REVIEW ARTICLE

Research on transnational corporations: shedding old paradigms

A review of the United Nations Library on Transnational Corporations

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With about half the world's business conducted by transnational corporations (TNCs) today, these institutions cannot fail to command the continued attention of polificians, poets and scholars, to be dissected, vilified or glorified according to the convictions of the observer. The monumental collection of research articles that makes up the United Nations Library on Transnational Corporations could, therefore, prove to be a precious resource that will grow dogeared with use in the decades ahead. It may seem a little churlish, therefore, to ask the obvious question: how much has formal research contributed so far to an understanding of TNCs?

The research culture

Measured against the growing importance of TNCs over the past thirty or forty years, the contributions from leading economists and political scientists have been minimal. But the muted responses from the inner citadels of these disciplines is hardly surprising. Despite the existence of a few powerful TNCs before the Second World War, the fact is that they did not gain prominence as a major force in international economic relations until the post-war period. Besides, as I shall point out below, TNCs fit awkwardly into both mainstream economics and political science. It is not surprising therefore that scholars in both fields have tended to walk around the existence of these firms, leaving research in that area largely to aberrants in those professions and to the faculties of business schools.

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¹ Richard E. Caves (1982) included a remarkably extensive bibliography covering the period up to the early 1980s, which comprised over 400 contributors from various disciplines. But, collectively, these publications had little impact on the thinking of economists during that period. Only two Nobel Laureates were contained in the list, with contributions that bear only peripherally on TNCs.

Contributions from economics

It is significant that Adam Smith's treatise, laying some of the foundations of modern economics, is entitled *The Wealth of Nations*, for the building blocks of modern economics are national economies and the firms that operate within them. The distinguishing characteristic of TNCs, on the other hand, is that their structure spreads across more than one nation and that the transactions they generate between nations are commonly internal to the firm. It would be asking a great deal of any discipline to accommodate quickly so radical an aberration in its theorizing and research.

A characteristic response of economists to the growth of TNCs, therefore, has been what Thomas Kuhn's famous treatise, *The Structure of Scientific Revolutions*, would have predicted: they observed the transactions of these enterprises through filters least disturbing to the reigning paradigms of the profession. In that spirit, economists took to studying TNCs under the rubric of foreign direct investment (FDI), applying the analytical tools appropriate to any capital flow between nations. As a capital flow, one could expect TNCs to be responsive principally to factors of financial yield and financial risk, factors well analysed in mainstream economics.

The tendency of economists to view FDI as just another capital flow is one that lingers to the present day, influencing the expectations, hypotheses and analyses of many researchers.² From an historical point of view, it is an assumption that is easily understood. The ability of parent firms to manage affiliates in foreign countries on a day-to-day basis, as I have already observed, is a relatively new development, hardly more than four decades old. The corporate jet, the communications satellite, the teletype and the fax opened up vastly increased possibilities for the development of global strategies and the management of widely dispersed units; but these facilitating technologies have not been in widespread use for more than a couple of decades.

To be sure, there were cases before 1950 in which parent firms sought to manage the units of their transnational networks in an integrated way. These were found largely in the raw material industries, that is, in industries in which the planning horizon was distant, the production cycles were long and the final output was more or less standardized. In such industries, the execution of a global strategy did not depend very much on efficient day-to-day communication.

As long as the world of TNCs was heavily weighted with affiliates that were allowed to stand on their own feet for extended periods, scholars had some

² The common use of FDl as a phrase more or less equivalent to TNCs tends to reaffirm that tendency. See, for instance, Froot (1993), which contains a collection of essays primarily on TNCs.

reason to hope that a study of FDI might yield an understanding of what was driving TNCs. By the 1970s, however, the relative functions of foreign affiliates and parent firms had been vastly altered. By that time, big capital-intensive raw material affiliates were no longer so important, having been pushed into a corner by widespread nationalizations in developing countries (Kobrin, 1984). Most of the new crop of foreign affiliates that appeared after the Second World War were created primarily to respond to a very different kind of challenge. In profit-making terms, the function of most of these affiliates was largely to squeeze out rents from intangibles such as patents, unpatented technologies, managerial systems, trade names and financial guarantees, by making and selling products and services in foreign markets. These were functions that demanded frequent communication and coordination among the parent firms and affiliates.

From the viewpoint of the parent firms, the prime function of most of these foreign affiliates at the time at which they were established was to market their products and services more effectively in the countries in which they were operating.³ In some cases, foreign affiliates were eventually able to deliver their products or services at a cost that was lower than could be achieved by the parent firms through exports; when that goal was reached, foreign affiliates sometimes assumed new responsibilities as export centres for the parent firms. But at the point in time when parent firms set up their foreign affiliates, cost considerations were typically smothered by factors such as a desire for a hedge against import restrictions; a desire for a counter against an aggressive rival which had already set up an affiliate in the country; a need to provide after-sale services; and the parent firm's recognition of the long-term advantages of observing the local market at close hand.

To be sure, some financial capital usually went along with the firm's intangible resources but, as a rule, the financial capital was doled out by the parent firm parsimoniously and grudgingly, as an inescapable adjunct of the operation. Line managers responsible for the establishment of these affiliates, often quite unfamiliar with foreign economies, tended to see the risks associated with such financial stakes as relatively high, and the treasurers of parent firms were usually acutely uncomfortable about exposing their funds in the form of an unhedged foreign asset.⁴ To be sure, the assignment of patents and trade names to foreign affiliates did involve some cost to the parent firms in the form of the foregone

³ Data breaking down the sales of foreign affiliates of United States-based TNCs by local and export markets appear in United States, Department of Commerce, Bureau of Economic Analysis (1975, tables L4-6; 1981, tables III.H3-5; 1990, tables 36-38).

⁴One study not contained in the *United Nations Library* that vividly mirrors the state of mind of treasurers of United States-based TNCs in the formative period of the 1970s is Rodriguez (1980), especially, pp. 99 et seq.

income that exports or licences might have earned, but that loss was usually seen as different in nature from the opportunity cost of investing hard cash.

Accordingly, a portion of the investments of parent firms in their foreign affiliates, faithfully recorded as FDI, was made up of the capitalized value of intangibles — how much, exactly, is not known. Once the affiliates were established, the profits ploughed back in these enterprises as additions to their original investment represented, in considerable part, the rents that these intangibles generated in their sales to the local market. Moreover, many of these intangibles have some of the characteristics of public goods, being reproducible at costs close to zero. While, in principle, the propositions of international finance take any factor into account that affects the profits of the firm, in practice the actual operations of TNCs present situations that deviate sharply from the usual assumptions of scholars in that field.

By the 1970s, it had already become clear that the FDI approach would not be sufficient to deal with the various consequences attendant the growth of TNCs. Yet the economics profession still seemed slow to take up the challenge. There were a few notable exceptions, of course, including Richard Caves, Edith Penrose and Charles P. Kindleberger. Under these circumstances, one could ordinarily have counted on a swarm of studies by junior faculty members and doctoral candidates in economics, ready to poke at these new developments with persistence and gusto. Yet doctoral theses on the subject and other manifestations of interest on the part of academic economists appear to have been relatively uncommon. The well-known story of the slow dissemination of Stephen Hymer's seminal thesis on the subject, accepted by the Massachusetts Institute of Technology in 1960 and not published until 1976, is illustrative.

A major reason for that limited response was probably the fact that, in the 1970s, the main currents in economic theory could not have been less accommodating to the concept of TNCs. At that time, economists in leading universities, as a rule, were belittling the possibility that markets could be less than tolerably efficient. Troublesome phenomena such as monopolies, scale economies, learning curves and externalities were commonly seen as either trivial or non-existent. And if active competition was not visible to the naked eye in some markets, they were said to be at least contestable, a condition that was thought to provide practically all the consequences of more active competition. Economists, therefore, had no reason to be diverted from the edifying process of refining and extending the general equilibrium model, on the assumption that the underlying conditions of the model were generally satisfied.

True, the contributions of Ronald Coase (1937) by this time had made acceptable the concept that the institutional weaknesses and the economic costs

associated with some arm's-length transactions might lead firms to internalize these transactions, thus explaining the existence of affiliate networks; Oliver Williamson would soon bolster that idea with his observations on markets and hierarchies. But Coase saw his contribution as strengthening, not weakening, the contention that markets could be presumed to be efficient. Property rights and market imperfections might influence how the boundaries of the firm are drawn; but with internalization available as a strategy for dealing with such factors, he saw even greater reason to assume that the existing markets were operating efficiently (Coase, 1937; Posner, 1993). As far as most economists were concerned, the neoclassical explanation of the behaviour of markets was quite sufficient to analyse the behaviour of TNCs in the acquisition and use of rent-earning intangibles.

Meanwhile, however, the complex strategies and structures of TNCs were becoming more complex still. The dichotomy of markets and hierarchies, so satisfying when it was formulated some decades ago, was rapidly losing its edge. With the mushrooming of strategic alliances of various shapes and durability among firms in North America, Europe and Japan, scholars were being obliged to contemplate the possibility that markets and hierarchies may represent the two ends of a continuum, rather than a simple dichotomy.

But the sparsity of contributions from economists during the decades of rapid growth of TNCs may have been due to more than a Kuhnian lag. That sparsity may have been also due to the sheer technical difficulty of analysing the behaviour of TNCs in ways that satisfy fully the research standards common to the profession. These are complex institutions with all the difficulties that conglomerates usually present and the proliferation of strategic alliances among them has done nothing to simplify the picture. Besides, the requirements for analysing the problems of imperfect markets in terms of data and analytical techniques are substantial when only a single national market is involved; when many markets are involved, the analytical problems often become overwhelming.

If sheer technical difficulties provide an explanation for the limited role that economists played thus far, we can reasonably conjecture that contributions from that quarter will soon be on the increase. Indeed, a number of developments in the past decade suggest the strong likelihood of such an increase.

One such development is in the field of international trade theory. Until the 1970s, the central question asked by trade theorists was: given the differences in conditions from one country to the next, what do these differences imply for the patterns of trade between them? In that formulation, differences among firms were irrelevant to the response. The strategic trade theorists of the

⁵ The insight in the paragraph that follows was suggested to me by R. Z. Lawrence.

1980s, however, have acknowledged at long last what others have taken for granted, namely, that differences among firms might have something to do with the observed trade patterns. Indeed, strategic trade theory concentrates on the differences among firms, including, notably, differences in scale and experience, while brushing aside the differences in country conditions that may have contributed to the patterns of trade under analysis (Krugman, 1987). The existence of TNCs is still barely acknowledged in the strategic trade literature, but the shift in perspective opens the door to more extended analyses of these firms by economists.

Another development that promises to heighten the interest of economists in conducting research on TNCs is the expanding capacity of economics for handling complex non-linear relationships and gaming situations. My strong impression is that economists' propensities to belittle the existence of scale economies and to dismiss the importance of learning curves became much less strident once their capabilities to handle such concepts on their own terms began to improve. Moreover, the quality of the data describing the activities of TNCs is improving, albeit very slowly. Once research on TNCs seems less risky and less costly, economists are likely to follow their instincts by doing more of it.

Contributions from political science

Political scientists, like academics from any other discipline, have approached the issues involving TNCs with the intellectual baggage of their calling, and that has sometimes impeded their analysis more than it has helped.

As with economists, the titles of the leading treatises from which political scientists draw their basic orientation are revealing. Plato's Republic, Machiavelli's The Prince and Hobbes's Leviathan speak volumes; so, too, does the unaccountable popularity of the so-called realist doctrines among political scientists, that is, doctrines that assume that international economic relations can be explained best as the outcome of a struggle among rational States to achieve maximum economic advantage. In spite of the persistent flood of evidence that economic policies of democratic Governments are shaped by a constant internal struggle among unreconciled interests, many political scientists continue to frame their analyses around the so-called realist models.

One common tendency among political scientists, therefore, has been to see the enterprise and the State in a principal-agent relationship. Most see the State as the principal, but a few see the agency relationship running in the opposite direction. Even when such a relationship is not explicitly assumed, there is a strong tendency to accept the idea that States have well-articulated goals and that TNCs are likely to be dominated — perhaps should even expect to be

dominated — by those goals (Gilpin, 1975; Krasner, 1978). Assumptions such as these serve to simplify the analytical task of the political scientist by preserving intact the primacy of the nation-State system.

The assumption that a principal-agent relationship has existed between Governments and big business probably served well until the Second World War. The transnational structure was not so common in the pre-war period as to highlight the fact that big business would commonly be faced with the dilemma of responding simultaneously to the demands of several sovereigns.

However, the disposition of political scientists to study international economic relations as a game in which only States really matter has not altogether prevented some from devoting attention to TNCs. From time to time, political scientists in host countries such as Canada, Mexico and Brazil have expressed misgivings about the political consequences of TNCs, some seeing them as institutions that suppress democratic tendencies in host countries and that create a condition of unhealthy dependency on the industrialized world. And when TNCs based in Japan began to establish affiliates in the United States in substantial numbers in the 1980s, some political scientists in that country began to rediscover arguments that had been popular among developing countries a decade or two earlier.

By and large, therefore, political scientists have not been as indifferent to the existence of TNCs as have economists. Indeed, some of the attention devoted by them and other non-economists to TNCs may well be the result of the economists' neglect of the subject. Academia abhors a publishing vacuum; if economists are not prepared to address some of the economic issues associated with TNCs, other academics are likely to fill the neglected space.

Still, most political scientists have failed to address the salient fact that TNCs actually consist of a network of corporations and that each corporation is created under the authority of the State in which it operates and is expected to serve the interests of that State. The network as a whole therefore becomes the reluctant conduit through which some sovereigns are engaged in an unremitting contest to capture more of the network's resources. At the same time, individual corporations, being linked by a common parent firm through ties of ownership, are expected to serve the interests of the network as a whole. In short, each of the units is placed in the acutely uncomfortable position of serving several masters at once.

In fact, it is not political scientists alone that find it unsettling to face the ineluctable dilemma confronting the units of TNCs. Governments hesitate to highlight the problem because its solution implies some surrender of their sovereign right to reign over the units in their territory. Transnational corpora-

tions themselves are reluctant to draw attention to their continuous dilemma because their situation will be seen by some as smacking vaguely of disloyalty. It is the rare political scientist who is prepared to address the relationship of TNCs and Governments as if it arose out of two legitimated systems, albeit systems with marked features of unresolved incompatibilities. Thus, research on the political role of TNCs is left to a small band of especially brave researchers operating out of the mainstream of the political science community.

Contributions from business schools

Research from business school faculties on TNCs is extraordinarily heterogeneous, ranging from simple econometric tests of some narrow proposition of firm behaviour to richly elaborated case studies lacking a visible hypothesis.

In many cases, faculty members in business schools, operating either from professional interest or career strategy, prefer to pursue research that, in form and content, parallels the work of economists, political scientists or social anthropologists. In many business schools, the prevailing research culture encourages such an emphasis. But even if it does not, the tendency is apparent in faculties that recruit their junior members primarily from these disciplines. Junior faculty members are often fearful of cutting the umbilical ties to their primary discipline; in those cases, the research generated is likely to pose issues and to draw on techniques that seek to satisfy the norms of that discipline.

The problem often encountered by such research, however, is the extraordinary complexity and subtlety of the structures, motivations and strategies of TNCs. As it has already been noted, the data banks and the analytical tools at the disposal of researchers do not begin to measure up to the challenge of describing and analysing TNC characteristics. By and large, the materials have come from governmental sources or other distant observation points and have been collected for purposes that have little to do with improving the management of the firms involved. As researchers wrestle with these problems, one often has the impression of a class in anatomy earnestly trying to learn its lessons by carefully studying an array of corpses encased in heavy shrouds.

Despite these handicaps, the contributions from business schools to an understanding of the operations of TNCs have been impressive. Numerous devices have been used to deal with the problems of complexity and paucity of data. But some have been less successful than others. Researchers, for instance, have often fashioned their own questionnaires covering a variety of issues, addressing them to officers of large enterprises. There are, of course, issues for which such questionnaires can be useful. For example, if the purpose is simple description, if the questions are unambiguous and readily answered without

effort and if the responses are dichotomous or nearly so, some useful impressions may emerge. But most of these questionnaires fail utterly to survive these tests. As a rule, the questions are ambiguous; the responses depend substantially on the position of the respondent in the organization to which it is addressed; and where the questionnaire offers a choice of responses, these are as a rule neither mutually exclusive nor exhaustive of all the possibilities.

Still, my sympathies are overwhelmingly with the researchers. For one thing, developing new data bases is a very costly undertaking. Besides, extraordinarily sophisticated analysts, such as Herbert Simon, Sidney Winter and Richard R. Nelson, have sought to model the behaviour of large firms, trying to capture some of the effects of their chronic myopia, their aversion to risk and the internal problems of agency of such firms. Yet, these admirable efforts have so far carried us only a little distance into the labyrinth of firm behaviour (Simon, 1976; Nelson and Winter, 1982).

It is not surprising, therefore, that some of the most provocative work of researchers from the business school community has come from those who have plumbed in depth the behaviour of individual firms, or the interplay of a limited cluster of firms competing in a well-defined product market. And little wonder that the preferred pedagogical medium of many business schools is the case method.

Not that researchers can content themselves with the case study approach for very long. However provocative these individual cases may prove to be, their contribution to the researcher is principally to suggest larger propositions and, if one is lucky, to suggest propositions that are testable. But until the available data and the analytic techniques open up more promising alternatives, it is easy to understand why some of the finest minds in business schools turn back to individual cases and industry studies.

The United Nations Library on Transnational Corporations

The contributions that comprise the *United Nations Library on Trans-*national Corporations should be viewed as the efforts of a brave band of researchers, attempting in the face of considerable odds and with little support from their disciplines, to understand and conceptualize a relatively new phenomenon. Viewed in those terms, those contributions seem remarkable in the extent to which they have offered an understanding of TNCs.

The United Nations Library on Transnational Corporations consists of twenty volumes of articles on TNCs published over the past twenty or thirty years. Each volume contains an extended introduction that synthesizes its contents, as well as a substantial bibliography, both prepared by the editor

responsible for the volume. The choice of editors, including the general editor, John H. Dunning, is a tribute to the energy, discrimination and persuasiveness of the Assistant Director of UNCTAD's Division on Transnational Corporations and Investment, Karl P. Sauvant.

In their introduction to the collection, Sauvant and Dunning are at some pains to point out that the literature on the subject of TNCs is multi-disciplinary in scope, embracing ideas drawn from various branches of economics and politics, as well as from the various vocational specializations of business schools. I have already hinted at the fact that this diverse band of contributors has commonly occupied positions at the margins of their respective callings. Taken together, these characteristics point to the inevitability of a highly diverse literature. Where the reviewer comes from, therefore, matters a great deal in determining what he or she observes in the literature. In the present instance, the reader is wise to take notice of the fact that this reviewer's principal interests have been in the "real" side of international economics (that is, the study of trade and industry) and in the "low" side of international political relations (that is, the study of economic issues).

General impressions

I shall not dwell for long on the general encomia that the *Library* deserves. The various editors of the twenty volumes took their tasks of selecting the leading articles in their respective fields and of preparing useful bibliographies seriously. The articles themselves are typically strong in bibliographical references, so the reader can get a better idea of the contents of a field than that provided by some of the articles themselves.

Given the diversity of the contributors, the articles presented in the twenty volumes have an encyclopaedic scope. Like any encyclopaedic work, the sheer variety and completeness of the *Library*'s coverage clouds the reader's ability to identify the main concepts on which there is agreement and the main concepts in contention. No issue of consequence is altogether missing — at least none that I could identify — but the reader will have to dig deep in order to distinguish the kernels that really matter in an understanding of the future of TNCs from the embellishing details, the dead ends and the side excursions that such a collection of essays inevitably includes.

Theoretical and historical contributions

The volume of the *Library* devoted to theory offers a sparkling set of articles that purport to throw light on the motivations surrounding the creation and spread of transnational networks. It is worth noting that these theories, for the most part, are concerned with why and how firms developed a transnational

structure rather than how they subsequently managed these structures. Not that the *Library* is lacking for articles on that score. They appear mainly in other volumes, including volumes on business strategy and organization, and in volumes on the raw-materials industries and services. And these prove, by and large, to be much more detailed and complex, much closer to the research emanating from business schools than from other disciplines. This gap, however, may be only transitory. With TNCs now well established throughout the world, it is expected to see the interests of theorists in the future interacting much more extensively with those of researchers from the vocational institutions as they try to analyse firm behaviour.

Dunning's selection of articles on theory suggests a highly eclectic approach to the theories explaining the existence of TNCs, an approach to be expected from an editor whose name is associated with the "eclectic paradigm". Some of the articles spin large hypotheses that are built up from the authors' starting assumptions; others go a step further by testing some basic ideas with relevant data. All told, the various theories move in a variety of directions, some painting a process in which managers respond to objective criteria in the presence of adequate knowledge, others suggesting a Simonian process based on imperfect information, a sense of threat and a strong aversion to risk.

Those of us who have followed the growth and spread of TNCs over the past few decades have been in the position of a troop of blind men stroking the same elephant. It is not surprising, given our limited vision, that my own selection of articles would have been weighted somewhat differently from those chosen by Dunning. I see the creation and spread of TNCs over the past few decades as having been owing, in part, to the animal spirits of a handful of adventurous managers, seizing the opportunities created by the radical improvements in transportation and communication in order to generate cheaper sources of supply or penetrate new markets. In sheer quantity terms, however, I regard as far more important the reluctant responses of risk-avoiding business bureaucracies, trying to reduce various threats in an environment of imperfect information and high uncertainty.

As a result, in explaining the spread of TNCs, my tendency is to give somewhat less weight to such quantifiable factors as the minimization of transaction costs and more weight to the avoidance of risk in an environment of imperfect information. One need only read some of the cases that describe the global strategies of TNCs to gain a glimpse of the anxious jousting of TNCs against identified rivals. In such jousting, minimizing costs and maximizing quality have high priorities, but the process is usually conducted and tested against the moves of identified rivals, not against an environment composed of faceless players.

In the real world, managers commonly see themselves in a gaming situation, rather than in a situation in which the competitive environment has to be taken as anonymous and given. Inevitably, then, managers are bound to raise some of the usual questions associated with the prisoner's dilemma: should the objective of a strategy be to cooperate with the opposition (e.g., through joint ventures and strategic alliances), hedge against the opposition's initiatives (e.g., in follow-the-leader imitative behaviour), or weaken and destroy the opposition (e.g., in cross-penetration into the opposition's main markets)? The manager's choice of reactions to those questions, I believe, goes far to explain the growth and spread of TNCs; and that perception has not yet been given the weight it deserves in existing theories.

Another volume in the series, edited by Geoffrey Jones, draws on the work of historians to shed light on the genesis of the modern-day TNC. Some of the pieces in that volume attempt to use history to test theory, always a tricky undertaking. An article by Dunning, for instance, purports to test his "eclectic paradigm" against the history of the United Kingdom. Other pieces, written by authors who did not have in mind the prevailing theories of the genesis of TNCs, recount developments that resonate with one theory or another. Yet, on the whole, these historical essays do very little to explain the forces behind the growth of TNCs in the period following the Second World War. The advances in the technology of transportation and communication, when coupled with the vast changes in intergovernmental relations that affect the conduct of business, have greatly diluted the value of history before the Second World War in explaining contemporary events.

Moreover, taken as a whole, these historical offerings leave a distorted view of the development of international business because they pay so little heed to one major historical factor in that development, namely, the formation and operation of international cartels in the period from about 1900 to 1940. These organizations, well chronicled in numerous sources and mentioned in passing in other volumes in the *Library*, were dominant in the shaping of various capital-intensive industries, including oil, steel and chemicals. Emphasizing the divisions of markets along national lines, they provide a vivid glimpse of the lengths to which national leaders, protected by monopoly or oligopoly in their home markets before the Second World War, were prepared to go in avoiding international competition. And they suggest why it was once appropriate to think of practically all large enterprises as intimately linked to a specific nation State.

There may, of course, be good reasons why the historical selections in this *Library* dwell so little on the role of cartels in their accounts of the development of international business. For one thing, the editor of the historical volume may

have seen his task as that of identifying the forerunners of the modern TNCs irrespective of whether the transnational form of organization as a whole was of much importance. Moreover, the principal relevance of cartels to TNCs before the Second World War was that they inhibited the formation of these corporations, retarding a trend that might otherwise have been much stronger. Dogs that fail to bark, it has been observed, often manage not to get the attention they deserve.

Two other volumes in the *Library*, however, provide invaluable historical accounts of the post-war development of TNCs in selected industries. One volume, edited by Bruce McKern, deals with the raw materials industries; another, edited by Karl P. Sauvant and Padma Mallampally, addresses services industries. These volumes, on the whole, prove reassuring in many ways. Some of the central theoretical concepts developed primarily in the context of manufacturing carry over nicely into these industries. But there are some added emphases as well. One such emphasis, evident especially in the raw materials industries, is the swiftly growing importance of environmental issues; these promise to figure in a major way in every aspect of future research on TNCs. Another, evident especially in the rapid growth of TNCs in the services industries, is the remoteness of neoclassical theory from some of the phenomena that need urgently to be explained, such as the forces behind the growth of transnational management consulting firms. In both these areas, theory is still in its infancy.

Performance

A volume of essays on TNCs in economic development, edited by Sanjaya Lall, throws a few penetrating rays on that complex area. But the essays, in my view, are not altogether representative of the outpourings on this subject of the past four decades that deserve to be noted. The volume is dominated by authors from the developed world, albeit authors who in some cases have proven beyond any doubt their empathy for the problems of the developing world. Missing are the offerings of such analysts from developing countries as Norman Girvan and Fernando Fajnzylber, with their critical analyses of the role of TNCs. What is presented, nevertheless, is a superior collection of offerings, evenhanded enough in their approach to portray the full complexity of TNCs' role and the difficulties of making sweeping judgments regarding their effects on the development process. But one wishes at times that the economists who dominated this volume might have kept one hand firmly in their pockets.

A companion volume on market structure and industrial performance, edited by Claudio R. Frischtak and Richard S. Newfarmer, provides some of the emphases I found muted in Lall's volume. This companion volume, in a series of well-executed studies, raises a variety of questions about the behaviour of TNCs and seeks valiantly to answer the questions that are raised. At the same

time, however, the collection of studies in that volume emphasizes once again the gross inadequacy of both the data and the techniques available to the authors for observing and measuring the performance of these firms, with caveats and uncertainties surrounding the findings of most studies.

Trade and payments

A volume of essays on the role of TNCs in international trade and payments brings together some interesting articles on the subject. But as the volume's editor, H. Peter Grey, is at pains to point out, not much has been written so far on the relation of TNCs to international trade, and what has been written comes largely from scholars who are focused on the behaviour of TNCs rather than on the performance of trade and payments. That asymmetry simply reflects, once again, the long-standing discomfiture of economists with TNCs and the strong preference of most for pursuing the application, refinement and extension of the neoclassical model as their principal professional pursuit.

In the application of that model to international trade and payments, the starting assumption is that the trade under study is consummated by independent actors on different sides of an international boundary, with their relations being determined by differences in national conditions and mediated by a reasonably efficient market. But when the units of TNCs are involved, other possibilities arise. The trades that take place may be less than optimal for a particular unit, being responsive to the objective function of TNCs as a whole. Or a very different problem may exist: in a struggle for turf among the units of TNCs, managers of rival units may resist some possible trade opportunities or may shape them in ways that would not occur among independent traders, settling on prices and conditions that would be impossible in an arm's-length trade. Add to these possibilities the fact that the international trade of TNCs is highly concentrated in products and services with relatively imperfect markets in which scale economies, learning curves, patents, technology and trademarks figure strongly. All told, the conditions are highly threatening to the efficiency of such basic concepts as comparative advantage and the Heckscher-Ohlin theorem.

As it has been observed earlier, the reluctance of economic researchers to engage some of these issues may be softening. With more than half of the world trade in goods and services being conducted by TNCs and with a considerable proportion of that total being undertaken between the units of the same company, it is increasingly difficult to turn a blind eye to their existence. Besides, as economists expand their capacity to deal with complex non-linear relationships that are common in the operations of TNCs, the problems they offer to the researcher will appear a little less threatening.

Still to be tackled, however, is the development of adequate data reflecting the activities of TNCs in international trade and payments. To be sure, statistics emanating largely from the United States and Japan offer a glimpse of the dominance of TNCs in international trade, as well as the importance of international transactions between related units and, as usual, these data are available only at aggregated industry levels. Researchers therefore are obliged to take giant statistical leaps to draw their inferences from heavily manipulated data. Still in their infancy are studies of basic questions, such as the degree of substitutability of investment for trade and the elasticity characteristics of intra-firm trade.⁶

Relations with Governments

Under Theodore H. Moran's editorial guidance, a volume is devoted to the relations between Governments and TNCs. Predictably, however, the title offers more than it can deliver. The articles provide collectively some rich fare on how Governments deal with TNCs. But, through no fault of the editor or the contributors, the volume has nothing substantial to say about how TNCs deal with Governments.

Yet that question is surely a central issue for the future. Governments have accepted the legitimacy of the transnational structure of business; indeed, Governments assiduously court TNCs, urging them to establish their units and expand their activities on the national turf. Once a TNC is established in any jurisdiction, most Governments cannot refrain from trying to extract the largest possible yield from the transnational network, regardless of whether the Government's gain is at the expense of other national jurisdictions. Nor can some countries refrain, at times, from putting pressure on TNCs in their jurisdiction to modify their behaviour in other countries.

Transnational corporations, therefore, have been placed in an intolerable position not of their choosing. Faced with conflicting demands and interests of Governments, they cannot escape playing the role of mediator and buffer among sovereign States. And confronting their responsibilities to their stockholders, they are sure to take defensive measures to reduce the risk of injury arising out of the conflicting acts of Governments.

Governments are not insensitive to problems such as these. When the problems have arisen in an egregious fashion, Governments have been known to modify their policies. In the case of the United States, for instance, administrations have sometimes drawn back from some of their policies when the overreaching has been obvious. Cases in point are the latter-day modifications of its ambitious programme to curb the "corrupt practices" of its TNCs in foreign

countries and to prevent TNCs from trading with some countries such as Cuba or the Libyan Arab Jamahiriya.

Despite these modifications, however, the conflicts created by governmental actions may be on the increase. One sees no let-up from the competition among Governments to extract resources from TNCs. And one sees sporadic tendencies on the part of some Governments — as well as the European Economic Union — to match the assertiveness of the United States with parallel measures of their own.

It would be a mistake, however, to picture TNCs as the hapless objects of governmental rivalries; indeed, a rich literature has accumulated over the years on the political activism of TNCs in developing countries. One area of research that the selected articles fail to emphasize sufficiently, however, is the growing capacity of TNCs to take a hand in shaping intergovernmental economic relationships among the advanced industrialized countries. Careful research has documented the pivotal role of TNCs in Europe, acting concertedly through their international organizations in securing the adoption in 1985 of the Single European Act (Green, 1993). The United States proposals in the 1980s that launched the Uruguay Round under the aegis of the General Agreement on Tariffs and Trade stemmed, in considerable part, from energetic initiatives by leading TNCs in the services industries.⁷

Once again, however, we are in an area of research in which non-events are as interesting as those that are visible to the academic researcher. It seems a plausible generalization from the record of the past four decades that any intergovernmental agreement substantially affecting TNCs will have to have the support of TNCs themselves if it is to be adopted and applied. The muted terms of OECD's guidelines on TNCs (adopted in 1976), and the limited influence exerted by the guidelines thereafter, point in that direction. So, too, does the failed project for a United Nations Code of Conduct on Transnational Corporations, abandoned in the late 1980s, as well as the last-minute withdrawal, by the Government of the United States, in 1993, of some of the services industries from the Uruguay Round negotiations. Further signs in that direction are the absence of any substantial agreements among Governments, apart from those members of the European Union, that would restrain Governments' competitive offerings of subsidies to TNCs.

There are indications, none the less, that TNCs, at times, will encourage and support international agreements aimed at reducing conflicts among Governments. The fashioning of a network of bilateral tax accords aimed at

⁷See, for instance, "Trade in services and American Express", Harvard Business School Case 383-114.

reducing double taxation, for example, has had the support of business organizations in which TNCs are dominant; in that instance, the spectre of uncoordinated actions by aggressive tax collectors in different countries has been a compelling goad. Indeed, an obvious hypothesis is that when different Governments may be expected to take aggressive uncoordinated action against the interests of TNCs, the possibility of support from these companies for an international agreement is fairly high. But this is an area for research that now presents a *tabula rasa*.

The taxation problem

The problems posed by the taxation of TNCs, to which a volume of essays edited by Sylvain Plasschaert is devoted, is illustrative of the depth and power of old paradigms in dealing with these entities. This area of policy-making demonstrates vividly that it will take more than a few decades of the corporate jet, the communications satellite and the fax to change greatly the basic attitudes of Governments towards TNCs.

As I have already suggested, the principle of bilateral agreements to avoid the threat of double taxation has had the solid support of TNCs. But a concept that has resisted any material change has been the dubious notion that the profit of TNCs can be determined objectively for each country in which a TNC has a taxable unit. That concept provides the central assumption for this volume, which reviews the efforts of Governments to determine the national profit to be assigned to the various units of TNCs, and the efforts of TNCs to deal with Governments on this critical issue.

I have already observed that many TNCs rely, for their business strength, upon the coordinated use of intangible inputs such as technology, trade names, patents and guarantees. In the process of implementing their strategies, the units of these TNCs engage in a continuous exchange of information across national borders. Such exchanges are often supplemented by more tangible inputs, including loans from other units, as well as tailor-made intermediates and materials destined for further processing and sale by the acquiring unit. To calculate a plausible profit for any jurisdiction, two questions have to be unambiguously answered: what is the cost to the tax-paying entity of the acquired inputs and — a question frequently overlooked — what sales can be appropriately attributed to the tax-paying entity, rather than to another unit of the TNC in another country? The second question seems to have slipped largely between the cracks. But the first question is thoroughly dissected in the volume edited by Plasschaert.

A spectator without any knowledge of these issues observing the great debates over transfer prices might well wonder at the spectacle. Can these worthy bureaucrats, lawyers, accountants and academics really expect in the end to find a set of prices that has any basis for objective support? Unaware of the power of the nation-State concept, especially where matters of defence and taxation are concerned, the spectator might wonder at the unrelenting effort of the adversary experts to achieve the implausible.

In their efforts to calculate a national profit, following decades of discussion in OECD and elsewhere, national taxing authorities claim to be guided by the prices that can be reached between independent buyers and sellers. But the record is clear on the fact that no such prices can be possibly found for the great majority of these transactions. The second-best price, proposed by theorists, is the marginal cost of producing the product or the service. But, especially when services are concerned, that price is commonly zero; and when it is not, the estimates of costs, in most cases, cannot escape being grossly arbitrary over a very wide range of services.

To be sure, the commitment of Governments to the arm's-length pricing approach is not wholly unrelenting. Troubled by the mounting backlog of contested cases, for instance, the Government of the United States has been testing a number of alternative approaches, including bilateral agreements on transfer prices and equal divisions of profits between Governments. But none of these approaches directly acknowledges the unreality of the underlying concept, namely, that each unit of the TNC has a profit that can be estimated objectively. And it is one of the lacuna of the essays in the Plasschaert collection that they rarely suggest to the king the extent of his nakedness.

The power of the nation-State concept is evident as well in the two volumes on the legal dimensions in the operations of TNCs. One volume, edited by Seymour Rubin and Don Wallace, Jr., presents a set of essays on how national laws deal with TNCs; a companion volume, edited by Arghyrios Fatouros, deals with the role of international law. Together, the two volumes portray a stark picture of the limited role of international norms and international regimes. At the same time, these essays reflect the extent to which the nature of TNCs is overlooked or disregarded both in national laws and in international agreements. Though Governments occasionally "pierce the corporate veil" in order to deal realistically with TNCs, the preferred approach is to maintain the pretense that the national unit is a stand-alone entity, with the power and authority to respond effectively to the sovereign. That fiction is preserved and strengthened in most of the international agreements purporting to deal with the rights and duties of foreign investors.

Half a dozen other volumes are included in the twenty-volume collection that makes up the *Library*. These cover a wide range of ancillary subjects,

including corporate finance (edited by Arthur I. Stonehill and Michael H. Moffet), business strategy (edited by Donald J. Lecraw and Allen J. Morrison), organization (edited by Gunnar Hedlund), industrialization (edited by Daniel Chudnovsky), cooperative forms (edited by Peter J. Buckley), human resources (edited by Peter Enderwick), innovation (edited by John Cantwell), technology transfer (edited by Edward Chen) and regional economic integration (edited by Peter Robson). In the case of some of these volumes, I felt the selection of articles exemplary and saw no need for added comment. In other cases, I was exploring territory hitherto unknown, so felt free simply to relax and enjoy the editor's selections. All told, these volumes fortified my impression of the care and discrimination with which the editors had discharged their responsibilities.

Conclusions

Nations are, I believe, only in the very first stages of a long journey aimed at accommodating the existence of TNCs on terms that make them efficient and responsible contributors to the international economy. A critical part of that process lies in effective research. Some of the basic issues demanding effective research have already been identified. But the heavy weight of history and the absence of relevant data have already inhibited creative thinking and slowed the education of policy-makers and the general public. Still, there are good reasons to hope that research on TNCs is on the rise, engaging the attention of more participants from diverse fields. Recent developments in diverse fields suggest the possibility that the inhibiting paradigms of the past will gradually be modified, increasing the interest of prospective researchers and the influence of their research on public policy.

Moreover, it is not implausible to assume that such research will have increasing support from Governments and TNCs. The unilateral efforts of Governments to deal with TNCs so far demonstrate a capacity to inflict pain without providing solutions. Eventually, both Governments and TNCs are likely to turn to other possibilities, including cooperative solutions that allow TNCs to develop their full potential in a context that also recognizes their responsibilities.

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