The eclectic paradigm: the next generation

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The article develops John H. Dunning's eclectic paradigm to allow for the globalization of production and markets for major products in the world economy. The focus moves from the decision of whether or not to invest abroad to that of maintaining the competitiveness of an individual transnational corporation. The new frame of reference requires a dynamic model and emphasizes the importance of managerial efficiency as well as possession of an integrated portfolio of international assets. The reference norm for the definition of an advantage is transferred from a domestic firm operating in a protected market to other transnational corporations competing in global oligopolistic markets with all of the strategic interaction which such oligopoly implies.

Transnational corporations (TNCs) are now the dominant form of business organization in many industries (including both goods and services), particularly in those in which possession by firms of proprietary product and process technology plays an important role (Behrman, 1993). Students of the TNC have found Dunning's eclectic (or OLI) paradigm (Dunning, 1977, 1988, 1993) to be the most valuable and comprehensive analytic framework. This paradigm derives, *inter alia*, from Stephen Hymer (1976) in which a foreign TNC considers a home-country firm as a potential competitor in the home-country market in which the foreign firm would suffer from the "disadvantage of being foreign". But the disadvantage of being foreign wanes with duration of being established in the host country and is largely eliminated by foreign direct investment (FDI) through acquisition.

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The Hymer postulate is still relevant for some young firms with ownership advantages that allow them to compete in niche markets, but for the well-established TNCs that now dominate international production in well-defined industries and product lines, it is no longer relevant.

Since the 1960s and the early 1970s when the Hymer postulate was a satisfactory operational assumption, FDI and international production have changed their character. The liberalization of international trade and investment regimes, the narrowing gap in consumer tastes with the increased potential for economies of scale, scope and specialization in differentiated products, the resurgence of the European and Japanese economies and their technology-reliant industries, the economic convergence of the industrialized countries to form a Triad, the very rapid development of new technologies of communication, transportation and management, a new acceptance of the value of inward FDI and international agreements that go a long way towards creating freedom of establishment and national treatment, have made important product markets global in scope. Transnational corporations have responded by integrating their production and marketing across affiliates located in many countries and now use affiliates as a means of seeking and obtaining resources that would otherwise be less easily accessed. The new conditions require the focus of analysis of the TNC to become the competitiveness (or success) of individual firms in worldwide competition.[1] These changes have created a fifth stage for the "industrial development path" (Narula, 1995) in which FDI flows respond freely within the Triad to the changes in the relative strengths of the corporations' ownership advantages as well as to the FDI-sensitive climate which governments' macro-organizational strategies generate (Dunning, 1992). Globalization has virtually eliminated the safe haven of a sheltered home-country market as a source of the minimum sales and profits needed to ensure survival by a home-country firm in both industrialized and the more affluent developing countries (UNCTAD-DTCI, 1995).[2]

[1] Dunning and Narula (1996, chapter 1, p. 11) recognized this: ". . . as the motivation of FDI has evolved away from being primarily geared to the exploitation of existing O advantages to the acquisition of new O advantages . . .". Those familiar with Lewis Carroll's *Through the Looking Glass* may find it useful to think of (dynamic) competitiveness in terms of the Red Queen's remark that . . . it takes all the running you can do, to keep in the same place".

[2] A sheltered home market, to the degree that it may still exist, becomes essentially a location advantage available to a subset of TNCs or potential TNCs. The degree to which the Japanese economy still provides (or did so until recently) a safe haven for some of its firms is an interesting empirical question; see Dunning and Lundan (1995).

The arena of competition in many industries are oligopolistic globalized markets in which firm behaviour and strategy are largely determined by the observed actions of immediate rivals and the assessment of rivals' strategic reactions to initiatives by individual TNCs.[3] The Hymer postulate is no longer the correct basis for an analysis of the competitiveness and viability of an (established) TNC. The sources of competitive advantage of an individual TNC are its portfolios of locational and created and natural assets and the managerial efficiency with which they are exploited relative to the attributes of rival TNCs competing in the same global market and/or product line (UNCTAD-DTCI, 1995). Locational advantages deriving from presence in the home country (including macroorganizational strategies of the home-country government) are now merely one feature of the portfolio of locational assets and are remarkable essentially because of their probable preponderant share of that portfolio.[4]

Dunning's eclectic paradigm has evolved to recognize this change in conditions (Dunning, 1993, p. 81) by identifying two kinds of ownership advantages, $\underline{O}_a$ and $\underline{O}_t$. Here $\underline{O}_a$ is the original version of firm-specific ownership advantages such as patents and advantages deriving from size together with those advantages that derive from the non-codifiable nature of technology and the learning that derives from those technological developments, and $\underline{O}_t$ identifies benefits deriving from economies of common governance, including those that arise from multinationality.[5] This article develops the paradigm along different lines. In particular, it stresses the dynamics of maintaining competitiveness, the role of a firm's portfolio of locational assets and their integration and puts greater emphasis on managerial efficiency (in the process transferring Dunning's $\underline{O}_t$ out of ownership advantages into a ''managerial-efficiency'' dimension).[6]

[3] Edward Graham (1978) was the first to identify this evolution of TNC behaviour.

[4] Where the home country handicaps a TNC relative to those rivals that enjoy more supportive (less burdensome) home-country regimes, TNCs will minimize the share of their assets in the home country and may even move their headquarters to a different country. IKEA has moved its headquarters from Sweden to the Netherlands.

[5] The reference norm for both kinds of ownership advantages must be the large TNCs that compete in global markets. One of the virtues of Dunning's paradigm is its capacity to evolve and mature with changes in international economic conditions.

[6] Casson (1987, pp. 32-33) anticipated this change. He argued that Dunning's $\underline{O}_t$ is really an internalization benefit and that ownership advantages are not necessary for FDI. In so doing, he effectively rebutted the validity of the Hymer postulate. For a discussion of this contention, see below.

Define competitiveness as having a satisfactory market share that can be maintained through time.[7] There are many attributes that contribute to a firm's competitiveness, but these can usefully be reduced to adaptations of the three dimensions of Dunning's paradigm: ownership advantages, locational advantages and internalization economies. To be viable, a TNC must be at least the equal of its competitors as regards the sum of the three dimensions: a net disadvantage in one dimension can be offset by a net advantage in another dimension but, probably, diminishing marginal rates of substitution apply here[8] If a TNC has an advantage in all dimensions, then it will, as long as the advantages can be maintained in the face of the necessary growth, put its rivals out of business and become a monopoly[9]

This article examines the implications for the accepted paradigm of the TNC of the charges in conditions and in the reference group and the consequent interactive nature of firm strategy, i.e., the implications of the substitution of firm competitiveness in globalized markets for the decision to exploit ownership assets abroad in one of several modalities as the focus of the paradigm. The analysis is conducted first in a static framework and then in a dynamic framework without external shocks including both random shocks and changes in the commercial environment (Gray, 1995). The article closes with a brief reference to the policy implications of the dynamic paradigm.

Static analysis

Static competitiveness requires that the return on capital be adequate given the market share. The role of ownership advantages (Dunning's $\underline{O}_a$) is

[7] "Satisfactory" here implies earning an adequate rate of return on invested capital. In symbols, the criterion for maintaining dynamic competitiveness can be presented for firm $\underline{i}$ as:

$$d/dt[(\underline{X}_i/\underline{W}_i) \geq 0$$

where $\underline{X}_i$ represents total revenues of firm $\underline{i}$ including any royalty income from the licensing of patents and $\underline{W}_i$ represents the revenues from all of the world's firms in the same industry or product line. The subscripts $\underline{C}$ and $\underline{W}$ denote country and world respectively. I am obliged to Clifford Wymbs for refining this definition for me.

This definition derives from a criterion for the competitiveness of a national industry given in Gray (1994). It is possible to conceive of a criterion for static competitiveness by merely insuring that the ratio of $\underline{X}_i/\underline{W}_i$ is compatible with an adequate rate of return on invested capital.

[8] An imbalance of this kind might have important consequences if some external disturbance or tranquil evolution increased the relative importance of one set of advantages.

[9] The process may involve the merger and acquisition of rivals or their retreat into minute niches in which they have comparatively strong O-advantages. The monopolist is always subject to the threat of entry either from a TNC based in another industry/market or from a newcomer.

little changed by the new frame of reference. These advantages consist of the portfolio of firm-specific assets, including created and operating assets, relative to those of the cohort of rivals. The mere existence of a portfolio of proprietary knowledge does not ensure parity in this dimension: what matters is the existence or non-existence of a net advantage in the asset portfolio *vis-à-vis* the cohort of rivals. The net advantage in proprietary assets could, in principle, be measured by the profit rate that a TNC would achieve if all of its rivals were at parity in terms of (the equivalents of) internalization and location advantages.

Internalization advantages involve the most significant departure from the eclectic paradigm and become a subset of "managerial efficiency advantages". Internalization still retains the original sense in which it was used by Dunning (1977) as affecting the choice of modality for the exploitation of ownership and actual locational assets, but must now include the advantages of common governance (O_t in Dunning, 1993, p. 81).[10] Transnational corporations now derive a competitive (dis)advantage from their relative skill in exploiting the potential economies of common governance given their portfolios of locational and ownership/proprietary assets. Economies of common governance include activities that derive from the linkages among assets located in different countries such as intra-firm trade (Hipple, 1995), economies that derive from the planning of production on a global basis, the transmission of managerial practices within the organization and the acquisition of command over scarce resources and of technological knowledge. The efficiency of exploitation of potential internalization advantages now constitutes a major component of managerial efficiency.[11] Define (static) managerial inefficiency as the shortfall between the potential of a TNC's existing assets when exploited with optimum efficiency and the actual level of efficiency of exploitation. This definition puts great emphasis on the quality of a firm's Schumpeterian entrepreneur(s) as well as on the quality of its professional managers.[12] It also puts heavy emphasis on the ability of a TNC to

[10] This article regards this skill as an internalization advantage rather than an ownership advantage; the reasoning underlying this identification is made clearer in the following section on the "dynamic" aspects of competitiveness.

[11] Managerial efficiency is clearly derivative from Leibenstein (1978).

[12] Transnational corporations usually engage in the production and distribution of goods and services that can be called "Schumpeterian"; such firms are characterized by Yair Aharoni (1993, pp. 25-28) as being in a constant state of flux as changes within the industry (especially the distribution of proprietary technological assets among the competitors) affecting their ability to compete and, therefore, their viability.

Dunning could be interpreted as regarding the quality of a TNC's entrepreneurs and its professional managers as being an ownership advantage. Given the current inter-firm mobility of managers, this is an operational variable rather than an asset; only if an executive is tied to a firm by a large ownership stake or by contract, could he/she be considered a firm asset.

transmit information internally so that all knowledge is fully utilized and not secreted away in a corner of the organization.[13]

If all TNCs have the same managerial efficiency, parity exists and managerial efficiency has no effect on static competitiveness. This is improbable. It is reasonable to adapt Michael Porter's (1990, pp. 166-175) idea that an adverse shock would lead to a compensating increase in managerial efficiency: a firm that has a net disadvantage in its portfolios of ownership and locational assets can maintain its competitiveness through a survival-driven response which enhances managerial efficiency (in all its dimensions). This idea provides for some resilience on the part of a firm to the intensity of pressure from its rivals, but the severity of the adverse shock or the magnitude of the disadvantage inherent in the two portfolios is vital and, Porter notwithstanding, an advantage in managerial efficiency cannot be relied upon to overcome major and long-lasting disadvantages: relative managerial efficiency can only increase by a certain amount per unit time and this gain must diminish with time.

Locational advantages must, in static analysis, be defined in terms of the existing portfolio of assets relative to those of the cohort of rivals. These advantages include any net advantages that derive from a home government's support of its TNCs in the form of outright subsidies or control through regulatory oversight or, more probably, negative or low net tax burdens (Gray, 1991), or from the home culture. A net locational advantage derives, probably more importantly in static analysis, from the scope which the existing portfolio of assets offers for economies achieved through vertical and horizontal integration of production and marketing and through the advantages which derive from available economies of scope, scale and specialization.[14]

In a static analysis, the three dimensions of the eclectic paradigm emerge only slightly modified. Competitiveness belongs to the established firms with high degrees of managerial efficiency (efficient in the exploitation of their internalization advantages) and strong portfolios of ownership and locational assets. New TNCs come into being by developing very strong ownership advantages in a narrow market segment: to achieve established status in an industry or sector, they must build upon the O-advantages that

[13] Culture of the home country may, prior to full geocentrism, play a significant role here.

[14] Economies that derive from length of production runs and learning.

allowed them to establish themselves in their niche market in the first place, and they must be able to generate the managerial efficiency in a broader range of products and activities. Membership in a group or trading company will clearly facilitate development. It is noteworthy that many middle-income countries have surprisingly large gross outward FDI positions (UNCTAD-DTCI, 1994). By developing the breadth of operations in foreign countries they may reap the benefits that accrue to internationally-diversified TNCs. These comprise the potential internalization advantages to be derived from a portfolio of international assets. The prototypical Japanese TNC grew by enjoying a strong advantage in managerial (and production) efficiency and a supportive macroorganizational strategy (Dunning, 1992) to enable it to overcome a relative weakness in O-advantages and a small market that limited potential economies of scale, scope and specialization.[15] In contrast, the outpouring of United States TNCs in the 1960s and 1970s was due to a substantial advantage in proprietary technology and recognition by those TNCs that FDI was prerequisite to maintaining market share in growing markets.[16] Possession of the financial resources to exploit those advantages was also made possible by the absence of exchange controls over FDI.

When Mark C. Casson (1987, pp. 32-33) argued that ownership advantages are strictly not necessary for FDI, he was logically correct: it is the overall advantage relative to the perceived competitor that is necessary for FDI to take place; ownership advantages are sufficient but not necessary. However, the importance of ownership advantages in practice should not be underestimated. The foreign-direct-investment decision is a forward-looking decision taken under conditions of appreciable uncertainty. To commit to FDI can require a margin over any perceived long-run benefits of comparative-static overall advantage; it is necessary to begin to earn an operating profit relatively quickly. Ownership-advantages are probably important not only in their contribution to making the net present value of the investment positive but also, by their greater immediacy and their easier identification, in contributing to the confidence of the Schumpeterian execu-

[15] Terutomo Ozawa (1995) gave an excellent assessment of Japanese strategy during those years. Peter H. Gray (1996) argued that the United States involvement in the Vietnam war provided an important release of the balance-of-payments constraints for Japan as well as providing affluence in East Asian economies which allowed Japanese firms to exploit economies of scale and specialization. The war also imposed a burden on the United States economy and its TNCs.

[16] This assertion receives a deal of evidential support in Dunning (1994).

tives of the investing firm.[17] Finally and as noted above, relative ownership advantages affect a firm's rate of profit and the internally-generated free cash flow. Foreign direct investment cannot be completely financed by debt and a free-cash flow over and above that needed for mandated investment (Milberg and Gray, 1992) is necessary if FDI is to be undertaken.

Dynamic analysis

The globalization of markets makes static analysis a less satisfactory basis for analysis of FDI and its consequences for firm competitiveness; an analysis of competition among Schumpeterian firms requires a dynamic analysis of firm achievements and interaction. When the analytic framework is allowed to confront changes through time (in the absence of external disturbances), the roles of the equivalents of the OLI dimensions change and the dimensions become less easily distinguished.

Ownership advantages increase or decrease according to the relative ability of a TNC to acquire and create assets and to improve the efficiency of its asset-creating operations. Given the possibility of differences in the encouragement to asset creation given both by government in the form of financial and technological infrastructural support and by home-country culture in terms of the ability of home-country nationals to respond to efforts to upgrade their quality, ownership-advantages have a definite locational aspect. The portfolio of ownership assets may be enhanced by affiliates located in foreign countries—particularly those that are resource-seeking and exist to acquire needed primary products or to keep the firm's headquarters cognizant of technological developments in the host country.[18] Any locational advantage is likely to diminish as the geographical distribution of assets of all TNCs converges through time and as national policies towards one's own TNCs tend to be harmonized.[19]

[17] As will become evident in the following section, dynamic analysis and competition among established TNCs is likely to reduce the relative importance of the portfolio of ownership advantages.

In support of Casson's argument that locational and internalization advantages can be sufficient, one should note that many of the earliest TNCs were engaged in the exploitation of natural resources.

[18] This point is also anticipated by Peter Buckley and Mark Casson (1987, pp. 21-22).

[19] The greater the degree of integration or openness of markets, the greater is the need for harmonization of the major factors affecting economic performance (e.g., the European Union's ratification of "one-market" legislation in 1992). Less important elements can be resolved by mutual recognition (e.g., environmental regulations); this procedure is less costly in terms of nationhood renounced and of negotiations and adjustment.

Dynamic analysis requires that the focus of locational advantages be the portfolio of locational assets because the locational advantages are interdependent. In the original version of the eclectic theory (Dunning, 1977), locational advantages were weighed in terms of alternative means of serving an individual market. In a world of globalized production and markets, it is the benefits that can be derived from a group of locational assets (given the stock of ownership assets) that contribute to firm competitiveness. Some investment decisions, such as the establishment of a marketing-and-distribution subsidiary in a country, may still be regarded as an independent decision, but most investments will involve explicit consideration of the potential interaction of the firm's assets.

In a static analysis, profits entered the picture only as a condition for competitiveness—that the return on equity should be "adequate". In a dynamic context, profits become very important. For a firm to remain competitive in a dynamic setting, it is important that the firm be able to create assets (new proprietary technology and the upgrading of factors) at a rate equal to that of its rivals; these operations require funding. Profits and depreciation together must generate a free cash flow sufficient to meet the demands placed upon the TNC. Such expenditures were described as "mandated investment", including four categories of activity that are crucial (Milberg and Gray, 1992): expenditures on research and development and other forms of asset creation; expenditures on plant and equipment to expand production to maintain market share in the global industry; expenditures on equipment to maintain the technological up-to-dateness of a TNC's production units; and maintaining the relative efficiency and breadth of a TNC's marketing-and-distribution capabilities (particularly in foreign markets).

Free cash flow is affected by the structure of taxes as well as by the rates of taxation levied on TNCs by home and host countries. Taxes paid must be measured net of the value of any benefits that are provided by governments as public goods (Gray, 1991). Free cash flow is also sensitive to the rate of dividend payout required by the home country's financial institutions (Gray, 1994). The potential sensitivity of free cash flow to the geographic distribution of assets is self-evident. However, the adequacy of any given free cash flow depends upon the degree to which rivals use increased investment in mandated activities as a strategic weapon. The ability of a leading oligopolist to raise the rate of expenditure on mandated investments (thereby enhancing its portfolio of proprietary technology and other created assets) can strain competitors with less favourable cash flows and cause

them to lose market share.[20] As market share decreases, profits and free cash flow wane and the situation can turn into a vicious circle ending with the elimination of the inadequately financed firms. Such a market can be described as "explosive", and an explosive market puts a premium on the ability of competing firms to withstand adverse conditions, i.e., it is important to maintain their profit flow and to have access to financial reserves.[21]

Once the importance of internally generated free cash flow is recognized, the importance of full exploitation of the two portfolios becomes self-evident. It is in a dynamic context that the broader concept of managerial efficiency must replace the eclectic paradigm's internalization advantages. Managerial efficiency includes not only the choice of modalities used to maximize the returns on ownership assets (pure internalization) but also the ability to integrate the stock of locational and ownership assets to the best advantage of the firm (to maximize the economies of common governance). Managerial efficiency must also incorporate straightforward X-efficiency in the utilization of resources within individual countries.

The role of the entrepreneur in managerial efficiency becomes more important in dynamic analysis. The competitiveness of a firm responds directly to the creative aspects of decisions affecting the design and development of new products and to the mix of investment within the three categories of created assets, new equipment and skills, and marketing and distribution capabilities (Chandler, 1992). This is the essence of managerial efficiency to which gains or losses of market share will be sensitive. In a potentially explosive industry, these decisions may make or break even an established corporation. The portfolio of locational assets will aid a TNC's competitiveness directly by defining the potential locational benefits, but it is the degree of managerial efficiency that determines the actual benefits derived. Here, as in other components of competitiveness-determination, it is the relative success of the entrepreneur and the ability both to generate

[20] Subject, of course, to its ability to raise the necessary funds from other divisions of the TNC or from its financial institutions in its home and host countries.

[21] An explosive market can be fatal to younger firms in the process of establishing parity by expanding the range of their geographic presence and of their products. Because established oligopolists will be expected to have substantial financial reserves, the weapon of expanded expenditures on mandated activities will be slower acting among the major players and will take effect only if the cash-flow aspect is reinforced by continued differences in managerial efficiency.

"Economic culture" can be important in this dimension. Close bank/industry relations or cross-ownership such as achieved in a trading company system can affect the ability of young TNCs to compete on a global basis and can influence the degree to which new TNCs can enter globalized markets.

dynamic managerial efficiency and to improve the quality of the portfolio of ownership and locational advantages over time that will determine firm viability (given the equivalent accomplishments of its cohort of rivals).

Policy implications

The dynamic paradigm of TNC competitiveness emphasizes the need for TNC executives to exploit fully their portfolios of locational assets *and* to ensure that the mix of assets in this portfolio is optimal. It is more usual to think of portfolio management in terms of financial assets that can be redistributed with relatively small transaction costs. But portfolios of real assets can also be redistributed—although the transaction costs of sale and acquisition will be larger and will vary within firms and across industries according to the importance of own equity and physical capital involved in each asset.[22] If the major part of the redistribution of asset portfolios were to be accomplished through unequal net additions, the policy implications would be much less severe.

The possibility of countries setting national economic policies in terms of the attraction of inward FDI by investment incentives (Gray and Walter, 1983) and of guarding against the possibility of an outflow of FDI because of a less favourable commercial environment than exists in other countries have already been addressed (Dunning, 1992; Dunning, 1993*b*). A dynamic paradigm suggests that the need for executives, and therefore their willingness to redistribute their locational assets, has been heightened by globalism. National governments must, therefore, formulate their macroorganizational strategies with greater sensitivity towards the effect of change on the behaviour of TNCs (both domestic and foreign-based). Nor can this policy stance be viewed solely as affecting changes in the national commercial environment: what matters is the relative attractiveness of one commercial environment relative to another so that governments must be aware of changes of conditions in competitor countries and must be prepared to introduce a matching change.

The potential for excessive competition by governments for the presence of inward FDI by foreign-based TNCs and of retention of operations by home-based TNCs is self-evident. There is a danger that countries will

[22] Thus, marketing-and-distribution assets are unlikely to be affected by the dynamic paradigm as much as production and research-and-development affiliates.

engage in macroorganizational strategies to match the low-bidder. The countries most willing to subsidize inward FDI are likely to turn the terms of trade substantially in favour of TNCs and against other actors in the global economy.[23] This possibility suggests that some set of rules or coordination among governments may be desirable (though it is difficult both to see how these rules could be enforced in a cost effective manner and difficult to anticipate how governments would arrive at a general formula which all could agree to in the face of domestic political pressures). Possibly, any such arrangement would have to be conducted at the industry level so that industries that might be identified as having unfavourable economic or social side-effects (such as contributing to instability) would be singled out for study. The international financial services industries are an obvious example, and international banks have already been the focus of the Basel Committee of the Group-10 countries (plus Luxembourg and Switzerland) (Gray and Gray, 1994). Manufacturing industries are likely to engender serious social costs only if they precipitate serious costs of adjustment in industrialized or newly industrializing countries and/or indulge in short-run investments in developing countries that leave the host countries worse off in the long run (resource-seeking agricultural TNCs are frequently cited as an example).

The obverse of the potential problems of globalization is that the international mobility of physical capital and equity motivate enhanced attractiveness of a national economic environment that favours greater output. Such an environment will emphasize the efficiency of government, the importance of protecting intellectual capital, the provision of good infrastructure and a well educated labour force—all of which are inherently desirable.

Concluding remarks

The analysis of the modern behaviour of TNCs must emphasize the dynamic implications of global, oligopolistic rivalry in which firms focus on

[23] For the view that TNCs flourish best in a *laisser-faire* global economy and that what is good for TNCs is good for the world economy, see Julius (1994). Such a view is valid only if the criterion for success is increased allocative efficiency and if the increased efficiency of TNCs' portfolios of locational assets are not subsidized at the expense of other productive activities which lend themselves less well to international production. Julius's criterion disregards considerations of excessive adjustment costs, financial and other instability and changes in the terms of trade between TNCs and other sectors of the global economy (particularly developing countries—Gray and Walter (1983)).

relative rates of acquisition of created assets (the acquisition of new O advantages), the efficiency of their geographic distribution and the development of the managerial efficiency with which these portfolios are both enhanced and exploited. The main developments have been to merge Dunning's $\underline{O}_t$ source of competitive advantage with internalization advantages into a dimension of managerial efficiency; to recognize the importance of a portfolio of interactive locational assets; and to emphasize the importance of internally-generated free cash flow in dynamic competition. This variation on the eclectic paradigm does allow better the importance of managerial efficiency to be identified in an interactive, dynamic world. The central contribution that Dunning's paradigm has given to analysis of TNCs is thereby enhanced.

It is useful to examine how the "next generation" of the eclectic paradigm addresses the original question of "whether or not to invest abroad?". Recognition of the role of a portfolio of locational assets means that a change in that portfolio will take place if the portfolio becomes sub-optimal because of changes in the asset and locational portfolios of rivals or because of new insights by or new assets at the disposal of a TNC. Foreign direct investment (or some other modality for exploiting an asset advantage in a foreign economy) will take place if it will create a new portfolio of locational assets that is perceived to be better than the old one. The criterion is now not unidimensional (which, if any, FDI will be viable in isolation and provide the highest return?) but multidimensional (which package of FDI will most enhance the value of the firm's portfolio of locational assets?). In this decision, the potential economies of common governance (internalization) will be of major importance. The original eclectic paradigm is still relevant even though its three dimensions are necessarily much more interdependent in the modern context. ■

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