that Indiana was the 32nd largest state exporter of agricultural products. In contrast, estimates presented in our research suggest a range of between $700 million and $3 billion in Indiana's agricultural exports.

Table 3 presents the newly estimated or simulated values of Indiana exports based on the assumption that Indiana exports perform more like other Indiana agricultural indicators. The first column shows Indiana exports in millions of dollars based on their being the same proportion as the region's Indiana's Gross State Product (GSP). For example, Indiana's agricultural GSP was approximately

Table 3. Simulated Indiana Exports of Agricultural Products for 2000 (in $ Millions and Relative to Reported Exports).

	GSP Value		Farm Value		Crop Value		Livestock Value	
	$ mils (1)	rel. (2)	$ mills (3)	rel. (4)	$ mils (5)	rel. (6)	$ mils (7)	rel. (8)
Louisiana	19,839	69	33,124	115	na	na	na	na
California	861	3	3,186	11	1,373	5	2,382	8
Texas	1,320	5	1,636	6	3,102	11	858	3
Washington	2,005	7	5,998	21	3,575	12	na	na
Illinois	703	2	744	3	673	2	1,357	5
New York	763	3	2,900	10	na	na	na	na
Indiana	289	1	289	1	289	1	289	1
USA	1,002	3	1,801	6	1,662	6	1,007	3

Notes: Na = Cannot calculate. Number divided by zero.

2% of the nation's agricultural GSP. If Indiana's exports had been 2% of the nation's agricultural exports, then they would have equaled $1.002 billion (see Column 1, bottom line). Using Illinois (Column 1, fifth line) rather than the U.S. as a basis of comparison, and if Indiana exports relative to those of Illinois were the same as Indiana's GSP to Illinois', then Indiana exports would have been $703 million. According to the GSP criterion, Indiana's exports might have been as high as $19.8 billion (Column 1, line 1), or 69 times (Column 2, line 1) the recorded Indiana export figure (based on Louisiana and Indiana GSP). It might have been as low as $703 million (Column 1, line 5), or twice (Column 2, line 5) the recorded Indiana export figure. The remaining columns provide similar estimates for Indiana exports based on each region for the remaining indicators: farm value (Columns 3 and 4), crop value (Columns 5 and 6), and livestock value (Columns 7 and 8).

There is no scientific way to choose the most correct figure for Indiana exports in 2000. But using intuition, one can create some ranges. This approach provides the minimum value of $673 million. Excluding Louisiana, the highest estimate would be about $6 billion. If we use the average of all the numbers in the table, excluding Louisiana and other extreme values, we get about $1.6 billion. Using the U.S. and GSP as a basis, we arrive at $1 billion. There is a temptation to be conservative, despite the fact that seven of the 21 numbers in the table have a value exceeding $2 billion. A conservative range might be from $700 million to $3 billion.[16]

Estimating State Exports of Services

"Indiana's Quiet Export Sector: Estimates of Indiana's Exports of Services" ventured into unknown territory by providing estimates of Indiana's service exports.[17] This territory is unknown because there is no attempt by any organization, government or otherwise, to systematically collect or disseminate information about state exports of services. At the national level, we know that while exports of services are much smaller than exports of merchandise, the former are growing much faster than the latter. As services become more important in the U.S. and other industrial nations, they should receive more attention. Nevertheless, if you wanted to know Indiana's exports of most any service – from travel and transportation to business services – you would not find them. We estimated that Indiana's exports of services totaled about $6 billion in 2000. Given that Indiana exports of merchandise in 2000 totaled $15.4 billion, this implies a services-to-goods export percentage for Indiana of nearly 39%. It also suggests that Indiana goods and services export sales totaled about $20.4 billion, shedding some light on the broader picture of the role and importance of exports from the state. Table 4

Table 4. Estimates of Indiana Exports of Services, 1997 and 2000 (in $ millions).

	1997	2000
Travel	$1,549	$1,731
Passenger fares	370	368
Other transportation	868	970
Education	152	180
Financial	217	361
Business, professional, and technical	313	409
Telecommunications	73	72
Sum of selected sectors	$3,542	$4,085
Sum of all service sectors	$5,133	$5,978

shows that the largest service export sectors were travel ($1.7 billion) and other transportation ($1 billion). The smallest was telecommunications ($72 million). Indiana's colleges and universities had a significant impact, with estimated educational service exports of $180 million in 2000.

FOREIGN INVESTMENT IN INDIANA

"Foreign Direct Investment in Indiana"[18] shows that the state has a large foreign-owned business sector, especially in manufacturing. Table 5 shows that foreign-owned affiliates of U.S. firms (FAs) in Indiana employed 165,100 workers.[19] That compares to 283,500 for Illinois and fewer than 100,000 for Kentucky. Furthermore, this presence has been growing rapidly. Of particular interest is that FAs were responsible for growth in manufacturing employment in the U.S.

Table 5. Employment by FAs in ENC+ and US in 1999.

	FA Employment 1999
Illinois	283,500
Ohio	260,100
Michigan	246,100
Indiana	165,100
Tennessee	151,800
Wisconsin	100,400
Kentucky	97,700
ENC+	1,304,700
US	6,003,300

Table 6. Percentage Change in Employment of FAs in ENC+ and US from 1991 to 1999 (in percent).

	Change in Employment (%) 1991–1999	
	Manufacturing	Non-Manufacturing
Michigan	79	75
Kentucky	47	18
Indiana	39	21
Wisconsin	20	19
Tennessee	14	44
Ohio	10	29
Illinois	−7	32
ENC+	24	36
USA	10	33

and Indiana – a sector struggling to maintain jobs. Table 6 shows that while FA employment in the U.S. rose by 10% between 1991 and 1999, FA employment in Indiana was up by 39%.[20] Non-manufacturing sectors in Indiana, in contrast, showed slower-than-national FA employment growth. Although a few large-scale projects made news headlines, the statistics suggest that most of the FDI in Indiana was from small companies, which have been largely attracted to the central and northern half of the state and in Indiana's traditional manufacturing industries: transportation equipment, primary metals, electronic and electrical equipment, rubber & plastics products, and industrial machinery. Companies from Japan, Germany, England, France, and Canada were the most aggressive acquirers of Indiana FDI.

Indiana's Foreign Population

Due to strong economic growth and a labor shortage, Indiana has experienced very rapid growth in its foreign-born population. The most recent data show that despite this rapid growth, Indiana continues to have a small number of immigrants relative to its own population, to the number of immigrants in the nation, and to the number of immigrants in neighboring states.[21] Table 7 shows that the ENC+ states, except for Illinois, had smaller-than-national foreign-born as a percent of total population. Indiana's foreign-born was 3.3% of the state population in 2000, compared to 11.1% for the nation.[22] Table 8 shows that this situation could change if the recent growth rate continues. Indiana's foreign-born population rose by 100% in the last decade of the 20th century.

Table 7. Foreign-Born as a Percent of Population in 2000 (in percent) ENC+ States and the United States.

	Foreign-Born as % of Pop.
Illinois	12.6
Michigan	5.4
Wisconsin	4.1
Tennessee	3.6
Indiana	3.3
Ohio	3
Kentucky	2.2
ENC+	5.7
US	11.1

This rapid immigration growth creates both benefits and strains for many cities and counties in Indiana. On the one hand, there is pressure to relieve job shortages at both the high and low ends of the occupation skill scale. On the other hand, state and local laws, regulations, and practices ought to address the special needs that come with growing immigrant populations – including everything from language training to enforcing minimum wage laws and occupation health and safety regulations. Educators and other organizations will also be busy raising awareness of the very real positive community effects and opportunities that come with a diverse population. Globalization trends suggest that these immigration pressures will not soon recede. This issue will be on the policy agenda for the foreseeable future.

Table 8. Net Change in Foreign-Born: As a Percent of End-of-Previous-Decade Foreign-Born in 2000 and 1990 (in percent and in thousands).

	Foreign-Born % Change		Change in Foreign-Born (Ks)	
	1990–2000	1980–1990	1990–2000	1980–1990
Kentucky	192	91	57	14
Tennessee	148	140	119	47
Indiana	100	55	93	33
Wisconsin	90	85	102	52
Michigan	88	39	244	77
Illinois	87	80	706	361
Ohio	70	32	138	48
ENC+	91	65	1,460	632
US	77	87	13,286	8,003

Free Trade

The evolving Free Trade Agreement of the Americas (FTAA) provides an example of the importance of free trade to Indiana. This agreement promises to reduce tariffs and other trade barriers between the U.S. and 33 other countries in the western hemisphere. Our report "The Free Trade Agreement of the Americas: Promise or Peril for Indiana Business?" looks at the pros and cons of the free trade practice, considers some complications that Indiana is likely to encounter in its implementation, and reviews the success of NAFTA with Mexico.[23] After taking this history and the debate into consideration, the report concludes that Indiana does stand to improve trade significantly with Latin America when free trade is enhanced. We find, for example, that Indiana exports to FTAA countries (excluding Canada and Mexico) could increase by more than $575 million per year following FTAA implementation.

POLICY IMPLICATIONS

So what does all this mean? It means that with a little focused attention it is possible to paint a more complete picture of a state's international transactions for business and government policy makers. Using Indiana as an example, we see a state that is globally competitive. Its export sales have been stronger than the nation's largely because it has been well positioned in the right foreign destinations and industries, and because its companies, large and small, have taken advantage of new opportunities abroad. This strong manufacturing sector has bucked adverse trends as it has attracted many foreign firms. Limited by local sources of labor, it has also been successful in attracting both low- and high-skilled immigrant workers.

The record of the manufacturing sector is unclear because of multiple sources for export sales information. It is only partially understood because of the paucity of data about supporting exports. One has to dig deep to find the truth about Indiana's exports of agricultural crops. The "usual" statistics greatly short-change Indiana's exports of corn, soybeans, and other farm products. Because of Indiana's strengths as an intermediate goods manufacturer and the bias in published data that focuses on direct exports, there is much we do not know about the extent of globalization in Indiana. We showed that the metals industries are unheralded export champions because much of what they produce goes out-of-state to be further processed or assembled before being exported. This information lacuna means that we greatly underestimate the size and distribution of impacts of foreign commerce on the state.

The U.S. and other wealthy nations are in a long-term industrial transformation that makes service production and exports ever more important to the incomes and employment of its residents. Domestically, service production provides more jobs than manufacturing. Internationally, the U.S. is the undisputed leader in the sales of service exports. U.S. services generally exceed imports and typically grow much faster than manufactured exports. Yet there are almost no statistics published on a state's exports of services. Our crude estimates suggest that Indiana has significant service exports but that its record to date does not come close to matching its global manufacturing performance. Whether by exports or by attracting foreign capital, Indiana is clearly underweight with respect to this very important sector. Of course, without good statistics, knowing just how "skinny" is left to imperfect measures.

Where does that leave state policy makers? This fabricated glimpse of Indiana's international profile shows the good, the bad, and the ugly. The good is that Indiana has exhibited strong global competitiveness, largely in manufacturing sectors. The bad is that the world is changing and it is not clear which Hoosiers are changing with it. The ugly is that we have trouble knowing what is really going on because of data deficiencies.

What could policy makers do if they had better information? This question takes us back to my first paragraph in the introduction. Policy cannot be made in a vacuum. It takes information. Information allows us to measure the state's international business. Information provides the basis for remediation. Information provides the substance for debates when deciding the best form of remediation. Information tells us about the impact past policies and practices have had on us.

States cannot manipulate exchange rates, nor can they raise or lower national import duties. States generally cannot impose statutory or voluntary quotas against foreign manufacturers. On the other hand, states can do a lot to affect global competitiveness. Below are some recommendations. However, some caveats first. These suggestions are for both governments and companies. Many Indiana companies do quite well in the international arena, but many more do not. Some of them could benefit by paying attention to these suggestions. The ideas that relate to government do not necessarily imply a larger government, nor do they necessarily imply more government control. They do suggest that economic development success can be improved by widening our economic development goals and tools. Combining or integrating some of the following activities with existing programs and policies could be done with a more judicious allocation of government resources:

- Collect and disseminate good information about global trends and opportunities.
- Partner with and pressure the federal government to improve its publication of state international trade information.

- Facilitate education and training on international business topics.
- Assist companies in finding foreign buyers, sellers, workers, investors, and partners.
- Help cities become more hospitable places for workers and their families who participate in global business.
- Use the bully pulpit to encourage a climate and an "attitude" of tolerance, cultural diversity, and global curiosity.
- Fund and disseminate research pertaining directly to the state's global competitiveness, including such topics as country and industry analysis.
- Use local taxes and other economic development tools in ways that build on and promote global competitiveness.
- Build telecommunication, transportation, and educational infrastructures appropriate to the needs of companies doing global business.
- Identify other states with common international goals and share ideas and resources.
- Work jointly with business, labor, and other organizations with common interests.
- Identify and make better use of federal government resources designed to promote international opportunities.
- Have a plan for global competitiveness. Then market it to the world.

NOTES

1. http://www.state.in.us/doc/businesses/IntTrade.html, 8/19/2002.
2. For more information on the US Commercial Service in Indiana, go to the website: http://www.usatrade.gov/website/DomOffices.nsf/(OfficeList)/Indianapolis?OpenDocument
3. For more information on GBIN, go to the website at: http://www.gbin.org/gbin.htm
4. For more information on Cinergy, Inc., go to the website at: http://www.indiana.cinergy.com/existing_business_resources/default.asp
5. We ask that the reader be patient with the Internet links provided. Below we explain that none of the original papers adapted for this paper have been updated with the newest statistics. Nor have the links been updated either, although we provide dates next to each link that indicate when we last used them.
6. http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/4thQtr/index.htm, September 2, 2002.
7. The original source for this information is the U.S. Census Bureau. See their website for more information about their data services. While some data is available at the website, most information must now be purchased. They disseminate state export data through the World Trade Atlas. See the following site for more information: http://www.census.gov/foreign-trade/statistics/state/index.html
8. The Census calls this time series the Production Origin Series. The source is a report entitled "Exports from Manufacturing Establishments," compiled by the Manufacturing

and Construction Division (MCD). The 1997 edition, available on MCD's web site (http://www.census.gov/mcd), gives exports by state, NAICS (North American International Classification System), and major economic sector. The 1997 report can be found at: http://www.census.gov/mcd/ar97.pdf

9. See the U.S. Census explanation for more information about OM and EL figures and a general discussion of SED-based export data: http://www.census.gov/foreign-trade/aip/elom.html

10. For more information about MISER's allocation procedure, go to: http://www1.miser.umass.edu/trade/method.html

11. For more information about HS and SIC codes, please go to: http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/1stQtr/Conversion.htm

12. "What Accounts for Differences in State Export Performance? Evidence from the Heartland, 1996-2000," http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2002/1stQtr/Special_Rpt.htm, September 2, 2002.

13. "Export-Related Sales and Employment in Indiana, 1997," http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/4thQtr/special_report.html, September 2, 2002.

14. In February 2001, the Office of Trade and Economic Analysis at the International Trade Administration of the US Department of Commerce (DOC) published its 1997 benchmark study, *U.S. Jobs from Exports*, which is based on the U.S. Census Bureau publication AR(97)-1, *Exports from Manufacturing Establishments*.

15. http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/1stQtr/index.html, September 2, 2002.

16. The Economic Research Service of the US Department of Agriculture estimated Indiana agricultural exports to be about $1.4 billion in 1999. ERS uses an agricultural output measure and then adjusts it for the degree of the state's domestic agricultural surplus (or deficit). States with agricultural deficits – meaning they cannot produce enough to meet the demands of consumers in their state – are likely to export less (than surplus states) to the world. See: http://www.ers.usda.gov/Briefing/AgTrade

17. Find this report at: http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/3rdQtr/QuietExportSector.htm, September 2, 2002.

18. This report published in December 2002 is at the following web address: http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/4thQtr

19. The original source for this information is William J. Zeile, "U.S. Affiliates of Foreign Companies: Operations in 1999," Table 6. Employment by Nonbank US Affiliates by State, 1997–1999, *Survey of Current Business*, August 2001.

20. These data come from multiple sources. The data for 1997 to 1999 are from Zeile's August 2001 article. Earlier data are from the Bureau of Economic Analysis website: International Investment Product Guide, Operations of US Affiliates of Foreign-Owned Companies, http://www.bea.gov/bea/ai/iidguide.htm#page12. These pre-1997 data come from two tables found in two links from this site. The following link has the data from BEA Table 13 – Employment by Non-bank U.S. Foreign Affiliates by-State, 1991 to 1996: http://www.bea.gov/bea/ai/0698iid/table13.htm; and from BEA Table 14 – Manufacturing Employment by Non-bank U.S. Affiliates by State, 1991 to 1996 http://www.bea.gov/bea/ai/0698iid/table13.htm

21. "Immigration in Indiana: Bane or Boon?" published in September 2002 at: http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2002/2ndQtr

22. United States, Department of Commerce, U.S. Census Bureau, *The Census 2000 Supplementary Survey* (C2SS), "Summary Tables," http://www.census.gov/c2ss/www, July 2002. Summary tables include economic, social, and housing characteristics. Results are available for the 50 U.S. states and the District of Columbia, and most cities and counties with populations of 250,000 or more. The tables provided for each of these areas present estimates on a variety of topics. *The Census 2000 Supplementary Survey* data provided a preliminary look at the detailed characteristics of the US population in 2000. However, as the official census sample data become available, they should be used instead of the C2SS to describe the population in 2000 and to look at changes from 1990 to 2000. Comparisons of C2SS data with data from the 2001 and 2002 Supplementary Surveys will provide information about changes for states and large cities and counties after 2000.

23. http://www.state.in.us/doc/publications/NewQuarterlyExportReport/2001/2ndQtr/FTAA.htm September 2, 2002.

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THE OPEN ECONOMY AND BORDERS: REFLECTIONS OF A MANAGING EDITOR

Michele Fratianni

ABSTRACT

This paper reviews the thirteen-year record of Open Economies Review (OER), an economics journal specializing in issues of the open economy, both at the micro and macro levels. It first examines the journal's output – defined by number and type of articles published, location of the authors' institutional affiliation, recurrent themes, and rejection rates – and then critically assesses the development of big themes in international economics and finance, where OER authors have made a contribution. The main conclusion is that national border represents a big constraint to the expansion of the open economy, a point not lost by OER authors.

INTRODUCTION

The motivation of starting an academic journal escapes the narrow calculus of marginal pecuniary benefits and costs. Curiosity, ego, and some idealistic sense of fairness and standards play a big part in that decision. Whatever the reasons, my endeavor as the managing editor of *Open Economies Review* (*OER*) started in 1990. I have been working at the job for thirteen consecutive years, and for some time, I had been toying with the idea of performing an "intellectual audit" of the journal and my role in it. In all likelihood, I would have delayed the exercise to

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some implausible time when I would not be too busy, had I not been forced to the task by Alan Rugman's invitation to present a paper at the Conference on "The Development of International Business at Indiana University." I thought this would be the appropriate venue to reflect on the job of editing a journal dedicated to the open economy for two reasons. The first is that I have been an "internationalist" faculty member at the Kelley School of Business, off and on, for thirty years. The second is that the participants at the conference, despite their different disciplines and specialties, share an intellectual commitment to the open economy, and thus are likely to be a receptive audience to the theme of my paper.

The paper is organized in two parts. The first deals with a brief examination of the journal's activity, defined by the number and types of articles published, location of the authors' institutional affiliation, recurrent themes, and rejection rates. The objective there is to offer a panoramic view of what the journal has done over its thirteen-year life. The second reviews and assesses the central propositions of a few big themes in international economics and finance, where *OER* authors have made a contribution. Here, the themes are placed in the foreground, with the *OER* contributions woven into the story. While I have tried to refrain from the parochial temptation of aggrandizing what has been close to my activities, the final judgment is left to the reader.

AUDIT OF *OER* OUTPUT

OER is a refereed economics journal specializing in the open economy, at both the micro and macro levels. It comes out four times a year and is published by Kluwer Academic Press. The journal has one managing editor, another editor, five co-editors, and a 24 member editorial advisory board. Combined, the institutional affiliations of these individuals span ten countries: Australia, Belgium, Denmark, Germany, Greece, Italy, the Netherlands, Switzerland, the United Kingdom, and the United States.[1] As a managing editor, I have fully depended on the advice and expertise of the co-editors and the advisory board; their reputations transfer to the journal. Nonetheless, I have final responsibility for what is published.

Table 1 shows basic data on number of articles, types of article defined by the *Journal of Economic Literature (JEL)* classification, authors' institutional affiliations, and rejection rates of the journal. I have broken the thirteen year period from 1990 to 2002 into three arbitrary sub-periods: 1990–1994, 1995–1999, and 2000–2002. The first column of the table shows the dominant – or closest fit – JEL classification of each article. Column 2 indicates the number of articles published corresponding with the indicated *JEL* classification. The

Table 1. Articles Published in *Open Economies Review* 1990–2002 by JEL Classification and Authors' Affiliation.

1990-1994 Publications Rejection rate: 75%									
JEL Class	# Articles	World Area of Author Affiliation[a]							
		NA	*WCE*	*AS*	*LAC*	*PA*	*REE*	*AF*	*ME*
B31	2	1	1						
C22	1					1			
E32	2	4	2						
E41	1		1						
E52	2	2	2						
E58	1		1						
E62	1	3							
F11	1	1							
F12	7		5	3					
F13	11	11	2						
F14	2		2						1
F15	2	1	1						
F21	6	2	4			1			
F22	1	1							
F23	3	1	1	1					
F31	10	6	7	1					
F32	4	7							
F33	13	7	6						
F34	2	1	1						
F35	1	1							
F40	1		2						
F41	3	3	1						
F42	4	4	3						
G10	1	2							
G12	1		1						
G15	2	2	3						
L11	1	1	1						
	86	61	47	5	0	2	0	0	1
1995-1999 Publications Rejection rate: 82%									
D31	1	1							
D62	1		2						
E15	1					1			
E32	1	1							
E41	3	1	3						
E43	1	1	1						
E52	1		3						
E58	5	2	5						

Table 1. *(Continued)*

E61	2	2							
E62	2	1	2						
F11	2	2							
F12	4			5					
F13	3	3				1			
F14	2		2						
F15	4	1	3			4			
F18	1	1							
F21	1		2						
F22	2		2			1			
F23	1			1					
F31	9	7	5	1					
F32	6	2	4	2					
F33	13	6	16						
F34	1	1							
F36	2	3							
F40	1		1						
F41	2		3						
F42	1		2						
G15	1	1							
G21	1		2						
H21	2	1	2						
H26	1	1							
L11	1		1						
L16	1		2						
O13	1			1					
O15	2	2							
031	1					1			
O38	1	1							
	85	41	63	10	0	8	0	0	0
2000-2002 Publications Rejection rate: 84%									
D43	1		1						
E41	1		2						
E43	1		1						
E58	3		5						
E63	5	3	9						
F11	3	4							
F12	5		3	2					
F13	7	1	7						1
F14	1	3							
F15	3	1	3	1					
F17	1		1						
F18	1	2							
F21	2		4						

Table 1. (*Continued*)

F22	1		1						
F30	1		2						
F31	8	4	6	1	1				
F32	1	1				1			
F33	6	3	5						
F41	3	1				1		1	
F42	3	1	4						
G15	1	2							
O47	1		1						
	59	26	55	4	1	2	0	1	1

[a] NA: North America and Canada; WCE: Western and Central Europe; AS: Asia; LAC: Latin America and Caribbean; PA: Pacific/Australia; AF: Africa; ME: Middle East.

remaining columns identify geographical areas of the authors' institutional affiliations, such as North America and Canada, Western and Central Europe, Asia, Pacific and Australia, Africa, and the Middle East. The rejection rate indicated above the column headings refers to the period average of the ratio of rejected to submitted papers. The rejection rate excludes three special issues and twenty-six review essays because in both instances authors were pre-selected.

Excluding special issues and review essays, *OER* has published 230 articles over its 13-year life, of which 173 were in international economics (F in the *JEL* classification), 32 in macroeconomics and monetary economics (E), seven in financial economics (G), six in economic development (O), three each in microeconomics (D), public economics (H), and industrial organization (L), two in economic thought (B), and one in mathematical and quantitative methods (C). Using the two-digit *JEL* classification (see Fig. 1), the most popular subject has been international monetary arrangements and institutions (F33). In large part, this is the natural response of authors to explain big events like the European Monetary System and European Monetary Union (EMU). It is possible that a perception of a favorable bias toward F33 might have played a role in the outcome. Observing that a subject occupies a "disproportionate" share of the journal's space, authors might have inferred that acceptance rates were biased toward that subject and, as a consequence, submitted a "disproportionate" share of papers in that area. I have no evidence of such an acceptance bias. Foreign exchange (F31) is a close second in the list of preferences, followed by protectionism (F21), models of trade with imperfect competition (F12), current-account adjustment (F32), economic integration (F15), central banking (E58), international investment (F21), open economy macroeconomics (F41), and international policy coordination (F42).

B – Schools of Economic Thought and Methodology

B31 – History of Thought: Individuals

C – Mathematical and Quantitative Methods

C22 – Econometric Methods: Time Series Models

D – Microeconomics

D31 – Personal Income and Wealth Distribution

D43 – Oligopoly and Other Forms of Market Imperfection

D62 – Welfare Economics: Externalities

E – Macroeconomics and Monetary Economics

E32 – Business Fluctuations; Cycles

E41 – Demand for Money

E43 – Determination of Interest Rates; Term Structure of Interest Rates

E52 – Monetary Policy (Targets, Instruments, and Effects)

E58 – Central Banks and Their Policies

E61 – Policy Objectives; Policy Designs and Consistency; Policy Coordination

E62 – Fiscal Policy; Public Expenditures, Investment, and Finance; Taxation

E63 – Comparative or Joint Analysis of Fiscal and Monetary or Stabilization Policy

F – International Economics

F11 – Neoclassical Models of Trade

F12 – Models of Trade with Imperfect Competition and Scale Economies

F13 – Commercial Policy; Protection; Promotion; Trade Negotiations

F14 – Country and Industry Studies of Trade

F15 – Economic Integration

F17 – Trade Forecasting and Simulation

F18 – Trade and Environment

F21 – International Investment; Long-Term Capital Movements

F22 – International Migration

F23 – Multinational Firms; International Business

F31 – Foreign Exchange

Fig. 1. JEL Classifications.

F32 – Current Account Adjustment; Short-Term Capital Movements

F33 – International Monetary Arrangements and Institutions

F34 – International Lending and Debt Problems

F35 – Foreign Aid

F36 – Financial Aspects of Economic Integration

F40 – General

F41 – Open Economy Macroeconomics

F42 – International Policy Coordination and Transmission

G – Financial Economics

G10 – General

G12 – Asset Pricing

G15 – International Financial Markets

G21 – Banks; Other Depository Institutions; Mortgages

H – Public Economics

H21 – Efficiency; Optimal Taxation

H26 – Tax Evasion

L – Industrial Organization

L11 – Production, Pricing, and Market Structure; Size Distribution of Firms (Concentration, Product Differentiation, Entry and Exit)

L16 – Industrial Organization and Macroeconomics; Macroeconomic Industrial Structure

O – Economic Development, Technological Change, and Growth

O13 – Agriculture; Natural Resources; Environment; Other Primary Products

O15 – Human Resources; Income Distribution; Migration

O31 – Innovation and Invention: Processes and Incentives

O38 – Government Policy

O47 – Measurement of Economic Growth; Aggregate Productivity

Fig. 1. (*Continued*)

The F33 share in the *OER* "market" declined considerably after the establishment of EMU in 1999. Authors turned their attention to a narrower set of questions dealing with how EMU works or should work. This decline was offset by an increase in E58. The world of central banking had been jolted by EMU which, in one blow, had demoted twelve European national central banks to the rank of implementation agencies of the new and powerful European Central Bank.[2]

Models of international trade with imperfect competition experienced a decline in the *OER* market share in the second half of the 1990s, but regained it in the last three-year period. Also rising in the same period were papers on open economy macroeconomics and international policy coordination.

During the first five-year period, North American (U.S. and Canada) authors accounted for 52% of *OER* articles. Western and Central European authors were second with 40% of the journal market. In the next five-year period, the North American share dropped to 33%, whereas the European share rose to 52%. The reversal was further accentuated in the last three years, with the Europeans rising to 61% and the North Americans declining to 29%. What did not change, throughout the thirteen years under review, is the sum of the two shares, which remained constant at 90%. One explanation for the shift in the authors' geographical areas has to do with the convergence of research standards on both sides of the Atlantic, a phenomenon I have documented elsewhere (Fratianni & von Hagen, 2001). A strictly related point is the spread of English as a professional language. During my tenure as managing editor I have noted a significant improvement in the use of English by authors for whom this language is not native. A second explanation is that *OER* topics are more appealing to Europeans than to North Americans, if for nothing else because the big events alluded to above have taken place in Europe's backyard and not in North America's. A third explanation is that Europeans find it is easier to publish in *OER* than in top journals like the *American Economic Review*, the *Journal of Political Economy*, and the *Quarterly Journal of Economics*. However this is also true for North American authors, and I have no evidence that North American authors are increasingly crowding out European authors in the leading journals. A fourth explanation is that the managing editor has a bias in favor of European authors. While I acknowledge no such bias, I leave the refutation to someone else.

In addition to journal articles, *OER* has published 26 review essays (Table 2), which tend to be more specialized than those appearing in the *Journal of Economic Literature*. For example, on protectionism, *OER* has published separate review essays on specific sectors (e.g. agriculture, industry, and services) and specific regions of the world (e.g. the EU). *OER* authors have reviewed the theme of international financial integration, not only in a general sense but also as it

Table 2. Review Essays Published by OER 1990–2002.

Theme	No. of Articles
Protectionism	8
International Financial Markets	7
Economic Integration	4
Monetary Union	3
Other	4
Total	26

applies to a specific geographical area (e.g. Europe) or country (e.g. the Chilean experience with taxes on short-term capital inflows).

The rejection rate of the journal has been rising, from 75% of the first five-year period to the upper 80s of the most recent period. This is what one would expect, as the journal's longevity and reputation have grown.

In sum, the journal has carved out a market for itself in the large area of international economics and finance. It has a worldwide readership.[3] North American and European authors account for 90% of published articles, a fact that reflects growing convergence of research standards between these two areas of the world as well as a competitive academic environment.

BIG THEMES

In assessing a few of the big themes in international economics and the role played by the journal, I have woven *OER* contributions into the big story without any intent to underscore them.

Openness of the economy is the journal's banner. Openness and size are inversely related. Based on the ratio of the average of exports and imports of goods and services to GDP, Luxembourg is more open than Belgium, Belgium more than Germany, and Germany more than the EU. The world is a closed economy. In traditional macroeconomic literature, the open economy, except for countries like the United States, is modeled like the firm in a competitive model: It is a price taker in the international markets and cannot alter its terms of trade (the ratio of export to import prices). Domestic prices are equal to foreign prices adjusted for the exchange rate. Changes in the latter translate one for one into changes in domestic prices.

Perfect integration of national markets, just like perfect competition, is an ideal state with strong welfare properties. In practice, however, we live in a world of

imperfect integration, with degrees of imperfection changing over time. During the gold standard of the late 19th and early 20th centuries, national markets were more integrated than either of the inter-world-war or post-World War II periods. International integration, both real and financial, grew rapidly toward the end of the last century. Newspapers and popular literature referred to the process as globalization. But globalization, in the strict sense of complete integration of national markets, never existed; nor is it likely to become a reality in the near future. Globalization has failed the empirical test even in the broader meaning of an imperfect but uniform integration across different regions of the world. Rugman (2000) draws attention to the fact that international trade and FDI are geographically concentrated in three areas of the world. The reason for imperfect integration is that many goods and services are sheltered from external competition either by transport costs, unfamiliarity with foreign trade practices, or outright protection. Political borders translate into thick bands of transaction costs. The rest of this paper focuses on the deviations from perfect integration and the underlying reasons.

The Border Effect in International Trade

The Heckscher-Ohlin-Vanek (HOV) explanation of international trade is one of the most cherished theorems in economics. According to HOV, comparative advantage is driven by relative factor abundance. The implication is that capital-rich nations export capital-rich products and labor-rich nations labor-rich products. The problem is that this model predicts no better than a coin toss (Bowen et al., 1987). It is hard to explain bilateral trade flows without taking into consideration differences in technology (Eaton & Kortum, 2002; Harrigan, 1997). Even better predictions are obtained when, in addition to technology differences, consumers are assumed to prefer goods and services produced domestically over those produced across the border (Trefler, 1995).

Geography matters to international trade (Krugman, 1991). Trefler (1995, Table 6) finds that the extent of the home bias in consumption is positively related to the size of the economy and negatively related to transport costs and tariff levels. But other factors may be at work. The size of the border effect has been quantified with gravity models, which have been successful in explaining bilateral trade flows. The inspiration of the gravity model is Newton's law of universal gravitation, which postulates that two bodies attract each other with a force proportional to their masses divided by the square of the distance that separates them. A typical specification of gravity model goes as follows:

$$X_{ij} = \mathrm{A}Y_i^b Y_j^c \mathrm{DIST}_{ij}^d e_{ij}^{(\mathrm{fDUMMY})} e_{ij}^u, \quad (1)$$

where X_{ij} = exports from country i to country j, Y = gross domestic product (the counterpart of Newton's masses), DIST = distance, DUMMY = a dummy variable that captures important characteristics, u_{ij} = i.i.d. error term. A, b, c, d, and f are estimatable parameters, with "b" and "c" having a positive expected sign and "f" a negative expected sign.

McCallum (1995) applied this equation to 1988 exports and imports among ten Canadian provinces and thirty states south of the border, coding DUMMY equal to 1 for interprovincial trade and 0 for province-to-state trade. The gravity model fits the data well: estimates of b, c, and d have the expected signs and are statistically significant. The parameter of interest here is f, the size of the border effect. The estimate of f is approximately 3 and statistically significant under a variety of tests, implying that interprovincial trade is approximately twenty times ($e^3 \times 20$) larger than trade between provinces and states. The border between Canada and the United States is wide. Helliwell (1996) confirms these findings with data for the province of Quebec, with the obvious intent of underscoring the implied trade consequences of a possible separation of this province from Canada.

Border effects also show up in prices. The law of one price is the traditional criterion for judging whether two markets are integrated. Transportation costs place a natural wedge on the law of one price. But even adjusting for transportation costs, prices of the same product sold in two different locations may differ because of the power of firms to price discriminate. Less than perfect competition is a necessary but insufficient condition for market segmentation. If consumers can arbitrage price differences, net of transportation costs, market integration can coexist with imperfect competition. In addition to transportation costs and domestic price discrimination, national borders add three types of potential friction: formal trade barriers in the form of tariff and non-tariff protection, informal trade barriers, and exchange rates. Formal trade barriers create a wedge between prices paid by consumers in the importing country and prices charged by the firm in the exporting country. Informal trade barriers are more difficult to quantify because they find their roots in business and social networks (Rausch, 2001). These networks – e.g. groups of the same ethnicity or religion, business alliances, and long-term relationships with foreign suppliers – facilitate international trade through better flows of transnational information and by tempering opportunistic behavior.[4]

The link between the exchange rate and the border occurs through the translation of foreign-currency prices into domestic currency equivalent. Let P_i^x and P_j^x be the price of good x in countries i and j, respectively, denominated in the countries' respective currencies; let S_{ij} be the exchange rate defined as units of currency i per unit of currency j. The ratio $P_i^x/S_{ij}P_j^x$ is the price of good x sold

in country i relative to the price sold in country j expressed in the i's currency, and it is equal to 1 if the law of one price holds. The exchange-rate pass-through measures the effects of a depreciation of currency i on local prices. Early work by Kreinin (1977) suggested that the exchange-rate pass-through – that is, the effect of a currency depreciation on local prices – was much less than complete for the United States, Germany, and Japan. Exchange rate changes can be used by firms to price discriminate internationally, a point made by the pricing-to-market literature (for a review, see Goldberg & Knetter, 1997, pp. 1252–1262). For example, Marston (1990) finds that Japanese exporters of microwave ovens offset 30% of yen appreciation by reducing yen export prices. The implication is that P_i^x and P_j^x are sticky in relation to S_{ij}, and $P_i^x/S_{ij}P_j^x$ will fluctuate (the higher the correlation between changes in S_{ij} and in $P_i^x/S_{ij}P_j^x$, the higher the degree of price stickiness). Thus, a variable exchange rate adds to the border effect.

Engel and Rogers (1996) test the hypothesis that price dispersion of similar products is affected not only by distance but by border as well. These authors use Canadian and U.S. city price data for fourteen sub-categories of the consumer price index. Price dispersion is measured by the sample average of the standard deviation of $\Delta \ln (P_i^x/S_{ij}P_j^x)$, where i and j index cities; the exchange rate is equal to 1 when the pair of cities are located in either Canada or the United States. The descriptive statistics indicate that dispersion differs from product to product,[5] and is on average higher between across-the-border cities than within-the-border cities. Engel and Rogers regress price volatility on distance and a border dummy, and find strong positive and statistically significant effects for both. The headline result is that the Canada-US border is equivalent to a distance of 75,000 miles. Price stickiness, as defined above, accounts for only part of the border effect.

Another way of assessing border effects is to compare domestic deviations from purchasing power parity with international deviations. Let P_i and P_j be the price index in location i and j, respectively. Domestic purchasing power occurs when $P_i/P_j = 1$, i and j being locations using the same currency; international purchasing power occurs when $P_i/S_{ij}P_j = 1$, i and j being locations separated by a fluctuating exchange rate. Parsley and Wei (1996) use prices of 51 products for 48 U.S. cities to estimate the convergence rate to (PPP). The authors reject that $\ln(P_i/P_j)$ follows a random walk in favor of the alternative specification of a zero-mean auto-regressive process of order one. The latter yields that implied half-lives deviations from PPP are between four and five quarters for tradables, much lower than half-lives deviations in an international context. This difference in convergence rates is consistent with a border effect. The implication is that if two countries were to adopt the same currency, the border effect would become smaller (more on this below).

Regionalism

Regional trade agreements (RTAs) are an important and growing feature of the international trade system (see, for example, Fratianni and Pattison (2001) and references therein). RTAs have existed since the middle of the 19th century and were an offspring of colonialism. The newer ones have greater membership diversity, more of an outward orientation, and seek to go beyond "shallow" goods trade liberalization. The EU is the best example of an RTA that pursues "deep" integration through liberalization of trade in services and investment and the establishment of common technical and regulatory standards, customs formalities, and government procurement practices.

Geographic concentration is a key and well-known feature of trade patterns. Figure 2 displays trade intensity for the main RTAs. By construction, the measure is equal to one when intra-bloc trade is as intense as trade between the bloc and the rest of the world. A value in excess of 1 indicates that intra-bloc trade intensity exceeds trade intensity with the rest of the world. The data indicate that international trade is regionally concentrated. Regionalization is sharply rising in the Andean Pact and Mercosur, slightly rising in the EU and NAFTA, stationary in APEC, and declining in ASEAN.

An important issue is whether regionalism in trade is due to geographic proximity or preferential trade policy. Again, the gravity model (1) has been the

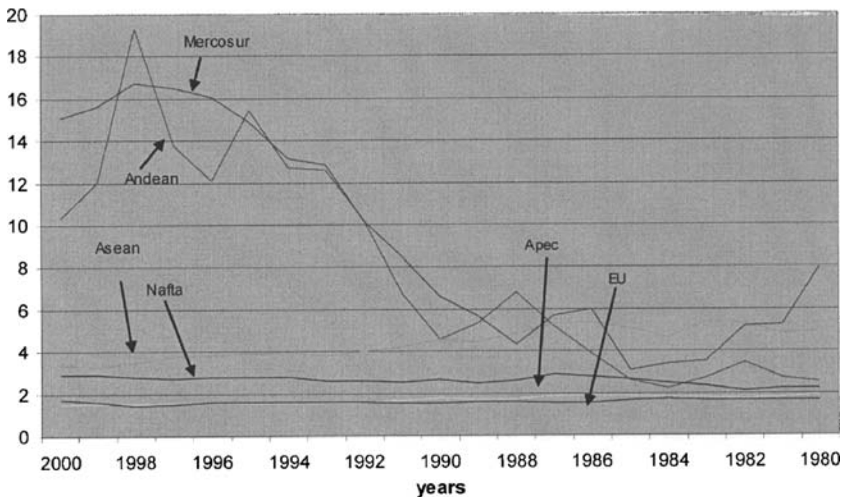

Fig. 2. Trade Intensity of Selected RTAs.

preferred tool to examine this issue. In addition to the basic income and distance variables, researchers have added dummy variables to capture common borders and common languages. The RTA-specific variables are added to the gravity model to "soak" effects not predicted by the pure gravity model, effects that are presumed to stem from preferential trade policy.

Typically, two dummy variables are used: an intra-bloc dummy that acquires a value of one when two countries belong to the same RTA, and an extra-bloc dummy that acquires a value of one when one of the two countries belongs to the RTA.[6]

Two broad classes of hypotheses can be tested with this model. First, the relative size of the dummies can tell us something about trade-creation and trade-diversion effects. For example, if the intra-bloc dummy is positive and the extra-bloc dummy negative, one can compare whether the trade-creation effects for a given pair of countries are larger or smaller than the trade-diversion effects. Second, and more important here, the sign of the two dummy coefficients can tell us whether the RTAs are building or stumbling blocs, where "building" means that RTAs enhance expansion of world trade and "stumbling" the opposite. According to the empirical results by Wei and Frankel (1997, Table 1), Asean, East Asia (excluding Asean), and Mercosur have statistically significant positive intra- and extra-bloc coefficients. These RTAs appear to have liberalized, not only internally, but also vis-à-vis the rest of the world and consequently have helped multilateralism. For EFTA and NAFTA, on the other hand, the intra-bloc dummy is positive and the extra-bloc dummy negative, evidence that is consistent with these two RTAs having created a positive internal trade effect but a negative external one. Here, regionalism is not consistent with multilateralism. Finally, for the EU the intra-bloc dummy is negative and the extra-bloc dummy is positive, suggesting that this RTA has generated a negative internal trade effect but a positive external one.

Are We Overestimating Border Effects?

McCallum's headline result of the Canada-US border effect and subsequent research on the same theme (e.g. Helliwell, 1998) has led, inevitably, to close scrutiny of the gravity model and its applications. We consider two criticisms.

The first is that the estimate of huge border effect results from the asymmetry of trade barriers on small versus large economies and the omission of important variables in (1). Anderson and van Wincoop (2001) construct a gravity model by assuming that each region in the world specializes in one differentiated good, with a fixed supply. Consumers maximize a constant-elasticity-of-substitution utility function subject to the budget constraint that income in the jth region is

the sum of consumption times prices. Prices differ by region because of trade costs, a variable that includes information, transport, tariff, and regulatory costs. The resulting gravity equation predicts trade flows from region i to region j will depend positively on incomes in both regions, measured as a proportion of world income, with unit elasticity; negatively on trade costs between region i and region j; and positively on multilateral trade costs of both regions. The latter are the critical omitted variable in (1). Trade between region i and region j is affected not only by trade costs between them, but also by the panoply of trade costs with other regions. When the latter rise relative to the former, trade flows between i and j rise. Further, smaller countries are more affected by trade costs than larger ones. This results from the fact that a small country has a larger fraction of its output exposed to trade costs than a large country. When trade costs rise (say, an increase in protection), the output of the regions of the small countries are redirected to intra-country trade much more than the output of the large country is redirected within its regions.

Thus, the general critique of Anderson and van Wincoop to gravity models like (1) is that not only do they omit multilateral trade costs, they also ignore the relative size of the economies and their exposure to international trade. By simply re-estimating (1), using McCallum's exact specification, both from the viewpoint of Canada and the United States, Anderson and van Wincoop (Table 1) find that the size of the border from the Canadian viewpoint is ten times as wide as from the viewpoint of the United States.

The other criticism of gravity models is that locations (regions) should be treated as observations in a time series. Geographers, quite naturally, are keen about the idea that location matters for inputs and outputs, and they worry about spatial dependence resulting from aggregation, externalities, and spillover effects. The point is that standard econometric techniques may not be appropriate in handling spatial dependence or error terms that are spatially correlated. This issue is raised by Porojan (2001), who tries to bridge the gap between the economics and the geography literature and proposes an adjustment for contiguous regions that is very popular with geographers. Re-write (1) as:

$$\boldsymbol{x}_{ij} = z\beta k + u_{ij}, \tag{2}$$

where lower letter symbols refer to natural logarithms of the upper case variables; $\boldsymbol{x}$ is a $((J)(J-1)/2) \times 1$ column vector of trade flows $(i, j = 1, \ldots J)$; z is a $((J)(J-1)/2) \times k$ vector, where k is the number of right-hand side variables in (1). β_k a $k \times 1$ vector of estimatable parameters, and u_{ij} the vector of residuals. Spatial dependence implies that the "dependent variable at one point in space may be functionally related to its value at some or all other locations in the system" (Porojan, p. 271). The fact that high-income countries seem to be in close geographical

proximity is one example of this dependence. Define $\boldsymbol{x}_{ij}^{s}$ to be the $(I \times J/2) \times 1$ vector of geographical contiguity, with the *ij*th element being equal to $(w_{ij})(x_{ij,t-1})$ and w_{ij} as a measure of relative geographical contiguity.[7] The testable equation becomes:

$$\boldsymbol{x}_{ij} = x_{ij}^{s}\rho h + z\beta h_k + u_{ij}, \qquad (3)$$

and ρ is the spatial autocorrelation parameter. In this reformulation, the gravity model tests the null hypothesis that observations are randomly distributed over the territory, or $\rho = 0$. Porojan rejects the null hypothesis on 1995–1996 bilateral trade flows between the fifteen members of the EU, Norway, Switzerland, Canada, the United States, Australia, New Zealand, and Japan. In addition, a statistically significant value of ρ tends to reduce the economic and statistical significance of other variables, such as distance and dummy variables capturing other effects. Thus, the general point is that results from gravity equations that ignore the issue of spatial dependence should be treated cautiously.

Optimal Currency Areas

The optimal currency area (OCA) is the world if the selection criterion were the efficiency of money as a medium of exchange: the usefulness of money rises the more people use it.[8] But the OCA literature tries to solve another problem, namely, what exchange rate regime is best suited to achieve simultaneously a country's internal balance (non-inflationary trend output) with external balance (sustainable balance-of-payments position). This led Mundell (1961) to emphasize factor mobility as a pre-condition for OCA. Without factor mobility and with price and wage rigidities, the exchange rate must adjust to restore external balance. Mundell identified common shocks as a second pre-condition of OCA. McKinnon (1963) focused on openness of the economy as a criterion for OCA. The more open the economy, the less important the exchange rate in changing the country's terms of trade; the small open economy is, in fact, defined to be a price taker in the world market. Kenen (1969) underscored product diversification – a more diversified economy is less prone to external shocks and hence does not require changes in the exchange rates.

Without denying the valuable insights of this literature, its impact has been rather limited because its messages are inconclusive and inconsistent (Tavlas, 1994). They are inconclusive in the sense that the criteria are "difficult to measure unambiguously [and therefore] cannot formally be weighed against each other" (Robson, cited by Tavlas, 1994, p. 213). They are inconsistent in the sense that one criterion points in one direction (e.g. a small open economy is very open

but undiversified), while another points in the opposite direction (e.g. a large economy is relatively closed but has a high degree of product diversification).

Two big events of the 1990s have reactivated interest in OCAs. The first is the creation of a monetary union in Europe, which replaced twelve national currencies with the new euro. This fact has shown that the construction of a large currency area with sovereign states is feasible. The second is the accelerating tempo of currency crises in the world: Mexico in 1994, Southeast Asia in 1997, Russia in 1998, Brazil in 1999, Argentina in 2001, Uruguay, and again Brazil in 2002. While the proximate causes of the crises may be somewhat idiosyncratic, the spread of information and communication technology and rising financial integration are common to all of them. The speed with which we consummate transactions has raised the degree of currency substitution and has rendered currencies of small open economies uncompetitive in relation to those of large and stable economies.

Frankel and Rose (1998) and Rose (2000) have questioned the direction of causality from "real" integration to monetary integration and have proposed instead the hypothesis that OCA criteria are endogenous. The direction of causality can go the other way, with monetary unification enhancing economic integration, not only through a higher degree of price transparency and lower transaction costs but also through more predictable costs and product differentiation. To test this proposition, Rose resorts to an expanded gravity model, where in addition to the basic income and distance variables shown in (1) he adds political, cultural, regional trade agreement, exchange rate variability, and common currency effects, all of which – except for exchange rate variability – are measured by (0,1) dummy variables. The estimate of the coefficient of the common currency ranges from 0.87 in 1970 to 1.51 in 1990 and 1.21 for the pooled regression (Rose, 2000, Table 2). Using the latter and noting that $\exp(1.21) = 3.35$, the implication is that monetary unification can more than treble trade, a large effect that dwarfs the impact of exchange rate variability on trade.

Frankel and Rose (1998) also claim that OCA criteria suffer from the so-called Lucas critique. That is, even abstracting from inconclusiveness, it is not proper to judge whether a group of countries are suited for monetary union on ex-ante criteria. Monetary unification is an engine of structural change and as such generates endogenous OCA criteria. Take, for example, the OCA criterion of shocks to the economy. The benefit of a monetary union depends on participating countries experiencing similar business cycles; there would be more value to an independent, national monetary policy if shocks were idiosyncratic. But how would the creation of a monetary union affect business cycles of the participating countries? Two separate effects need to be distinguished. The first works through trade intensification and the second through a common monetary policy. Trade intensification can occur either through deeper industry specialization – as

predicted by theories of comparative advantage – or through deeper product differentiation. With deeper industry specialization, regions or countries become more dissimilar and more prone to industry-specific shocks; monetary unification would exacerbate asymmetric shocks. With deeper product differentiation, regions and countries would trade in the same industries with products differentiated along the dimension of either variety or quality; monetary unification would enhance symmetric shocks. A diversified economy would have a high proportion of intra-industry trade in total trade and would suffer from asymmetric shocks less than a specialized economy (Kenen, 1969). In sum, the effect of a monetary union on business cycles depends on the relative strength of product specialization and diversification.

Frankel and Rose test the two opposing trade forces by regressing correlations of bilateral economic activity on bilateral trade intensity and a proxy of monetary policy coordination for a group of twenty-one industrial countries (fourteen of which belong to the EU), each with four distinct observations. The critical finding is that trade intensity exerts a positive and statistically significant impact on the proxy for shock correlation: that is, trade intensity brings about more shock symmetry.[9] This result is consistent with a rise in intra-industry trade as a proportion of total trade, as trade intensifies in a monetary union.

Fontagné and Freudenberg (1999, Table 8) show with microdata that dispersion of specialization has decreased among EU countries from the 1980s to the 1990s. Their data set consists of 10,000 products in fourteen industries. The products in each industry are categorized as either horizontally differentiated (significant overlap and small degree of price differences) or vertically differentiated (significant overlap and small degree of price differences) or inter-industry trade (no overlap). Values of the dispersion coefficients are reported for 1980, 1987, and 1994. In 31 out of the 42 coefficients, dispersion declines. Only two industries have bucked the trend of declining specialization: agriculture and automobiles. Monetary policy coordination in the EU has been accompanied by a convergence process of the member countries' economic structure, a finding that is consistent with the hypothesis that the degree of symmetry shocks is endogenous to the process of monetary unification.

International Financial Integration

The prevailing wisdom is that whatever the degree of "real" integration in the world, financial integration is a notch or two higher. After all, capital, and especially finance capital, moves faster than goods, services, and people. There is a tendency in the macroeconomic literature to treat capital mobility and international

financial integration as synonymous. They are not. The former is a necessary but insufficient condition for the latter. It takes more than removing restrictions to the flows of capital and foreign exchange transactions to achieve global finance. Unhampered market access, adoption of financial standards, and non-discriminatory financial regulation are part of the requirements for global finance (von Furstenberg, 1998).[10]

Open economy macro-models have relied on the assumption of perfect capital mobility to demonstrate two important points. The first is that in a regime of fixed exchange rates, perfect capital mobility implies that the interest rate of a small economy is anchored to the world interest rate and monetary policy is totally ineffective. The second is that in a regime of flexible exchange rates, perfect capital mobility implies uncovered interest rate parity and, given price stickiness, the exchange rate tends to overshoot (see Dornbusch, 1980, Chaps 10 and 11).

Feldstein and Horioka (1980) challenged the prevailing view of high capital mobility by using data from sixteen OECD countries for the period 1960–1974 to show that national investment (in fixed capital) as a ratio of GDP (denoted as I) is primarily financed by national saving as a ratio of GDP (denoted as *S*). In a cross-section regression of the type

$$I_i = \alpha + \beta S_i + u_i \quad i = \text{country } 1, 2, \ldots N, \tag{4}$$

the authors tested and failed to reject the null of $\beta = 1$ of zero (physical) capital mobility. Feldstein and Horioka instigated a vast empirical literature, which found lower values of β, especially for the 1980s, but did not disprove its basic tenets (see survey article by Coakley et al., 1998).[11] Moreover, there has been no shortage of criticism in the literature on what this test means for capital mobility. Here are the three most significant ones.

The first criticism regards the identifying assumptions underlying β. In a classical model the real rate of interest affects I negatively, S positively, and the current-account balance B negatively (and hence the capital-account balance positively), subject to the equilibrium condition of $S_i - I_i = B_i$, $\beta = I_r/(I_r + S_r + B_r)$, where I_r, S_r, and B_r are the slope coefficients of *I*, *S*, and *B* with respect to the real rate of interest (Coakley et al., pp. 172–173). $\beta = 1$ when both S_r and B_r equal zero, and $\beta = 0$ (perfect capital mobility) when either S_r or B_r or both tend to infinity. So what drives perfect capital mobility: an infinitely elastic saving rate or an infinitely elastic capital account? The identification problem becomes more complex with general-equilibrium models.

The second criticism concerns β and the size of the country. Refer to the equilibrium condition $S_i - I_i = B_i$ in a world of perfect capital mobility. Assume a shock to *S*. If the shock occurs in a small open economy, the world rate of interest and the national *I* schedule will remain unchanged, and ΔS will be

reflected in ΔB: for example, a positive shock implies a larger net export of capital, and $\beta = 0$. If the shock occurs in a large economy, the world rate of interest and the national I schedule will change. A positive shock implies a lower world rate of interest and a higher national I; hence, S and I will be positively correlated, and $\beta > 0$. Thus, the estimate of β is positively correlated with the size of the economies (Harberger, 1980). The final criticism concerns the use of cross-section data. Typically, the observations are averages of long annual time series. Given that the long-run value of $B_i = 0$ (a country can neither permanently lend nor permanently borrow), the value of β is biased toward unity.

Notwithstanding these criticisms, study after study have confirmed the positive association between investment and saving, to the point at which now the finding has been elevated to the rank of a "major puzzle" in international macroeconomics (Obstfeld & Rogoff, 2001). It is a puzzle because our strong prior is that capital is mobile and financial markets are integrated in the industrialized world. Our prior has been fed by the evidence on covered interest rate parity: A yield on a short-term, highly liquid, and risk-free security denominated in currency i is equal to the yield on a comparable security denominated in currency j net of the forward premium or discount (Fratianni & Wakeman, 1982). But relatively few currencies qualify for covered interest rate parity, if for no other reason than because active forward markets do not exist for most currencies in the world. More important, covered interest rate parity applies to a narrow spectrum of financial assets and not to physical capital studied by Feldstein and Horioka (Dooley et al., 1987, pp. 522–523). For physical capital, the relevant law of one price is real interest rate parity, which can be expressed as follows (Frankel & MacArthur, 1988):

$$r - r^* = (i - i^* - fp) + (fp - \Delta e) + (\Delta e - \pi + \pi^*) = 0. \tag{5}$$

Starred variables refer to the benchmark country, r is the ex-ante real rate of interest, i the market rate of interest, fp the forward discount or premium of the home currency, Δe the expected depreciation of the home currency, and π the expected rate of inflation. Equation (5) is consistent with $\beta = 0$ in (4) (Dooley et al., 1987; Lemmen & Eijffinger, 1995). The evidence overwhelmingly rejects (5), and not surprisingly. For (5) to hold, three conditions need to be simultaneously satisfied: covered interest rate parity (the first term in parentheses in the equation); the forward premium as an unbiased estimate of the expected depreciation (second term); and expected purchasing power parity (third term). The first of these three conditions, as we have noted, has empirical corroboration for few currencies and a very narrow set of assets. The second fails miserably (ef. Kang, 1992). On the third, we have noted that the half-life of convergence of international real exchange rate is much longer than its domestic counterpart (see also Obstfeld &

Rogoff, 2000). In sum, the failure of real interest rate parity supports the basic contention of Feldstein and Horioka that β in (4) is different from zero.[12]

The Feldstein and Horioka finding seems to be consistent with two home biases, one in equities and the other in consumption. The domestic bias in equities is measured relative to the asset diversification predicted by the international capital asset pricing model (Solnik, 1996, Chap. 5). Given historical mean returns and variances, the model predicts that the weight of foreign equities should be much higher than the observed weight. The discrepancy between predicted and actual weight remains large even under the assumption of infinite relative risk aversion (Lewis, 1999, Table 2). The bias could stem from the failure of the capital asset pricing model to predict diversification, or from the failure of PPP, which is a standard assumption of the international capital asset pricing model, or from the failure of both; there is no way to distinguish between the two. Various attempts to justify the equity home bias have also failed (Lewis, 1999). For some researchers, the bias does not exist because the large standard deviations underlying means and variances of returns makes it difficult to reject the hypothesis that a domestic-only portfolio is worse than an internationally diversified portfolio (Lewis, 1999).[13]

The domestic consumption bias is measured relative to the prediction made by a model where markets are complete in the Arrow-Debreu sense and countries diversify risks due to idiosyncratic shocks (Obstfeld & Rogoff, 1996, Chap. 5). In this setting, the growth rate of domestic consumption is equal to that of foreign consumption. The data clearly refute the implication of complete markets (Lewis, 1999, Table 1). International risk sharing is not only small relative to prediction but smaller than among regions of the same country. In an early article on the subject, Atkeson and Bayoumi (1993) show that regional capital flows within the United States are larger than among countries. Similar results were obtained for Canada (Bayoumi & Klein, 1997). Not only financial flows but also flows of physical capital are more mobile within the regions of the same country than among countries. Helliwell (1998) reports the results of a Feldstein and Horioka regression with data from the OECD countries and Canadian provinces. The coefficient of the provincial saving variable is negative, statistically significant, and of a size comparable to the coefficient of national saving, implying that capital is very mobile within Canada.

In sum, the evidence can be summarized as follows: Physical capital is more mobile within the regions of a country than across countries. The same is true for finance capital. National boundaries are an obstacle to international capital flows and the geographic diversification of assets. As it is true for trade, the national border represents a constraint to the expansion of the open economy.

CONCLUDING COMMENTS

The editing of a journal carries a lot of responsibilities; it is a job with an apparent excess of personal costs over benefits. Because I do not admit to irrational behavior, I have convinced myself that the hidden benefit has been learning and keeping up with the literature. I have no regrets. *OER* is an established journal by now, with a fair record. The challenge for the future is to improve on this record.

OER authors have contributed to many of the big issues in international economics and finance. In the text, I have reviewed to what extent national markets for goods, services, and capital are integrated. Despite the clamor of anti-globalists, the world is far from being an integrated village. It took us almost a hundred years to regain the degree of integration that existed during the gold standard. Integration today remains imperfect because national borders translate into high trading costs, a portmanteau term that includes formal trade barriers, informal trade barriers, and exchange rates.

The significance of the border goes beyond goods and services. It affects physical and finance capital as well. National boundaries are an obstacle to international capital flows and the geographic diversification of assets. It remains to be seen whether regional trade arrangements will break the national domesticity of consumption and assets or create a border of their own.

NOTES

1. Australia: Warwick McKibbin (board); Belgium: Paul de Grauwe (co-editor) and André Sapir (board); Denmark: Niels Thygesen (board); Germany: Manfred J.M. Neumann and Jürgen von Hagen (board); Greece: George Tavlas (board); Italy: Paolo Savona (co-editor), Michael J. Artis and Lorenzo Bini-Smaghi (board); The Netherlands: Clemens Kool and Casper de Vries (board); Switzerland: Andreas Fischer and Ernst Balternsperger (board); United Kingdom: Andrew Hughes Hallet (co-editor), Andrea Boltho, Huw Dixon, Jacques Mélitz, and Patrick Minford (board); and USA: Heejoon Kang, Dominick Savatore, Robert M. Stern (co-editors), Michael Bordo, Menzie Chinn, Michael Gavin, Koichi Hamada, Ronald I. McKinnon, Anthony Santomero, David D. VanHoose, and George von Furstenberg (board) (at time of writing).
2. National central banks retained, in most instances, the very important function of regulator and supervisor of the national financial system.
3. For example, Rausch and Trindade (2002) find that the Chinese diaspora is trade enhancing.
4. For example, Rausch and Trindade (2002) find that the Chinese diaspora is trade enhancing.
5. The dispersion is much higher in sectors that have significant product differentiation (e.g. ladies' apparel and footwear) than in sectors that sell relatively homogeneous products (e.g. food and alcoholic beverages); see Table 2 in Engel and Rogers (1996).

6. This literature is reviewed by Soloaga and Winters (1999).

7. According to Porojan, the most popular formulation of contiguity among geographers is: $w_{ij} = l_{ij}/\varepsilon_j l_{ij}$, $l_{ij} = 1$ for regions or countries that share a land border or a small-body-of-water border, and 0 otherwise.

8. This is true of "commercial" language as well.

9. Other authors have found evidence of European business cycles; see Hughes Hallet and Piscitelli (2001).

10. Switzerland is a good example of unhampered capital mobility and low financial integration. According to Lusser, the former President of the Swiss National Bank, "it is" a country that has made the international movement of capital very much its financial business, has a domestic economy that is to a large extent divorced from international price relations and withdrawn from competition by cartels and government regulations (von Furstenberg, 1998, p. 55).

11. The journal has had six articles bearing directly on Feldstein-Horioka.

12. There is a long list of financial assets whose prices differ significantly across countries. For example, von Furstenberg (1998) reviews the evidence on the estimated cost of capital in the United States and Japan and insurance premia in countries of the EU. In both cases, differences are too wide to be explained by differences in tax rates.

13. The uncertainty problem can be gleaned from the data reported by Lewis (1999, Table 2) on the sample means and standard deviation of the annualized monthly dollar returns of the U.S. stock market and the EAFE index (the "foreign" stock market) for the period 1970–1996. The foreign stock market average return of 12.12% exceeded by almost one percentage point the U.S. stock market return of 11.14%. However, given that the standard deviations of the foreign and U.S. stock market were 16.85 and 15.07, respectively, one cannot reject the null of mean equality.

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