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THE MULTINATIONAL CORPORATION AS AN INSTRUMENT OF DEVELOPMENT

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I Introduction

The role of the multinational corporation in development has been subjected to one of the highest "heat to light" ratios in the literature of any familiar to this observer. Much comment on the subject can only be called polemical, emanating, on the one hand, from those who believe that any foreign corporate presence in a developing country entails the loss of post-colonial virginity and, on the other, from those who view such presence as a simple augmentation of the LDCs' capacity for doing what it wants to do in a smooth neo-classical context. The remaining literature usually occupies intermediate high ground by listing the pros and cons, often as not concluding that the net weight of the argument "depends" on the particular circumstances of the case.

It is, of course, an open question whether anyone can do better than provide such a listing, i.e. ferret out what is generalizable about this important and growing phenomenon, at least with respect to its economic impact on the development process.² There is general agreement--if on little else--that the multinational corporation is relatively new, relatively important, and that it has been growing by such leaps and bounds in the post-war that it seemed at one time to threaten to shortly gobble up virtually all the world's GNP. Even if that prospect is no longer threatening, the phenomenon clearly cannot be ignored, in terms of its increasingly large role not only in the field of foreign investment but also in international

1 The author wishes to acknowledge the very helpful comments of Lou Goodman.

2 I hasten to add that although this conference carries "political considerations" as its sub-title--and although I readily acknowledge the pervasive political economy setting within which the subject must be viewed--I find myself, perhaps predictably for a "bourgeois economist," unable to incorporate these dimensions to my satisfaction.

trade. One's perceptions of what it does or does not contribute to development, or what it may or may not contribute in the future, are thus not in the category of precious points for scholastic debate, but of rather major importance for the citizenry of both the rich and the poor countries. There are at least two leading actors in the drama, the MNC (multinational corporation) and the LDCG (less developed country government); and two supporting actors, the DCG (developed country government) and the LDCI (less developed country industrialists). As to the benevolence or malevolence of the instrument from the vantage point of these various concerned parties, there is virtually no agreement and as yet therefore no general political consensus as to where policies affecting the multinational corporation should be heading.

This paper takes the basic position that the role of the multinational corporation in development cannot be assessed independently of time and place, but that such assessment must be related to the particular phase of a developing country's life cycle, as well as to the type (e.g. size and resource endowment) of the LDC in question. Secondly, this paper emphasizes the point that the MNC is not by any means a monolithic organizational concept but itself a short-hand for a heterogeneous set of organizational forms ranging from wholly-owned subsidiaries, at one extreme, through various kinds of joint ventures, to licensing and management contracts, on the other. Thus a more helpful, i.e. generalizable, interpretation of "it depends," may be, to our mind, one which differentiates among LDCs in terms of both historical and typological dimensions and differentiates among various possible organizational manifestations of the MNC.

While we are quite agnostic on whether it is, in fact, possible to treat this phenomenon in a scientific antiseptic fashion, we nevertheless

feel that one has an obligation to try. Neither resort to caricatures or mystiques is particularly helpful in this effort. The MNC did not just happen--there are deep-seated reasons for its existence, persistence and growth, as well as for the always controversial nature of its report card. We must try to understand these reasons not in terms of some isolated, if fascinating, phenomenon but in relation to what has been happening in the developing world over the past quarter century of attempted transition from colonialism to economic maturity.

The phase a particular LDC finds itself in as well as its size, endowment, etc. will, we believe, dictate a differential analysis of the causes, the impact, and, most importantly, the particular organizational manifestation of MNC activity. Put another way, the MNC constitutes a bundle of activities including variable proportions of capital, technology, management, training, entrepreneurship, and information. The prominence of different components calls for different organizational structures and consequences. Exploration of these relationships in a more "disaggregated" sense is, we believe, likely to be more fruitful than the customary assessment of the role of "the" MNC in "the" LDC.

Section II of the paper briefly sketches in what we conceive to be the main contours of the typical LDC transition process and relates it to the changing motivation, organizational content, and impact of the MNC in an idealized sense. Section III deals with the many real world deviations from that idealized historical path and attempts to relate such deviations to some of the current controversy surrounding the MNC phenomenon. The final section presents some modest suggestions concerning the additional light this type of analysis may shed on future policy options facing the various

concerned parties.

II The Idealized Role of the MNC in an Historical Context

Kuznets has aptly defined the development problem as one of transition between a long epoch of agrarian stagnation and a long epoch of modern growth.¹ Such a transition, history tells us, may last anywhere from 30 to 50 years and is likely to be composed of a number of sub-phases during which the development characteristics of the society undergo marked change. In the pre-independence or colonial epoch developing countries were characterized by the essentially enclave nature of their production and trade pattern, i.e. the co-existence of an export oriented cash crop sector and a large, relatively stagnant, food producing agricultural hinterland. Proceeds from this land-based export activity were deployed to finance the consumption needs of the workers and entrepreneurs engaged in the enclave, with the rest either reinvested in the further expansion of the export-oriented enclave--or reinvested abroad, as dictated mainly by the commercial and political interests of the mother country. Once LDC governments had achieved political independence after World War II--earlier in Latin America--they almost invariably attempted to intervene in order to redirect these traditional colonial patterns of production and trade. This redirection is known as the import substitution sub-phase of transition in which LDCG's aim at gaining full control of their critical raw material export earnings through exchange controls, and at reallocating them towards domestic industrial and overhead expansion. It usually includes substantial government deficit financing accompanied by inflation and increasingly overvalued exchange rates, quantitative import restrictions and the rationing of other critical materials. In fact, this

1 Modern Economic Growth, Rate, Structure and Spread, New Haven, Yale University Press, 1966.

regime may be characterized as still fuelled by traditional land-intensive exports, but with both foreign exchange and domestic saving now channeled towards the growing industrial sector and a new protected industrial entrepreneurial class. In this sub-phase the brute act of saving and of re-directing the flow of both new foreign and domestic investment is crucial. It is in this period also when the fine points of appropriate technology choice or even of appropriate output mix choice take a back seat to the exploration of the domestic market, while entrepreneurs are given a chance of learning-by-doing under the cover of protection, with distorted relative prices assuring them of substantial windfall profits.

Let us now turn to the MNC in the context of such a transition from dependent colonial to independent import substitution growth. The old colonial flow of investment to the overseas territories represented a type of long-term movement of capital, management and entrepreneurship which can be viewed as a forerunner of the MNC.

British foreign lending before 1913, for instance, was primarily portfolio rather than direct, with most of the investment going to the relatively more advanced regions like the U.S. or relatively more secure places like U.K. colonies. Regions not fitting either of these categories, e.g. Latin America, (with the exception of Argentina) received relatively less in toto of which a relatively higher proportion apparently was in the form of equity.¹ Thus even the form of capital flows differed depending on the country of destination and on its overall state of economic and entrepreneurial preparedness. In the post-independence post-World War II

1 The above information from Brinley Thomas "The Historical Record of International Capital Movements to 1913," as published in Capital Movements and Economic Development: Proceedings of a Conference held by the International Economic Association, ed. by John A. Adler with the assistance of Paul W. Kuznets, St. Martin's Press, New York, 1967.

era the political control which used to be associated with the colonial type of long-run capital movement was, of course, no longer acceptable--nor the almost exclusive concentration on raw materials and extractive activity which characterized it. Instead, during import substitution investment is channeled mainly into the industrial sector of the LDC, with the main contribution of the MNC one of adding to industrial savings, capital accumulation and management capacity. At this point in time, when the market, the role of relative prices, efficiency, etc. have been put aside, at least temporarily, in order to ensure as rapid a rate of industrial growth as possible, foreign capital and management can provide an important assist. This is usually a period when technology choice generally consists mainly in the act of turn-key borrowing from the "shelf" of advanced country technology. Thus the fact that the MNC is very likely to be biased in the same direction has been no cause for special alarm. In this period the watchword is getting the job done as quickly as possible--with relatively little concern for efficiency--certainly not at international prices.

Pursuing our idealized scenario, the coming of foreign capital, either of the portfolio variety or (more likely where risks are high, intervention difficult, and domestic managerial capacity low) in the form of equity, can thus be expected to play an important role in this phase. The rationale for the wholly-owned subsidiary is undoubtedly stronger at this particular time in the history of a typical LDC than at any other. If the proper conditions can be established attaching to such dimensions as the excessive use of domestic loan capital, the provision of training and upgrading of local management and labor, the avoidance of certain designated

areas where domestic managerial and entrepreneurial capacity already exist, plus an ex ante agreed-upon time frame for gradual disinvestment or transformation, the contribution of this particular form of MNC presence may be viewed as potentially mutually beneficial. It constitutes the contemporary manifestation of the long term movement of international capital and management skills in the "right" direction.¹ Help with what the LDC needs most at this stage, i.e. a contribution to the brute act of saving, of getting things done, of managing a relatively new type of activity, can be provided by the wholly-owned subsidiary in this idealized setting.

We do not wish to engage here in the protracted and rather sterile debate on the merits and demerits of the import substitution sub phase itself. Faithful to our historical perspective, we will simply assert that we do believe that the infant entrepreneurial/infant industry argument has merit at a point in time, and that much of the criticisms along the Little-Scitovsky-Scott lines² is properly directed towards the issues of how much, how long and what kind of import substitution packages make sense.³ If the regime is sufficiently flexible, and the vested interests which typically grow up under it not excessively strong, we would expect, after some time, a transition towards a more open and export-oriented subphase of growth to be effected. We do know that this is bound to happen sooner or later because primary or consumer goods import substitution will run out of steam, either because the industrial sector no longer has sufficient markets domestically to keep going and/or because the ability of the agricultural and

1 Needless to add, a logical accompaniment of such factor mobility would be access of unskilled labor into the advanced countries.

2 Little, Scitovsky and Scott, Industry and Trade in Some Developing Countries--A Comparative Study, Oxford University Press, 1970.

3 For a fuller explanation, see the author's "Relative Prices in Planning for Economic Development," in International Comparisons of Prices and Output, D.J. Daly, ed., NBER, 1972, as well as the discussion with Eckstein, Ruggles and Stolper that followed.

cash crop export sectors to keep fuelling an often highly inefficient industrialization process without any help from industrial exports becomes ever more questionable.

It should, of course, be readily admitted that many LDCs try to persevere with import substitution, moving from the primary (consumer goods) to the secondary (capital goods and raw materials processing) type. But this becomes an ever more costly process and can be sustained in the longer run only by countries with a reliably favorable natural resources base--and even here problems of increasing unemployment and a worsening distribution of income may well force a halt at some point. This struggle between the "necessities" of a changing resource endowment, socio-political pressures and the reluctance of the new industrial class and the civil service to give up their windfall profits and power is another, very interesting--but separate--story.¹

If these obstacles are successfully overcome the system is likely to move from its land or raw material fuelled import substitution subphase to an unskilled labor based export substitution subphase. The latter is characterized by the capacity of the now more experienced domestic entrepreneurs to combine with the country's abundant supply of cheap labor and begin to look outward, away from the limited domestic market, and toward expandable export markets for labor intensive industrial goods. The industrial sector can now be expected to begin to help fuel its own further growth on a sustained basis, while the economy's entire production and trade pattern swings closer to the lines dictated by resource endowment and efficiency considerations.

1 See, for example, Little-Scitovsky-Scott, op. cit.; Fei and Ranis, "Development in Open Dualistic Economies," JDS, forthcoming; as well as Hirschman, "The Political Economy of Import-Substituting Industrialization in Latin America," Vol. 82, February 1968, pp. 1-32.

This change in the system's underlying abilities must, of course, be reflected in accommodating changes in the LDCG's policy package, i.e. a gradual move from direct controls and distorted prices towards indirect controls and more realistic relative factor and commodity prices. Devaluation, import liberalization, interest rate reform, the dismantling of other licensing systems, etc. are all part and parcel of such changes in the policy package as we have witnessed in a number--though still small--of developing countries.

While no endowment or indeed policy changes are likely to be abrupt, what we are contemplating here is the gradual shift from a forced march pattern of import substitution to the more flexible ballet-style advance of export orientation along comparative advantage lines. Consequently, in this more efficiency oriented labor-intensive production and growth phase the idealized role of the MNC may also be viewed as subject to important change. For at this point in the life cycle of an economy in transition the role of appropriate technology and output mixes in penetrating international markets becomes much more important. One can now conceive of a benign and productive combination between the advantages of the MNC, with its global scan of markets and technology, and the growing domestic expertise based on the specificity and peculiarities of the local resource endowment and institutional factors. In this period, the MNC presence in the organizational form of joint ventures seems to make increasing sense. As indigenous entrepreneurial and management capacities have by now gradually matured and as, with the diminution of windfall profits, the premium on efficiency increases, there is increasing scope for a functional symbiotic association between foreign and domestic capital as well as talent.¹ Under generally more competitive conditions

1 We, in fact, find the percentage of wholly owned multi-national projects declining by about 10% between 1939 and 1967 (U.N. Multinational Corporations in World Development, p. 156, N.Y. 1973).

there is an increasing need for coming up with the right amalgam of imported and adaptive technologies and output mixes to ensure the continued outward-looking expansion of the industrial sector.

Finally, after a period of sustained export diversification, with industrial sector labor absorption proceeding at a rate far ahead of population (and labor force) growth, the LDC will ultimately approach the end of its labor surplus condition and the beginnings of the epoch of mature growth. One would now expect joint ventures to increasingly give way to licensing and management contracts as the "final" manifestation of the MNC presence in the interplay among advanced countries--along with the movement of portfolio capital in response to international differences in the rate of return. We would expect such interactions to be a continuing, flexible feature of the international movement of capital, accompanying a global division of labor with respect to both final and intermediate products.

If we accept, even in rough outline, this idealized, if undoubtedly somewhat naive, two-track picture of the gradual phasing of growth regimes within the developing country, along with the gradual phasing of what constitutes the optimal expression of an MNC presence, the outlines of a changing mutually beneficial relationship can be discerned. There is a gradual shift of emphasis from the pure generation of saving and getting the management job done to one of efficiency and entrepreneurial flexibility; from the simple transfer of technology and tastes perfected in different contexts, to the search for imaginative indigenous technology and output mixes; from the simple capital-intensive add-on to the import substitution enclave, to the labor intensive partnership with substantial spill-over effects.

In all these efforts the additional possibility presented by a foreign MNC presence is, of course, just that, i.e. an additional potential advantage

if the above idealized script is not entirely discarded. The real world, we all know, is likely to be many steps removed from such an ideal. The basic suggestion of this paper, therefore, is not to claim that "all is for the best in this best of all possible worlds," but to indicate -- by contrasting the real world with such an ideal--that much of the pervasive misunderstanding on the role of the MNC in development may be related to the fact that some or all of the major parties involved too often choose to ignore the historical context and thus the changing nature of any potential mutually beneficial interdependence between the MNC and the LDC. If, for one reason or another, one party or another, attempts--as they do--to move against these underlying realities, e.g. to rearrange the sequence, or to prevent the sequence from playing itself out, global welfare benefits decline and frictions as to their distribution rise. We intend to illustrate this point and to pursue the resultant inevitable generation of substantial conflicts in the next section.

III Departures from the Evolutionary Ideal

If we read the record of the past quarter of a century correctly, there exist substantial real world obstacles to any such idealized or "normal" phasing of a changing relationship between the LDC and MNC. On the side of the MNCs there has been a clear reluctance to move from the wholly-owned subsidiary to the joint venture, licensing, etc. as host LDC entrepreneurial capacity matures and pure saving assumes a lesser importance. On the part of the LDCG's there is often a desire to retain import substitution controls long after their rationale has lost its force but, as the MNC mystique declines, large MNC profits are noted, and nationalistic resentments increase, to attempt to turn the temperature down only for the foreign investor. This

is likely to be due to a mutual misunderstanding of the predictable dynamics of the relationship over time. The bargains struck initially during early import substitution are almost bound to guarantee the MNC an extremely high rate of return, based in substantial part on the public grant of monopoly power, which it is later understandably loathe to surrender. The LDC for its part, often wants the MNC presence at that point for reasons of prestige, bandwagon effects or security, almost regardless of the terms--and often at terms much in excess of what it would take to attract it. Witness not only the protection and market-power granted through licensing and other controls but also the lavish tax holiday and other fiscal favors customarily bestowed. Moreover, regardless of one's judgment about the relative benefits accruing to the two parties as a result of a particular foreign investment at this point in time, there should be general agreement that the advantages to the recipient LDC will decline over time and those to the investing MNC increase over time--in the absence of any change in the nature of the contract.

An example of the reversal of the natural sequence which is sometimes attempted is for the MNC to view the joint venture not as a (later) instrument for accommodating to the growing local entrepreneurial, management and research expertise but to utilize it (earlier) to try to circumvent LDCG controls increasingly aimed--in response to growing domestic pressures--at foreign capital, as import substitution proceeds. Such tendencies are more likely if the product line is fairly broad and diversified, trademarks and patents can be used to gain control over the domestic market, and there is relatively little risk of loss of "real," i.e. appropriable, technology via local partners-- or of disagreement with them on transfer pricing or other non-competitive practices. Similarly, with respect to the relative importance over time of research, development and engineering, we often see an attempt

to support research, often very basic, during import substitution within both the public and private sectors of the LDC--almost invariably leading to a substantial wastage of resources--instead of de-emphasizing such activity until much later--and even then, placing more faith in engineering improvements emerging at the factory floor and repair shop level rather than the large breakthroughs of the corporate lab variety. We know that the licensing of technical processes is often used by the MNC, e.g. in India,¹ as a device not really to transfer technology among relatively co-equal partners but to gain certain market-sharing advantages or evade the exchange controls and, by the cooperating domestic firm, to be able to enlist the help of the foreigners in convincing the "controls bureaucracy" to issue certain vital slips of paper. The entire arena of so-called technology transfer is thus often misused by both parties--one party claiming that it is transferring knowledge when it is, in fact, only utilizing such devices to gain or maintain a monopoly or trademark advantage; the other, claiming it is receiving knowledge when, in fact, it requires the mystique of the MNC hook-up to consolidate its own hold within the import substitution hothouse. Thus we encounter certain code words and payments for services other than those stipulated, with the main loser the LDC consumer and the development objective generally. Patents, licensing and technical collaboration agreements "before their time," i.e. before there can be some reasonable equality in the technological partnership and some services for the payments rendered,

1 V.N. Balasubramanyam, International Transfer of Technology to India, New York: Praeger Publishers, 1973.

have given rise to considerable controversy.¹

Even with respect to ^{the} transfer of capital, pure and simple, this reversal of the idealized sequence is frequently encountered. During import substitution when domestic interest rates are usually kept artificially low (part of the effort aimed at favoring local industry) it is the MNC which gets favored treatment when local capital is rationed. Thus the wholly owned subsidiary may be more than 50% financed by subsidized local capital with only 25% representing new equity flows. During the more competitive, export oriented sub-phase, in contrast, when the contribution to brute saving is less crucial, higher interest rates within the LDC may induce the MNC to bring in a relatively larger share of new investment capital from the outside.

We may thus observe a marked lack of sensitivity on the part of the MNC to the changing capacities and needs of the LDC as it attempts its transition to modern growth through various historical subphases, and an equal lack of sensitivity on the part of the LDC as to how it can really maximize the benefits and minimize the costs of this foreign presence at different points in its life cycle. In fact, all the actors are likely to be guilty of causing major departures from the ideal. There are good underlying reasons for such "deviant" behavior. First, the MNC, whose profits are initially based mainly on market imperfections, may find itself naturally unwilling to voluntarily

1 See Vaitos, for example ("Patents Revisited: Their Function in Developing Countries," Journal of Development Studies, October, 1972) who concluded that "in the real world of multiple patent ownership by large corporations, the main functions of patents is not to encourage inventive activity but to aid profit maximization through minimization of competitive forces." Premature patenting is often simply a prelude to the acquisition of local firms. Machlup ("Patents," International Encyclopaedia of the Social Sciences, Vol. II) believes that mainly DCG pressures and mistaken prestige motives account for LDC membership in the international patent convention.

shift from windfall to earned profits as required by the nature of the phasing. Second, the LDCG which often "blows hot and cold" with respect to its regulatory attitude on foreign enterprise, may refuse to try to differentiate among the various organizational manifestations of the MNC in any consistent fashion--and end up either welcoming all parts of the MNC bundle or rejecting all. (It may thus be obtaining the worst of both worlds, in extension of the well-known shibboleth that a consistent, if tough, policy vis-a-vis the MNC would be much preferred by foreign investors to one that is better "on average" but fluctuating and unpredictable). Third, the private LDCI who initially almost unthinkingly welcomes the presence of large foreign companies to help him "test the waters" and provide political support for government policies favoring the industrial class, often later turns on the MNC when he finds himself unable to compete effectively with foreigners who have favored access to capital markets, bureaucrats, etc. Fourth, DCG's seeking to support the actions of their own investors abroad--which they claim are also in the interest of the LDC's--often do so without any perception of changes in the landscape and the consequent need for change in the nature of the potentially symbiotic relationship. Often the policy approaches that of "right or wrong, this is my MNC". Aid is tied to the host country treatment of MNCs in the form of Hickenlooper and Gonzales amendments; and manifestations of modern extra-territoriality extend as far as the application of antitrust and Trading with the Enemy Acts to U.S. subsidiaries abroad (as in the celebrated recent case of Argentine motor sales to Cuba).

Little wonder that we sense the current rising tide of dissatisfaction and friction but have thus far had little success in disentangling the meaning of "symbiotic coexistence" in this particular sphere of global interdependence. Blame is placed by any one of the actors or the other without any real

consideration of the meaning and substance of any ideal (or at least "better") relationship at any particular point in time, or of what elements of flexibility could be built in as a safeguard for the (inevitable) change in the underlying conditions. The all-too-frequent interventions by all parties in any such idealized phasing which may be postulated can be placed at the doorstep either of a basic misreading of history, or a basic misunderstanding of the requirements of long term coexistence, or--if one prefers-- a malevolent conspiracy among colluding vested interest groups who, laboring under a short time horizon, are endeavoring to "get rich quick" by defrauding the LDC public. While it is always most difficult to determine motivation, we shall assume here--for the sake of argument--that the LDCGs taken as a whole are well intentioned and desirous of striking the best bargain for their societies and that most MNCs are not interested in a hit and run strategy but rather in realizing long term profit goals. If they don't succeed, it is not because we accept the inevitability of conflict under an idealized phasing on both sides, but because there is misunderstanding and miscalculation. In order to give this (admittedly vulnerable) argument a little more concreteness, let us look at a couple of points of controversy to see if they can be related to interventions with what we have called the ideal phasing of the relationship.

The role of the MNC in providing scarce capital is one. Those who accept the straight neo-classical line would argue that the MNC is basically an example of a long-run capital movement from capital rich to capital poor regions and don't understand why there should be any question in terms of both global welfare enhancement and benefits to the host LDC. On the other hand, we have seen that MNCs often actually don't bring in very much capital, i.e. only 25% of the investment is in the form of foreign equity, with 50%

or more made up of loans obtained at favored rates in the local money markets. In the early import substitution phase, when savings are still the most scarce item, a wholly owned subsidiary should, therefore, be asked to bring in most of its capital from abroad, either in loan or, more likely, equity form. But once the particular domestic shortage which can be alleviated through the MNC presence shifts from capital towards entrepreneurship and information (especially in the realm of intermediate goods markets and global technology scanning capacity), the LDCG's concern should shift accordingly.

Second there is the much repeated, and undoubtedly correct, accusation that the MNC, especially in its wholly owned subsidiary manifestation, has unprecedented power, unchallenged by either the LDCG or DCG, to show its profits where it pleases by allocating its overhead, setting transfer prices, moving currencies about, etc. On the other hand, many of these so-called abuses, serious as they may be, spring from the environment created by the LDCG in its desire to avoid foreign competition, and provide special access to credit, investment guarantees, tax advantages and "the quiet life" for its industrial entrepreneurs generally. Whether or not LDC governments create such hot house environments, attract MNCs and then blame them for continuing to prosper in the shape of the increasingly disliked subsidiary--even after the logic has passed--or whether the MNC influences the LDCG both to adopt these policies initially and then to refuse to turn down the temperature later may not really be the important question. Undoubtedly some of both is correct and the result is the same: an intervention in the capacity for a natural transition from import to export substitution on the part of the LDCG and in the pattern of transition from a wholly-owned subsidiary to the more flexible joint venture, licensing and management contract manifestations of the MNC.

A closer look at the area of technology transfer and technology choice may serve to illustrate the point further. Let us differentiate, at the outset, between the various components of what normally goes under the name of "technology." There is, first of all, existing knowledge about different processes or different ways of producing a given commodity in different endowment situations--and ways and means of devising new ones. (This is what the economist usually has in mind.) Second, there is existing knowledge about different types and qualities of goods--and ways and means of devising new ones (this is what the businessman usually has in mind). Finally there is the distinction to be drawn between the "actual" transfer of technology--of either kind--from rich to poor countries, and the "fictitious" transfer, e.g. via patents, trademarks and the like, as a device to preserve oligopoly power and/or avoid exchange controls. To put it quite bluntly, much of the discourse on the role of the MNC in technology transfer has been thoroughly confusing because these very different dimensions have not been analyzed separately and, most important from the point of view of this paper, report cards have been issued on the basis of only a very partial review of the performance and without regard to the historical context.

Specifically, MNCs are, for example, often taken to task for selling overpriced patented "know-how" to their subsidiaries or licensees, the main purpose of the transaction being to restrict entry to both domestic or other MNC competition, while increasing the domestic demand for "overspecified" or luxury goods (soft drinks and toothpaste are frequent examples). There undoubtedly is a tendency for MNCs to be less active in this regard when the "technology" transferred is less appropriable, e.g. focussed on techniques as opposed to quality variation. Yet does that mean that the famous Veblenite "advantage of the late-comer" in borrowing from the international shelf of

technology is but a fairy tale--possibly commissioned in some corporate board room in New York or London?

We really do not think so; these advantages are real but often eclipsed by even larger advantages based on other-than technology characteristics. As long as the LDC finds itself in the heavily monopolistic era of import substitution growth it will try to transfer "technology" of the Pepsodent (or product differentiation) type when what the LDC really needs is capital and management. It will try to obtain a thorough-going emulation of the international (previously imported) good (e.g. Coca Cola and drip-dry shirts) when adaptive goods (e.g. Green Spot and bush shirts) would serve better, i.e. prove cheaper while producing the same amount of consumer utility. Later on, once a more competitive and export oriented environment obtains, the LDCG should realistically welcome the inflow of information and technique and product oriented technology change to ensure the successful and sustained participation of her industrial sector in world markets. In fact, it often does not try to draw this distinction and hardens its attitude--on the basis of its now greater entrepreneurial confidence and/or stronger nationalistic attitudes--just at the time when it could derive larger benefits. The MNC, for its part, as has been shown by the experience of Japan, will not necessarily "cut and run" when forced to concentrate on "real" technology transfers, but will instead accept lower (earned) levels of profit in place of higher (unearned) levels of monopoly rents. But it is also, and quite understandably, perfectly willing to continue playing the import substitution game, even if now directed, (via export subsidies, tax concessions and the like) towards the more favored export markets. One need only remind the reader that negative value added can be as negative when contributed in production for export (and by foreigners) as in import substitution.

The product cycle presumes to tell us something about the changing motivations of the MNC as it first explores its own domestic DC markets, then exports, then moves defensively to produce abroad, and, finally, seeks to export from its LDC base. While there exists no necessary synchronization between this sequence for any particular product line and the natural evolution of the resource endowment, the policy package in any given LDC, or the particular organizational manifestation of the MNC, we would expect to find relatively more of the wholly-owned subsidiary type of MNC in India and relatively more joint ventures and licensing arrangements in Taiwan. This assumes that the admittedly substantial departures from the evolutionary ideal are distributed more or less equitably across countries. In this way our view can be subjected to some rough and ready tests not only longitudinally, i.e. by examining post-war LDCs in transition, or the longer historical experience of Japan, but also cross-sectionally, i.e. by contrasting contemporary LCDs in different phases of development.

We have not attempted any such tests in the context of this paper-- which is intended only as suggestive of possible new directions of analysis. Nevertheless, in addition to the somewhat loose and episodal discussion concerning the contemporary LDCs, a word on the Japanese historical case which does not, at first blush, seem to fit the case terribly well, may be in order. Japan, it should be emphasized, experienced a relatively unique early transition period. On the one hand, it was relatively neglected, even after the Seclusion period ended, by foreign colonial powers who were busily occupied elsewhere; on the other, the unequal treaty provisions of the Meiji period forced Japan into a relatively mild (i.e. low protection) version of

the import substitution sub-phase. This meant the virtual absence of the colonial type of investment in overheads while in industry proper subsidies and extensive technical assistance to domestic investors or direct government ownership replaced the creation of a heavily protected hot-house beckoning to foreign as well as domestic enterprise. Nevertheless the wholly-owned subsidiary form of foreign investment was used in an era where Japanese experience and entrepreneurial capacity was as yet deemed insufficient, e.g., in international trade, banking and shipping until the turn of the century. The predominance of foreign firms in these areas was reduced after 1900 when a more outward or trade-oriented policy coincided with greater interest on the part of foreign companies in joint ventures (then called "joint companies") with the increasingly formidable Zaibatsu groups, in such industries as electrical engineering, rubber products, metals and linoleum, culminating in a substantial expansion during the 20's and 30's. As we would expect, technical assistance, patent and licensing arrangements became more prominent thereafter. Thus the Japanese case may be said to represent a "mild" version of the idealized sequence with both the sub-phases of transition and the changes in the MNC presence muted by the twin forces of early (and consistent) Japanese government resistance and early lack of interest on the part of the Western world.¹

The way in which technological change is itself generated is subject to a similar and, of course, related cycle. If we distinguish not only between R&D (research and development) but add also E (engineering) and I (information), we can perhaps arrive at some general statements about what constitutes

¹See also G. C. Allen and A. G. Donnithorne, Western Enterprise in Far Eastern Economic Development: China and Japan (London, 1962), and Edwin P. Reubens, "Foreign Capital and Domestic Development in Japan," in S. Kuznets, ed., Economic Growth: Brazil, India and Japan, (Duke University Press, 1955), pp. 179-228.

an ideal sequence in a particular product area. Basic R&D would presumably be carried on at the outset in the home labs of the MNC, i.e., during the LDCs' import substitution sub-phase, with scarcely any technology-related activity taking place abroad.¹ Facing a relatively low volume LDC domestic market, the main objective of the MNC would be to gain assured access with the help of transplanted turn-key technology, restricted model choice (and as little foreign capital input as possible). During this phase MNC subsidiaries very often even carry outright prohibitions against exports to reassure rivals on market share stability. Once the host country's infrastructure and entrepreneurial capacity has progressed to permit a move toward substantial industrial export orientation the MNC can be seen to take an increasing interest in the possibility of new product design specifications and the use of a more labor intensive technology. As the MNC's profit source abroad is forced to shift from production and sale in the home market to export sales, expenditures on R&D and E become important for the first time. Conventional corporate lab R & D may, however, still have a much lower value than the small modifications in technology and product design which are more likely to emanate from the machine shops and assembly lines of the LDC plant. The accumulating evidence indicates² that most of these consist of labor using adaptations peripheral to the machine or core process proper, including mainly handling, packaging, storing, etc. But there are also examples of machine speed-ups supplemented by greater (manual) quality control and more

1 Globally, more than 95% of MNC "official" R&D expenditures are made at home.

2 See H. Pack, "Employment and Productivity in Kenyan Manufacturing," Economic Growth Center Discussion Paper, February 1974; G. Ranis, "Industrial Sector Labor Absorption," Economic Development and Cultural Change, March 1973; and W. P. Strassman, Technological Change and Economic Development, Cornell University Press, 1968.

intensive machine maintenance, and the upgrading of a lower quality raw material into a standard quality intermediate product (e.g., in cotton yarn and plywood production) via the application of "more labor." In addition, the willingness to sacrifice minute gradations in quality, e.g. yarn counts, can often yield large benefits in additional factor substitution potential. Such non-spectacular but nevertheless highly important rearrangements of the production line (adaptive technology) or non-spectacular adjustments in quality (adaptive goods) are the consequence largely of plant engineering changes (E) rather than R&D--though "adaptive research" emanating from the workshops is just as appropriate a label. Interview-based episodal evidence indicates that it often takes considerable time and energy to persuade the mother company that such modifications are possible without unintended sacrifice of the sacred cow of an internationally advertised product quality.

At the end of the sequence running from E to adaptive R&D (opposite from the DC sequence), i.e. once the LDC is well into its export oriented development phase, the case for supporting overseas R&D becomes stronger. Leaving aside such arguments as the attraction of lower legal control standards on research (e.g. in pharmaceuticals), we are focussing only on the enhanced possibility for a mutually advantageous real content inter-penetration of know-how among now relatively more equal partners tied together via a nexus of cross-licensing and patents. That this world does not often exist in DC-LDC relations--it does within Western Europe, between Europe and the U.S., and, to some extent, between the U.S. and Japan--does not alter its increasing realism as we look to the future.

It is interesting to note that even LDCs still deeply ensconced in their import substitution sub-phase (as most are) may open up a selected portion of

their industrial sectors to export substitution--via the so-called export processing zone device. Here MNCs working with subsidiaries or local partners abroad often begin by placing assembly operations abroad in special zones out of the reach of LDC tariff and other controls. Raw materials are imported from abroad, value added is mainly labor, and the product is re-exported. This device, along with such provisions as (in the case of the U.S.) Sections 806.30 and 807.00 of the Tariff Code, which permit re-entry duties to be levied on only the value added abroad, enables the MNC to take advantage of the LDC's cheap unskilled labor supplies. The growing phenomenon of international subcontracting by process, e.g. in electronics, textiles, leather goods, gloves, etc., has been growing by leaps and bounds over the past decade. It now constitutes more than 1/6 of total U.S. imports from LDCs. But what is even more to the point is that what initially starts as a simple process of taking advantage of cheaper labor abroad usually becomes, after some time, a source of labor-using technology change. Once the log-jam on the preservation of quality standards is broken, additional LDC processing levels, forward and backward from the initial emphasis on assembly, are likely to be added. One rather convincing demonstration of the contrast of the role of E, D, and R (in that order) between a more competitive export-oriented and a less competitive domestic-oriented industrial environment is provided by comparing technologies in use in the same industry in the same country at the same time. To cite but one example, MNC brassiere manufacturers in the Mexican border industries produce much more labor intensively than those serving the still protected domestic market. Once forced to abandon the "quiet life" of windfall profits and satisficing entrepreneurial behavior,

MNCs--like their local counterparts--will "scratch around" to find technological alternatives; they could eventually--e.g. in the Mexican case cited, if given permission--"export" competitively into their own domestic market and thus reverse the normal Linder sequence of international trade.¹

The rejection of export processing zones by some labor surplus LDCs and their generally bad press, even where they have been booming along successfully, is somewhat puzzling and presents another example of interventions in our natural sequence, i.e. the beginnings of export orientation patterns in a generally still protectionist system. Surely these are enclaves with relatively small technological spill-over effects, but just as surely they are not exploiting irreplaceable natural resources, but "exploiting" or, rather absorbing, otherwise unemployed and thus forever "wasted" human resources.

As the LDC nears economic maturity, access to information (I) is exposed as an increasingly important source of MNC profits as other components of MNC superiority fall away. Especially in the particularly imperfect markets for intermediate goods and in the global search for appropriate technology the common assumption of freely available information is most suspect--even in the later more competitive phase of development. Thus a natural evolution sees the MNC initially with little interest in transferring technology to the LDC, then moving to the encouragement of E, finally R&D--reversing its normal behavior in the DC sequence. The joint venture, LDC licensee or

1 S. Burenstam Linder, An Essay on Trade and Transformation, Uppsala, 1961.

independent producer will then become increasingly concerned with I, access to information on both technology and design alternatives and markets. Imitation or adaptation elsewhere of the Japanese trading company organizational form--which permits access to an essentially highly imperfect international market by smaller independent domestic producers,¹ could help assure a better distribution of the profits--with due regard to only the legitimate functions of effectively utilized patents, licenses, etc. It could also permit greater scope for joint ventures between smaller MNCs and these smaller domestic firms. Where "real" economies of scale are exaggerated and dwarfed by artificial economies of larger size (and market power) such combinations are likely to be very effective, especially in penetrating foreign markets.

IV Policy Options

Where then does this idealized evolutionary view of the potential for productive coexistence--plus a description of the very substantial real world deviations from it--lead us with respect to the future? While one is hesitant to make any predictions, it can be asserted with some confidence that the reality is becoming uglier and that LDCs and MNCs currently find themselves on something of a collision path as the result of the cumulative effects of too many "interventions" by all the parties. There seems to be a general tendency towards confrontation in the relations between the rich and the poor in areas which matter to the rich (as on critical raw materials) and towards not-so-benign neglect where they don't (as on foreign aid). Neo-colonial fears currently fuelling a new populism in many LDCs are, moreover,

1 Now also being attempted in Brazil.

interacting with a defensive economic nationalism in a developed world perplexed by its own current plethora of seemingly insoluble problems. The spiral seems to point downward and could well lead to autarky (and anarchy) in international economic relations.

On the other hand, we also perceive an opportunity in the midst of the current upheaval. With so many moorings loose and so many once comfortable assumptions under reexamination it is reasonable to believe that this is also a good time for a reexamination of the potential developmental role of the MNC. This is likely to be true whether or not our own notions concerning the anatomy of an ideal and dynamically changing relationship among the four main actors are accepted. Since we are necessarily somewhat partial to what has gone before, however, we shall, in this section, attempt to derive some conclusions for policy based on our own analysis of the issues.

First and foremost, we would argue for an unbundling of the MNC into its component parts and a much more explicit examination as to just what is being transferred and what is being paid for and at what rate at each stage of the development process.¹ Most misunderstandings arise because of the mystique of the powerful, footloose MNC, bargaining with the poor, option-less LDCG, the latter thus being pressured to buy what is essentially a "pig in a poke." The capital, technology, management and entrepreneurship components of any deal should be spelled out as fully as possible and each component priced out. Screening procedures which exist in virtually every LDC, especially during the import substitution sub-phase, should concentrate more on disaggregation and full disclosure, thus permitting comparative shopping and

1 See also Carlos F. Diaz-Alejandro, "North-South Relations: The Economic Component," Growth Center Discussion Paper No. 200, April 1974.

other than all-or-nothing acceptances or rejections. Fade-out and divestiture agreements can similarly be negotiated much more intelligently ab initio in the light of some historical perspective which might provide, for example, for a transition from the wholly owned subsidiary to the joint venture form after 10 years, and possibly further reassessments in the direction of licensing or management contracts thereafter.

We must, of course, contend with the argument that "it is unlikely that multi-national firms will ever be willing to repeat the Japanese experience elsewhere because, from their point of view, they helped create formidable competition to themselves for very meager returns."¹ Clearly, if offered more at every stage they will seek more. But if there is a clear and anticipated transition from one function (and one bundle) to another within a particular LDC, competitive pressures among the MNCs should assert themselves to dictate a willingness to accept reasonable rates of return. In this we would be safer in relying on the MNCs' long-run profit objectives rather than on some public spirited impulse.² Negotiations should recognize that it is mutually better to plan on living together under changing rules than to attempt to deny the declining value of some major MNC components over time and thus inviting expropriation or other retaliatory action. The burden of proof would have to be on the side of those, e.g., Vernon, who claim to see, as indeed may sometimes be the case, a general tendency for a broadening and deepening relative role for the MNC over time.

¹Larry Krause, "The International Economic System and the Multi-national Corporation," Annals of the American Academy of Political And Social Science, September 1972, p. 99.

²As Henry Ford II put it recently: "A corporation can serve society only if it is profitable. And it can stay profitable only if it is responsive to the [changing] needs....of the society in which it operates." (material in brackets and underlining added)

LDCG screening procedures governing MNC presence should thus be modified in the direction of greater automaticity, greater predictability and more built-in flexibility over time. Such procedures should reflect a recognition that some of the excesses of the MNC, ranging from transfer pricing to the payment of unduly high wages, to the inappropriateness of the technology selected, to the underutilization of patents and the overutilization of domestic credit and export prohibition clauses, are not unrelated to the policy environment created by the LDCGs for all industry. The MNC can be most effectively forced to put its energies into building better mousetraps, and using adaptive (labor intensive) technologies in doing so, if it is forced to give up the "quiet life" of the satisficing monopolist as the transition to a more liberal policy regime is effected. MNCs are quite capable of coming up with appropriate technology and output ideas when there are pressures to "scratch around" further, witness the above cited experience in the export processing zones and the labor intensive multi-purpose Ford and GM vehicles, using simple sheet metal, jigs and fixtures, currently being produced in South-East Asia.¹

Some of the windfall profits created through protection, subsidization, etc. are necessary to compensate entrepreneurs for undue risks during early import substitution. Even "old" MNC subsidiaries have learning and institutional problems to overcome. There are advantages, however, even then, in working for some harmonization among neighboring LDCs to avoid being played off one against the other, on the one hand, and granting concessions far in excess of what is required to effect the move, on the other. Moreover, where

¹As a Ford executive put it (William O. Bourke, "Basic Vehicle for South-East Asia," in Technology and Economics in International Development, AID Seminar, May, 1972, p. 75) "simplicity is often harder to achieve than sophistication"--but it can be achieved when the motive is there. The adaptive (labor intensive) case should be distinguished from the so-called complementation programs, i.e. to produce a conventional vehicle by siting different processes in different countries, which has been less successful.

the major "advantage" of the MNC is trademark recognition in a low technology area, with domestic producers threatened by displacement and domestic consumers by demonstration effects, screening procedures should restrict entry. Removal of the veil of secrecy and full disclosure requirements thereafter would constitute a giant step in the direction of avoiding unnecessary frictions. Much of the present problem is one of perception and mutual suspicion causing secular love/hate rather than arm's length relationships.

There is much that can and should also be done by the DCG's individually and collectively to facilitate the evolution of a natural and mutually beneficial sequence. Most important perhaps is a sustained effort to move away from the image of a knee-jerk DC reaction in favor of its MNC citizens abroad--right or wrong. Hickenlooper and Gonzales amendments are viewed as only slightly modernized versions of gunboat diplomacy, and are equally ineffective. The U.S. has made no major effort in recent years to get rid of these and other well encrusted barnacles on the vintage 1961 aid legislation. The extension of domestic anti-trust and Trading With the Enemy legislation and other forms of extra-territoriality to U.S. MNCs abroad represents, in general, an ineffective and highly offensive instrument. Similarly the administrative practice of public sector aid tying sets an unfortunate example for intra-MNC movements of capital, both adversely affecting the LDC's choice of technology.

Closely related is the issue of OPIC-type government investment guarantees. There would seem to be little reason to provide MNCs quasi-automatically with DCG-subsidized specific or extended risk guarantees on the basis of financial criteria only. Any MNC investment thus guaranteed by the DCG carries with it the implied blessing of the rich country; it is incumbent

on the DCG to reassure itself that no unfair trade practices, exclusive market demands, export prohibition clauses or other objectionable procedures are being contemplated before any guaranty is extended.

Finally, DCG's should be ready to support LDC efforts to move out of import substitution and into export-oriented growth phases. The most important contribution here is by not slamming the door (via higher tariffs, quotas and threatened quotas) in the face of the successful LDC's. More "aid" spent at home, i.e. in the DC's' domestic markets in the form of effective adjustment assistance, would be of great help for any sustained export oriented strategy by a substantial number of transitioning LDCs. Moreover, it is often substantially easier to overcome both vested interests and honest doubts concerning an impending import liberalization within the LDC, if temporary aid ballooning is possible to "protect" exchange reserves and public revenues during the transition. On the technical assistance side, donors should generally view with favor LDCG efforts to beef up their own legal and economic staffs in order to deal more effectively--and on a more equal footing--with their large and powerful MNC counterparts. International assistance with research on adaptive industrial technology (see the analogies to rice and wheat research), as well as in providing greater access to markets and information to all parties (large and small firms, domestic and MNC's) on an equitable basis, would also be of considerable help.

Internationally, the intended and actual application of the Paris Convention on Patents certainly needs to be reviewed if wholesale LDC defections are to be avoided. Whether a fair conduct code governing MNC-LDCG relations along the lines of the recent Kindleberger proposal will do much good at this

particular point in time is questionable;¹ but it is also clear that unless we move in such a direction as a longer term goal, Krause's analogy² between the MNC internationally and its domestic counterpart within an expanding United States common market will continue to limp rather badly.

The world thus still finds itself a long way from George Ball's cosmo-corp or Harry Johnson's uni-globe. In fact, there are some current danger signals that, at least in the short term, we may be moving in precisely the opposite direction, that of increasingly autarkic warring parties both as between the rich and the poor and as between Europe and the U.S. and even as between the least developed and the less developed countries.

Yet, we believe there is reason for hope. For one, the real interdependence of "spaceship earth," long a part of establishment rhetoric, is being recognized as never before in the wake of the oil crisis; and even though the lesson has been an expensive one, there is increasing realization of the need for an approach to symmetry in international economic relations if future breakdowns are to be avoided. In this context greater understanding of the differential contribution the MNC can make to development in different phases of the growth process can help, both in curbing the excessive appetite for quick profits and the excessive annoyance with red tape on the part of corporate managers, and the excessive fear, on the part of the LDCs, of corporate

¹See P. Goldberg and C. P. Kindleberger, "Toward a GATT for Investment: A Proposal for the Supervision of the International Corporation," in Law and Policies in International Business, Summer 1970, as well as the Code of Conduct referred to in the recent report by UN/ECOSOC on "The Impact of Multinational Corporations on the Development Process and on International Relations" (also known as the Report of the Group of Eminent Persons).

²Op. cit.

excesses or big power, neo-colonial machinations. The best basis for harnessing the additional resources and talents that are there, it seems to us, is full knowledge of what is and what is not in any particular MNC bundle and what is and what is not helpful--and at what price--at each stage of the development process. We are not at all sure that our attempt to unbundle, disaggregate and insert a time dimension has gotten to the heart of the matter--there are psychological and political dimensions which are clearly left to one side--;but we do believe that we have to search in this general direction if the global maximization principles of economic interdependence are to be reconcilable with differing distributional claims in an imperfectly competitive real world.