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The eclectic paradigm as an envelope for economic and business theories of MNE activity

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Abstract

This paper updates some of the author's thinking on the eclectic paradigm of international production, and relates it to a number of mainstream, but context-specific economic and business theories. It suggests that by dynamizing the paradigm, and widening it to embrace asset-augmenting foreign direct investment and MNE, activity it may still claim to be the dominant paradigm explaining the extent and pattern of the foreign value added activities of firms in a globalizing, knowledge intensive and alliance based market economy. © 2000 Elsevier Science Ltd. All rights reserved.

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1. Introduction: the contents of the eclectic paradigm

For more than two decades, the eclectic (or OLI[1]) paradigm has remained the dominant analytical framework for accommodating a variety of operationally testable economic theories of the determinants of foreign direct investment (fdi) and the foreign activities of multinational enterprises (MNEs).[2]

The eclectic paradigm is a simple, yet profound, construct. It avers that the extent, geography and industrial composition of foreign production undertaken by MNEs is determined by the interaction of three sets of interdependent variables — which, themselves, comprise the components of three sub-paradigms. The first is the com-

[1] Ownership, Location and Internalization.

[2] As described, for example, in Caves (1982, 1996) and Dunning (1993). For the purposes of this article we use fdi and international production, viz. production financed by fdi, as interchangeable terms.

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petitive advantages of the enterprises seeking to engage in fdi (or increase their existing fdi), which are specific to the ownership of the investing enterprises, i.e. their ownership (O) specific advantages. This sub-paradigm asserts that, ceteris paribus, the greater the competitive advantages of the investing firms, *relative to those of other firms* — and particularly those domiciled in the country in which they are seeking to make their investments — the more they are likely to be able to engage in, or increase, their foreign production.

The second is the locational attractions (L) of alternative countries or regions, for undertaking the value adding activities of MNEs. This sub-paradigm avers that the more the immobile, natural or created endowments, which firms need to use jointly with their own competitive advantages, favor a presence in a foreign, rather than a domestic, location, the more firms will choose to augment or exploit their O specific advantages by engaging in fdi.

The third sub-paradigm of the OLI tripod offers a framework for evaluating alternative ways in which firms may organize the creation and exploitation of their core competencies, given the locational attractions of different countries or regions. Such modalities range from buying and selling goods and services in the open market, through a variety of inter-firm non-equity agreements, to the integration of intermediate product markets, and an outright purchase of a foreign corporation. The eclectic paradigm, like its near relative, internalization theory,[3] avows that the greater the net benefits of internalizing cross-border intermediate product markets, the more likely a firm will prefer to engage in foreign production itself, rather than license the right to do so, e.g. by a technical service or franchise agreement, to a foreign firm.

The eclectic paradigm further asserts that the precise configuration of the OLI parameters facing any particular firm, and the response of the firm to that configuration, is strongly contextual. In particular, it will reflect the economic and political features of the country or region of the investing firms, and of the country or region in which they are seeking to invest; the industry and the nature of the value added activity in which the firms are engaged; the characteristics of the individual investing firms, including their objectives and strategies in pursuing these objectives; and the raison d'être for the fdi.

Regarding this last contextual variable, scholars have identified four main types of foreign based MNE activity[4]:

1. That designed to satisfy a particular foreign market, or set of foreign markets, viz. *market seeking*, or demand oriented, fdi.
2. That designed to gain access to natural resources, e.g. minerals, agricultural products, unskilled labor, viz. *resource seeking*, or supply oriented fdi.
3. That designed to promote a more efficient division of labor or specialization of an existing portfolio of foreign and domestic assets by MNEs, i.e. *rationalized*

[3] As, for example, set out in Buckley and Casson (1976, 1985, 1998), Hennart (1982, 1989) and Rugman (1982, 1996).

[4] For an elaboration of these and other kinds of fdi (e.g. escape, support, and passive investments), see Dunning (1993) chapter 3, p. 61–3.

or efficiency seeking fdi. This type of fdi, though related to the first or second kind, is usually sequential to it.

4. That designed to protect or augment the existing O specific advantages of the investing firms and/or to reduce those of their competitors, i.e. *strategic asset seeking* fdi.

Combining our knowledge of the individual parameters of the OLI paradigm with that of the economic and other characteristics of home and host countries, and of the investing, or potentially investing, firms, it is possible to derive a wide range of fairly specific and operationally testable *theories*. Thus, it may be hypothesized that some sectors, e.g. the oil and pharmaceutical sectors, are likely to generate more fdi than others, e.g. the iron and steel or aircraft sectors, because the characteristics of the former generate more unique O advantages, and/or because their locational needs favor production outside their home countries, and/or because the net benefits of internalizing cross-border intermediate product markets are greater.

Similarly, it is possible to predict that the significance of outward fdi will be greater for some countries, e.g. Switzerland and the Netherlands, than for others, e.g. Russia and India, simply by knowing about their economic histories, the core competencies of their indigenous firms, the size of their home markets, their experience in foreign markets, and the locational attractions of their immobile resources and capabilities, relative to those of other countries. Finally, some firms, even of the same nationality and from the same industry, are more likely to engage in fdi than others. Sometimes, this might reflect their size — on the whole, large firms tend to be more multinational than small firms; sometimes their attitude to risk — particularly those associated with foreign ventures and of foreign partnerships with foreign firms; and sometimes their innovating product, marketing, locational, or fdi strategies.

The extent and pattern of foreign owned production will depend on the challenges and opportunities offered by different kinds of value added activity. Thus the growth of existing, and the emergence of new, markets e.g. in China, over recent years, has led to a considerable expansion of various kinds of market seeking fdi — particularly in fast growing industries, e.g. telecommunications. By contrast, the rate of expansion of several natural resource sectors has been less impressive, as many products have become less resource intensive, due, for example, to the innovation of new alloys, improved recycling techniques, the miniaturization of components, and the replacement of natural by synthetic materials. The reduction of both transport costs and artificial barriers to most forms of trade has led to more efficiency seeking fdi — both among developed countries and between developed and developing countries.[5] While, as some kinds of technology have become more standardized and/or more codifiable, licensing agreements and management contracts have replaced fdi, e.g. in the hotel and fast foods sectors, in the more knowledge and trade intensive indus-

[5] The former mainly in the form of the growth of horizontal, i.e. product specialization, and the latter in the growth of vertical, i.e. process specialization.

tries, e.g. pharmaceuticals, industrial electronics and management consultancy, the economies of global integration have made for a dramatic increase in merger and acquisition (M and A) activity (UN, 1998).[6] Moreover, the advent of electronic commerce is not only heralding the end of the geography of some financial and information markets, but is revolutionizing the organization of intra-firm production and trade.[7]

The content and predictions of the eclectic paradigm are firmly embedded in a number of different economic and business theories. Although *taken separately*, none of these offer a comprehensive explanation of the growth and decline of MNE business activity,[8] *taken together* — i.e. as a group — they do so. Most of the theories, too, are complementary, rather than substitutable, to each other. Some tend to focus on particular kinds of fdi, but not others. Others are designed to explain different aspects of international production, e.g. its ownership, structure, its locational profile or its organizational form Thus, location theory forms the basis of the 'where' of MNE activity; industrial organization and resource based theories of the firm offer some reasons 'why' foreign owned affiliates may have a competitive edge over their indigenous competitors; while the concept of the firm as a 'nexus of treaties' (Williamson, 1990) is critical to an understanding of the existence of MNEs, and of why firms prefer to engage in fdi rather than sell their O specific assets, or the rights to use them, to independent foreign producers.

Much of this paper will, in fact, seek to demonstrate how, and in what ways, these approaches are complementary to each other; and of how the eclectic paradigm offers both an envelope of these theories, and a common analytical framework within which each can be accommodated and fully enriched in their application.[9]

Finally, the relevance of the individual components of the eclectic paradigm, and the system of which they are part, will depend on whether one is seeking to explain

[6] Such activity is estimated to have accounted for between 55% and 60% of all new fdi flows over the period 1985 to 1997 (UN, 1998).

[7] As witnessed, by the growth of intra-firm trade both of intermediate and of final products, documented, for example, by UN (1996b).

[8] The explanation of foreign direct *div*estment by MNEs is exactly the reverse of that of foreign direct investment. It may be brought about by a decline in their O specific advantages and/or the L advantages of foreign countries, and/or a reduced motive by firms to internalize the cross-border market for buying or selling intermediate products (Boddewyn, 1985; Dunning, 1988).

[9] Throughout our analysis, we shall proceed on the assumption that paradigmatic and model building theoretic structures to understanding international business activity are complementary rather than alternative scientific methodologies (Buckley & Casson, 1998b). While accepting the need for rigorous theorizing and the empirical treating of specific hypotheses, we also believe that encompassing related hypotheses into an open-ended and comprehensive conceptual framework, which not only identifies and evaluates the interaction between the theories, but makes its own generic predictions, provides a useful, and in many cases, an essential, foundation to these theories. We, therefore, view the eclectic paradigm as a systemic framework which provides a set of general assumptions and boundary criteria in which operationally testable theories, germane to fdi and MNE theory, can be comfortably accommodated. It is, perhaps, the most expressive of the research tradition in international business which has evolved over the past two decades (Weisfelder, 1998). For an elaboration of the concept of a research tradition, see Laudan (1977).

the static or dynamic determinants of MNE activity. For example, one of the earliest theories of fdi, viz the product cycle theory, put forward by Raymond Vernon (1966), was concerned not only with explaining the *process* by which firms deepened and widened their markets,[10] but also how their locational needs might change as they moved from the innovatory to the standardized stage of production. By contrast, much of extant location theory and internalization theory seeks to identify and explain the optimum spatial and organizational dimensions of the existing resources and capabilities of firms and nations. Knickerbocker's 'follow my leader,' and Graham's 'tit for tat' thesis (Knickerbocker, 1973; Graham, 1975) also contain a longitudinal dimension, which, for the most part, is absent in most variants of industrial organization theory, for example as originally propounded by Hymer (1960) and Caves (1971). Initially, too, the eclectic paradigm primarily addressed static and efficiency related issues (Dunning, 1977), but more recently has given attention to the dynamic competitiveness and locational strategy of firms, and particularly the path dependency of the upgrading of their core competencies (Dunning 1995, 1998).

The kernel of this paper is directed to examining the changes in the boundaries, constraints and structure of the eclectic paradigm over the past twenty years;[11] and those now being demanded of it by contemporary world events and scholarly thinking. In doing so, it will pay especial attention to the emergence of alliance capitalism[12] and the growth of asset augmenting fdi (Wesson 1993, 1997; Makino, 1998; Kuemmerle, 1999). In particular, it will set its analysis in the context of four significant happenings of the 1980s and 1990s, viz.:

1. the maturation of the knowledge-based economy,[13]
2. the deepening integration of international economic and financial activity, including that fostered by electronic networks (Kobrin, 1999),
3. the liberalization of cross-border markets, and the flotation of the world's major currencies, and
4. the emergence of several new countries as important new players on the global economic stage.

The next three sections will examine how the main intellectual thrust in explaining each of the OLI triumvirate of variables has evolved over this time. In particular, it will argue that, as the dynamic composition of these variables has assumed more significance, so the value of the eclectic paradigm has increased relative to the sum

[10] See also the writings of the Scandinavian school on the internationalization process (e.g. Johanson & Vahlne, 1977; Luostarinen, 1979; Welch & Luostarinen, 1988).

[11] For a longer term perspective, and particularly for an appreciation of the evolution of the O advantages of firms, and their changing locational patterns and organizational modalities, see two classic studies by Mira Wilkins (Wilkins 1970, 1974).

[12] A generic term which suggests that the wealth of firms and countries is increasingly dependent on the kind and quality of alliances they form with other firms and countries. This concept is explored in more detail in Dunning (1995).

[13] Which elsewhere (Dunning, 1997), we suggest represents a new stage in the development of market based capitalism, the previous two stages being land based and machine based capitalism.

of its parts, with the contribution of each becoming increasingly interdependent of each other. Finally, the paper will give especial attention to the contribution of strategic cum managerial approaches to understanding the growth and composition of MNE activity, while averring that the relevance and richness of these is enhanced if set within the overarching construct of the eclectic paradigm.

2. The ownership sub-paradigm

In explaining the growth of international production, several strands of economic and business theory assert that this is dependent on the investing firms possessing some kind of unique and sustainable competitive advantage (or set of advantages), relative to that (or those) possessed by their foreign competitors. Indeed, some would argue that in traditional neoclassical theory, in which the firm is a 'black box', no fdi is possible — as all firms have equal access to the same resources and capabilities *within* their own countries, while there is complete immobility of resources and capabilities *between* countries.

When the eclectic paradigm was first put forward (in 1977),[14] it was assumed that such competitive or O specific advantages largely reflected the resources and capabilities of the home countries of the investing firms; and that fdi would only occur when the benefits of exploiting, i.e. adding value to, these advantages from a foreign location outweighed the opportunity costs of so doing.

Since the 1960s, the extant literature has come to identify three main kinds of firm or O specific competitive advantages.

1. Those relating to the possession and exploitation of monopoly power, as initially identified by Bain (1956) and Hymer (1960) — and the industrial organization (IO) scholars (e.g. Caves 1971, 1982; Porter 1980, 1985). These advantages are presumed to stem from, or create, some kind of barrier to entry to final product markets by firms not possessing them.
2. Those relating to the possession of a bundle of scarce, unique and sustainable resources and capabilities, which essentially reflect the superior technical efficiency of a particular firm relative to those of its competitors.[15] These advantages are presumed to stem from, or create, some kind of barrier to entry to factor, or intermediate, product markets by firms not possessing them. Their identification

[14] The origins of the paradigm date back to 1958, when the distinction between the O advantages of firms and the L advantages of countries was first made, in a study by the present author, of American investment in British manufacturing industry (Dunning, 1958, revised 1998). The I component was not explicitly added until 1977, although some of the reasons why firms prefer to engage in fdi rather than cross-border licensing *et al* agreements were acknowledged by the author and other scholars in the early 1970s. (See the 1998 revised edition of Dunning, 1958, Chapter 11)

[15] Implicitly or explicitly, this assumes some immobility of factors of production, including created assets, and that factor markets are not fully contestable. Much earlier, several kinds of competitive advantages specific to *foreign* owned and *domestic* firms were identified by such scholars as Dunning (1958), Brash (1966) and Safarian (1966).

and evaluation has been one of the main contributions of the resource based and evolutionary theories of the firm.[16]

3. Those relating to the competencies of the *managers* of firms to identify, evaluate and harness resources and capabilities from throughout the world, and to coordinate these with the existing resources and capabilities under their jurisdiction in a way which best advances the long term interests of the firm.[17] These advantages, which are closely related to those set out in (2) are especially stressed by organizational scholars, such as Prahalad and Doz (1987), Doz, Asakawa, Santos and Williamson (1997) and Bartlett and Ghoshal (1989, 1993). They tend to be *management*, rather than *firm*, specific in the sense that, even within the same corporation, the intellectual et al., competencies of the main decision takers may vary widely.

The *relative* significance of these three kinds of O specific advantages has changed over the past two decades, as markets have become more liberalized, and as wealth creating activities have become more knowledge intensive. In the 1970s, the unique competitive advantages of firms primarily reflected their ability to internally produce and organize proprietary assets, and match these to existing market needs. At the turn of the millenium, the emphasis is more on their capabilities to access and organize knowledge intensive assets from throughout the world; and to integrate these, not only with their existing competitive advantages, but with those of other firms engaging in complementary value added activities. Hence, the emergence of alliance capitalism, and the need of firms to undertake fdi to protect, or augment, as well as to exploit, their existing O specific advantages (Dunning, 1995). Hence, too, the growing importance of multinationality, per se, as an intangible asset in its own right.

The question at issue, then, is whether the changing character and boundaries of the O specific advantages of firms can be satisfactorily incorporated into the eclectic paradigm, as it was first put forward. We would argue that as long as they do not undermine the basic tenets of the paradigm, and are not mutually inconsistent, they can be, although most certainly, they do require some modification to existing sub-paradigms and theories.

In Tables 1 and 2, we set out some of the models and hypotheses which have been sought to explain the origin, nature and extent of O specific advantages. We divide these into two categories, viz. those which view such advantages as the income generating resources and capabilities possessed by a firm, at a given moment of time, i.e. *static* O advantages; and those which treat such advantages as the ability of a firm, to sustain and *increase* its income generating assets over time, i.e. *dynamic* O advantages. Both kinds of advantage tend to be context specific, e.g. with respect

[16] For a full bibliography, see Barney (1991), Conner (1991), Conner and Prahalad (1996), Cantwell (1994) and Dosi, Freeman, Nelson, Silverberg and Soete (1988); Foss, Knudsen, and Montgomery (1995); Saviotti and Metcalfe (1991). See also the writings of Teece (1981, 1984, 1992) and of Teece, Pisano and Shuen (1997).

[17] Which includes minimizing the transaction costs and of maximizing the benefits of innovation, learning and accumulated knowledge.

Table 1
Theories explaining O specific advantages of firms. A: Group 1 Explaining Static O advantages[a]

	1) MS[b]	2) RS[b]	3) ES[b]	4) SAS[b]
Product cycle theory. (Vernon 1966, 1974)	•Country (largely US) specific resources and capabilities of firms •All asset exploiting fdi •Further hypothesizes that competitive advantages of firms are likely to change as product moves through its cycle			
Industrial organization theories. (Hymer, 1960; Caves 1971, 1974; Dunning 1958, 1993; Teece 1981, 1984)	•Largely Oa advantages initiated, or protected, by entry and/or mobility barriers to product markets. These include patent protection, and marketing, production and financial scale economies •All asset exploiting fdi •Little attention paid to asset augmenting fdi		•Oa advantages based on efficiency of investing firms also described in various empirical studies from Dunning (1958) and Safarian (1966) onwards	
Multinationality, organizational and risk diversification theories. (Vernon 1973, 1983; Rugman, 1979; Kogut 1983, 1985; Kogut & Kulatilaka, 1994; Doz et al., 1997; Rangan, 1998)	•Mainly Ot advantages, but also some Oa advantages arising from presence of investing firms in countries with different economic political, cultural regimes. Ot advantages include ability to access, harness and integrate differences in distribution of natural and created assets and of organizational and managerial experience related to these •(Potentially could be extended to include why markets for sustaining or increasing O specific advantages are best internalized.)			

(continued on next page)

Table 1 (*continued*)

	1) MS[b]	2) RS[b]	3) ES[b]	4) SAS[b]
Internalization theory. (Buckley & Casson, 1976, 1985, 1998a,b; Hennart 1982, 1989; Rugman 1982, 1996)	•Entirely confined to Oa and Ot advantages arising from internalization of intermediate product markets •All asset exploiting fdi •Largely, though not exclusively, a static theory, though some acknowledgment that relative transaction costs of markets and hierarchies may vary as firms seek to exploit dynamic market imperfections			
Capital Imperfections theory. (Aliber, 1971)	•Largely independent of type of fdi. The theory argues that firms from countries with strong exchange rates, or which discount capital at higher rates of interest will be tempted to invest, often by M and As, in countries which are economically weaker. The theory, as initially put forward, has no time (t) dimension; and, in essence, is a financial variant of internalization theory			
Follow my leader, tit for tat theory. (Knickerbocker, 1973; Graham 1975, 1990; Flowers, 1976)	•Mainly concerned with explaining fdi as a space related strategy among competing oligopolists. The main hypothesis is that fdi will be bunched in particular regions or countries over time; and that there is likely to be an inter-penetration of the territories occupied by the oligopolists. Though originally applied to explain asset-exploiting fdi, it is now also being used to explain some asset augmenting fdi			

[a] Oa=Ownership advantage based on the possession or privileged access to a specific asset. Ot=Ownership advantages based on capabilities to organize assets, both internal and external to the investing firm, in the most efficient way.

[b] 1) Market seeking 2) Resource seeking 3) Efficiency seeking 4) Strategic asset seeking

Table 2
Theories explaining O specific advantages of firms. B: Group 2 Explaining Dynamic O advantages[a]

	1) MS[b]	2) RS[b]	3) ES[b]	4) SAS[b]
1. Resource based theory. (Wernerfelt 1984, 1995; Conner, 1991; Helleloid, 1992; Montgomery, 1995; Conner & Prahalad, 1996)	•As initially formulated, mainly concerned with identifying and evaluating variables influencing sustainability of competitive advantages of firms. Less attention given to traditional barriers to entry and more to such variables as specificity, rareness and non-imitatability of resources, and the capabilities of firms to create and utilize them. Mainly concerned with asset exploiting fdi and only limited recognition of O_t advantages			•FDI designed to augment domestic-based resources and capabilities (Wesson 1993, 1997; Makino, 1998; Dunning, 1996; Chen & Chen, 1999)
2. Evolutionary theory. (Nelson & Winter, 1982; Nelson, 1991; Cantwell 1989, 1994; Dosi et al., 1988, Saviotti & Metcalfe, 1991; Teece et al., 1997)	•A holistic and time related approach, mainly directed to identifying and evaluating dynamic Oa advantages of firms. Basic proposition relates to the path dependency of accumulated competitive advantages, and that the more efficient firms are in managing these advantages, the more likely they will have the capability to engage in asset exploiting and asset augmenting fdi			
3. Organizational (management related) theories. (Prahalad & Doz, 1987; Bartlett & Ghoshal, 1989; Porter, 1991; Bartlett & Ghoshal, 1993; Doz and Santos, 1997; Doz et al., 1997)	•Essentially explain O advantages in terms of ability of managers to devise appropriate organizational structures and techniques to effectively access, coordinate and deploy resources and capabilities across the globe. These theories, in recent years, have especially focused on the cross-border sourcing of intellectual assets and the coordination of these assets with those purchased from within the MNE			

[a] Oa=ownership advantage based on the possession or privileged access to a specific asset. Ot=ownership advantages based on capabilities to organize assets, both internal and external to the investing firm, in the most efficient way.

[b] 1) Market seeking 2) Resource seeking 3) Efficiency seeking 4) Strategic asset seeking

to industry or country; and related to the kinds of competitive advantages (as identified earlier) which firms seek to attain or sustain. While, over the past two decades, changes in the world economic scenario and knowledge about MNE activity have led to a *relative* decline in market seeking (MS) and resource-seeking (RS) fdi — both of which tend to be based on the static O advantages of the investing firms —, they still help to explain a major part of first-time fdi, particularly in developing countries (Dunning, 1999).

However, one of the key characteristics of the last two decades has been the increasing significance of fdi based on the possession of, or need to acquire, dynamic O advantages. Thus, rationalized or efficiency seeking (ES) fdi is only viable if: (a) the investing firm is already producing in at least one foreign country and (b) both intermediate and final product, trade is relatively unimpeded by natural or artificial cross-border barriers. Strategic asset seeking (SAS) fdi is dependent on intellectual capital being located in more than one country, and that it is economically preferable for firms to acquire or create these assets outside, rather than within, their home countries.

To successfully explain dynamic and alliance related O specific advantages, each of the particular theories of fdi identified in Tables 1 and 2 requires some modification. Thus, the *resource based* theory needs to reexamine the content and significance of existing resources and capabilities of the firm in terms of

1. their ability to sustain and/or upgrade these advantages,
2. their ability to harness and influence the quality and price of complementary assets, and to efficiently coordinate these with their own innovating competencies and
3. their ability to locate their value added activities in countries and regions which offer the optimum portfolio of immobile assets, both for creating or acquiring new O specific advantages, and for exploiting their existing advantages. Inter alia, such immobile assets may reflect the bargaining and negotiating skills of MNEs in their dealings with foreign governments (Rugman & Verbeke, 1998).

While accepting much of the content of *resource based* theory, the *evolutionary* theory of the firm pays more attention to the *process* or *path* by which the specific O advantages of firms evolve and are accumulated over time. In contrast (or in addition) to internalization theory, it tends to regard the firm as an innovator of created assets, rather than a 'nexus of treaties'. It is, by its nature, a dynamic theory, which, like the resource based theory, accepts the diversity of competencies between firms; however, unlike the latter, it focuses on the firm's long term strategy towards asset accumulation and learning capabilities, and its implications both for established routines and the development of new ones. (Nelson & Winter, 1982; Nelson, 1991; Teece et al., 1997; Foss, Knudsen, & Montgomery, 1995).

Zeroing down to management as the unit of analysis, contemporary organizational scholars, such as Prahalad and Doz (1987), Doz et al. (1997), Bartlett and Ghoshal (1989, 1993) are paying increasing attention to the harnessing, leveraging, processing and deployment of knowledge based assets as a core competence. While the subject of interest is similar to that of the resource and evolutionary theories, the emphasis of this kind of approach is on the capabilities of management to orchestrate and integrate the resources it can internally upgrade or innovate, or externally acquire, rather than on the resources themselves. But, as with the resource based and evolutionary theories, the objective of the decision taker is assumed to be as much directed to explaining the growth of firm specific assets, as to optimizing the income stream from a given set of assets.

The question now arises. To what extent are the theories relating to the origin and content of O specific advantages, as set out in Table 1 — and particularly their contemporary versions — consistent with, or antagonistic to, each other? Our reading is that, when the eclectic paradigm was first propounded, they were largely aimed at explaining different phenomena, or offered complementary, rather than alternative, explanations for the same phenomena. It is true the unit of analysis was frequently different; and that the underlying philosophy and some of the assumptions of industrial organization theory were different than those of resource based theories (Pauwells & Matthyssens, 1997). But, in general, within their specified analytical frameworks, the predictions of the various theories were consistent with those of a general 'envelope' paradigm, and also the more specific predictions of the O sub-paradigm about the kind of competitive advantages likely to be possessed by MNEs, and the industrial sectors and countries in which their affiliates were likely to record superior levels of performance relative to those of their indigenous competitors (Dunning, 1993; Caves, 1996).

3. The locational sub-paradigm of countries (and regions)

For the most part, until recently, neither the economics nor the business literature gave much attention as to how the emergence and growth of the cross-border activities of firms might be explained by the kind of location-related theories which were initially designed to explain the siting of production *within* a nation state; nor, indeed, of how the spatial dimension of fdi might affect the competitiveness of the investing entities. In the last decade or so, however, there has been a renaissance of interest by economists, (e.g. Audretsch, 1998; Krugman 1991, 1993; Venables, 1998), and industrial geographers (e.g. Scott, 1996; Storper, 1995; Storper & Scott, 1995) in the spatial concentration and clustering of some kinds of economic activity; by economists in the role of exchange rates in affecting the extent, geography and timing of fdi (Cushman, 1985; Froot & Stein, 1991; Rangan, 1998); and by business scholars (Porter 1994, 1996; Enright 1991, 1998), in the idea that an optimum locational portfolio of assets is a competitive advantage in its own right.

The eclectic paradigm has always recognized the importance of the locational advantages of countries as a key determinant of the foreign production of MNEs (Dunning, 1998).[18] Moreover, since the 1930s, at least, there have been numerous

[18] Unlike with internalization theory, where the locational decision is normally taken to be independent of the modality of resource transference.

context-specific theories of the geographical distribution of fdi and the siting of particular value added activities of firms.[19] Some of these 'partial' theories are set out in Table 3. They include the locational component of Vernon's product cycle theory (Vernon, 1966), and that of Knickerbocker's 'follow my leader' theory (Knickerbocker, 1973), which was one of the earliest attempts to explain the geographical clustering of fdi; and Rugman's risk diversification theory, which suggested that MNEs normally prefer a geographical spread of their foreign investments to having 'all their eggs in the same (locational) basket' (Rugman, 1979).[20]

However, for the most part, the question of *where* to locate a particular fdi, given the configuration of the O and I variables, was not thought to raise new issues of interest to students of the MNE. At the same time, throughout the last three decades, there have been many *empirical* studies on the determinants of both the export v. fdi choice of corporations, and the spatial distribution of MNE activity.[21]

Once again, in conformity with our earlier analysis, and as Table 3 shows, these explanatory variables are seen to differ according to the motives for fdi, its sectoral composition, the home and host countries of the investing firms, and a variety of firm specific considerations. But, in the main, scholarly research has extended, rather than replaced, standard theories of location to encompass cross-border value added activities. In particular, it has embraced new locational variables, e.g. exchange rate and political risks, the regulations and policies of supra-national entities,[22] inter-country cultural differences; and has placed a different value of other variables common both to domestic and international locational choices.[23] However, these add-on or re-valued variables could be easily accommodated within the extant analytical structures.[24] This marked off most pre-1990 explanations of the location (L) specific advantage of nations from those of the O specific advantages of firms.

The emergence of the knowledge based global economy and asset augmenting fdi is compelling scholars to take a more dynamic approach to both the logistics of the siting of corporate activities, and to the competitive advantages of nations and/or regions. In the former case, firms need to take account not only of the presence and cost of traditional factor endowments, of transport costs, of current demand levels and patterns, and of Marshallian type agglomerative economies (Marshall, 1920); but also of distance related transaction costs (Storper & Scott, 1995), of dynamic externalities, knowledge accumulation, and interactive learning (Enright 1991, 1998; Florida, 1995; Malmberg, Sölvell & Zander, 1996), of spatially related innovation and technological standards (Antonelli, 1998; Sölvell & Zander, 1998), of the

[19] One of the first of these studies was that of Frank Southard in 1931 on the locational determinants of US fdi in Europe (Southard, 1931).

[20] Earlier, Agmon and Lessard (1977) had suggested that US MNEs commanded a higher price than their uninational counterparts because individual investors looked on the former as a means of internationally diversifying their investment portfolios.

[21] For a survey of these studies, see, for example, Dunning (1993) and Caves (1996).

[22] See particularly the impact of WTO agreements and dispute settlements on the locational decisions of MNEs, as documented by Brewer and Young (1999).

[23] Notably, wage levels, demand patterns, policy related variables, supply capabilities and infrastructure.

[24] As set out in textbooks on location theory, e.g. Lloyd and Dicken (1977) and Dicken (1998).

Table 3
Theories explaining L specific advantages of countries

	1) MS	2) RS	3) ES	4) SAS
1. Traditional location theories. (Hoover, 1948; Hotelling, 1929; Isard, 1956; Losch, 1954; Lloyd & Dicken, 1990; Weber, 1929)	•Demand related variables, e.g. size, character and potential growth of local and adjacent markets	•Supply oriented variables, e.g. availability, quality and price of natural resources, transportation costs, artificial barriers to trade	•Supply oriented variables, especially those related to comparative advantages of immobile assets, e.g. labor, land and infrastructure	•Location and price of created assets, including those owned by firms likely to be acquired
	•Presence of competitors			•Exchange rates
2. Theories related to the process of internationalization. (Anderson & Gatignon, 1986; Cavusgil, 1980; Daniels, 1971; Forsgren, 1989; Hirsch, 1976; Johanson & Vahlne 1977, 1990; Luostarinen, 1979; Vernon, 1966; Welch & Luostarinen, 1988)	•Mainly MS and RS, using traditional locational variables, but also several firm specific variables and transaction costs			•Some attention given to foli as a learning activity
	•Emphasis on role of psychic distance, particularly in exploiting accumulated knowledge based O advantages (Daniels, 1971; Johanson & Vahlne 1977, 1990)			
3. Agglomeration theories. (Audretsch, 1998; Enright 1991, 1998; Forsgren, 1989; Krugman 1991, 1993; Malmberg et al., 1996; Porter 1994, 1996; Storper, 1995; Cantwell & Piscitello, 1997)	•Some clustering of products for convenience of consumers, including industrial consumers	•Supply related clusters, based on static external economies, e.g. pooled labor markets		•Supply related clusters based on asset augmenting activities, local accumulation of knowledge, and exchange of information and learning experiences
	•Economies of scale and scope	•Economies of scale and scope		
4. Theories related to spatially specific transaction costs. (Florida, 1995; Scott, 1996; Storper & Scott, 1995)	•Given production and transport costs, external ties and scale economies, spatially related transaction costs are hypothesized to lead to a clustering of related activities. (a) to reduce overall costs and (b) to maximize benefits of inter-related innovating and learning activities			

(continued on next page)

Table 3 (*continued*)

	1) MS	2) RS	3) ES	4) SAS
5. Theories related to presence of complementary assets. (Teece, 1992; Teece et al., 1997; Chen & Chen, 1998, 1999)	•The presence of related activities which help lower transport costs and promote joint economies in innovation, production and marketing			•As for MS, RS and ES, but directed to asset augmenting activities, and strategic networking
6. Theories related to government induced incentives. (Loree & Guisinger, 1995; UN, 1996a)	•Especially fiscal and other incentives leading to increase in demand for products of MNEs	•Supply related incentives, concessionary rights for exploitation of natural resource based sectors; intellectual property rights, tax advantages for RS and ES		•Mainly incentives to promote innovation-driven alliances, and the upgrading of existing O advantages of investing firms
7. Theories related to oligopolistic behavior and product cycle. (Graham 1975, 1998; Knickerbocker, 1973; Vernon, 1974)	•Follow my leader and other forms of oligopolistic behavior may apply to all four forms of international production, although incentives and pressures for such behavior are likely to be context specific			
8. Theories of risk diversification (Agmon & Lessard, 1977, Rugman, 1979)	•Types of location specific risk vary with kind of fdi, but theory suggests that firm will diversify their portfolios to minimize their risk exposures, which include exchange, political and economic risks			•Risks of SAS fdi also relate to inappropriate timing (especially for M and As) and insufficient knowledge about the assets being acquired
9. Exchange rate theories (Aliber, 1971; Cushman, 1985; Froot & Stein, 1991; Blonigen, 1997; Rangan, 1998)	•Theories which assume exchange rates or changes in exchange rates, suitably discounted for risk, capture most of the differences in cross-border locational costs, and also expectations of investors about the future course of exchange rates. These embrace all kinds of fdi, but particularly that of the timing of M and As			
10. Knowledge enhancing (dynamic) theories of location. (Dunning, 1997; Kogut & Zander, 1994; Kuemmerle, 1999; Porter 1994, 1998; Chen & Chen, 1998, 1999)	•See also SAS column, for 1-7 above. More specifically, dynamic theories are directed to explaining locational strategy in terms of sustaining and promoting location specific advantages in a world of uncertainty, learning and continuous innovation and upgrading of products. Applies especially to research and development activity of all kinds of fdi. The need to exploit dynamic locational advantage especially pronounced in high technology sectors			•Theory is that firms will invest in those countries which offer the greatest opportunities accumulated for upgrading their existing core competencies, and that such a locational strategy is path dependent

increasing dispersion of created assets, and of the need to conclude cross border asset augmenting and/or asset exploiting alliances (Dunning 1995, 1998).

Contemporary economic events are suggesting that the nature and composition of a country or region's comparative advantage, which has been traditionally based on its possession of a unique set of immobile *natural* resources and capabilities, is now more geared to its ability to offer a distinctive and non-imitatible set of location bound *created* assets, including the presence of indigenous firms with which foreign MNEs might form alliances to complement their own core competencies. Recent research not only reveals that some nation states are not only becoming increasingly dependent on the cross-border activities of their own and foreign based corporations for their economic prosperity (Dunning, 1996; UN, 1998);[25] but that the competitiveness of these corporations is becoming increasingly fashioned by the institutional framework within which they operate (Oliver, 1997; Doremus, Keller, Pauly & Reich, 1998). In particular, both nation states and sub-national authorities are becoming more aware of the need to provide the appropriate economic and social infrastructure, both for their own firms to generate the O specific assets consistent with the demands of world markets, and for foreign investors to engage in the kind of value adding activities which advances the dynamic comparative advantage of the immobile assets within their jurisdiction (Porter, 1994; Peck, 1996; Dunning, 1998).

As yet, business strategists, organizational, and marketing scholars have paid little attention to how their own explanations of the timing and geographical profile of international business activity need modifying in the light of the new forms of fdi and of alliance capitalism. There is, for example, little treatment of spatially related factors in either the resource based, or the evolutionary theories of the firm; although the role of spatially related agglomerative economies is being increasingly recognized as an important source of learning and innovating capabilities. Indeed, Michael Porter has gone as far as to say that, in the modern global economy, "anything that can be moved or sourced from a distance is no longer a competitive advantage" (Porter, 1998p. 29), and that "the true advantages today are things that are sticky, that is not easily movable". If this is correct, it may be inferred that as the dynamic gains from spatial clustering and network linkages become more pronounced,[26] so will the locational choice of firms become a more critical strategic variable. It also follows that national and regional authorities should pay more attention to the fostering of immobile complementary assets and cluster related public goods as part of their policies to attract and retain mobile investment.

As in the case of O specific advantages, scholarly research on the kind of L advantages most likely to explain the 'where' of international production has taken on a new trajectory over the past decade. More particularly, the dramatic increase in cross-

[25] Especially small states like Switzerland, Belgium and Sweden.

[26] Chen and Chen (1998, 1999) have argued that the access to foreign located networks would both augment the O specific advantages of the investing firms, and enable firms which otherwise do not engage in fdi, so to do. The authors back up their assertion that fdi might act as a conduit for strategic linkages by drawing upon the experiences of Taiwanese firms.

border mergers and acquisitions,[27] has reflected the availability and price of assets that firms wish to acquire or tap into to protect or augment their competitive advantages. While the exchange rate might certainly affect a timing of the fdi, the extent to which the acquired assets — together with the business environment of which they are part — advances the competitiveness and strategic trajectories of the investing firms, are the critical locational determinants.

Finally, we would observe that, although several strands of intellectual thought contribute towards our understanding of the locational dynamics of MNE activity, these offer complementary, rather than alternative, explanations. This is not to deny that there are differences of emphasis or methodology among scholars,[28] but we believe that they are not substantive enough to preclude their incorporation into any revised paradigm of international production.

4. The internalization sub-paradigm

Given that a firm has a set of competitive or O specific advantages, and the immobile assets of a foreign country are such as to warrant locating value adding or asset augmenting activities there, what determines whether such activities are undertaken by the firms possessing the advantages, or by indigenous producers buying the advantage, or the right to its use, in the open market, or acquiring them by some other means?[29] Orthodox internalization theory offers a fairly straight-forward answer, viz as long as the transaction and coordination costs of using external arm's length markets in the exchange of intermediate products, information, technology, marketing techniques, etc. exceed those incurred by internal hierarchies, then it will pay a firm to engage in fdi, rather than conclude a licensing or another market related agreement with a foreign producer. In general, the transaction costs of using external markets tend to be positively correlated with the imperfections of those markets. Over the last two decades, an extensive literature has identified a whole range of market failures, such as those associated with bounded rationality, and the provision of public and jointly supplied products and common intangible assets, and which permit opportunism, information asymmetries, uncertainty, economies of scale, and externalities of one kind or another.[30]

In explaining why firms choose to engage in fdi rather than buy or sell intermediate products in some other way (the third question which any international business theorist must answer) internalization theory has provided the dominant explanation over the past two decades. Yet it has not gone unchallenged. The major criticisms

[27] Which, within the Triad of countries, are estimated to have accounted for around three-fifths of all new fdi between 1985 and 1995 (UNCTAD, 1997).

[28] For example, there are several socio-economic and geographical theories of the rationale for industrial clustering, see, for example, Storper (1995).

[29] E.g. by a subcontracting, or turn-key, agreement.

[30] For two recent explanations of the various kinds of market failure and the response of firms and governments to these, see Lipsey (1997) and Meyer (1998).

have been of three kinds. The first is that it is an incomplete theory in that it ignores other functions which a firm may perform, other than those which are transaction related; and other reasons, apart from short run profit maximization, why firms may wish to engage in value added activities outside their national boundaries. For example, firms have abilities of learning, memory adaptation and the capabilities to produce — tasks which markets cannot emulate. Many cross-border M and As are undertaken to gain new resources and/or to access to new capabilities, markets, or to lower the unit costs of production, or to gain market power, or to forestall or thwart the behavior of competitors.

Such objectives fit less comfortably with the conception of a firm as a 'nexus of treaties', and more with that of a firm as a 'collection or bundle of resources' (Barney, 1991), or as a 'repository of knowledge and capabilities' (Kogut & Zander, 1994; Madhok, 1996). This does not destroy the validity of internalization theory per se. It does, however, suggest that its contents should be widened to incorporate *all* costs and benefits associated with corporate activities; and not only those which are transaction related![31] Contemporary writings, both by resource based and evolutionary scholars have refocused attention on the *unique* characteristics of the firm,[32] vis à vis those of other institutions; viz as a unit of production, whose function is to efficiently convert a given set of resources into economically rewarding products.

The second criticism of orthodox internalization theory is that it is a static theory, and gives little guidance as to how best a firm may organize its activities to create future assets, rather than optimize the use of its existing assets. The increasing role of innovation in the contemporary global economy, and the need of firms to tap into, and exploit, resources and capabilities outside their home countries, is requiring a reappraisal of the rationale for, and economics of, extending the boundaries of a firm. It is also requiring scholars to judge the success of managerial strategy less on the criteria of short run profitability, and more on that of long run asset appreciation. To be relevant in a dynamic context, extant internalization theory needs to explain why firm-specific transaction costs are likely to be less than market-specific transaction costs in the *creation*, as well as in the *use*, of resources and capabilities.

Third, the growth of a range of inter-firm coalitions is resulting in de facto internalization, but without equity ownership. This is most evident in two cases. The first is where the competitive advantage of a firm is based on its ownership of a set of proprietary rights, the use of which it can effectively control and monitor through a contractual agreement. The second is that where firms engage in collaborative agreements for a very specific purpose, which is usually time limited, e.g. a research and development project or a joint marketing arrangement in a particular country or region. Here, full internalization, which, in essence, addresses ownership issues, is not a realistic option for the participating firms. At the same time, most strategic

[31] I am grateful for one reviewer of this paper who pointed out that orthodox internalization theory addresses a single question, viz. "where are the boundaries of the firm drawn?". I agree. But, up to now, this particular question has been approached mainly from a transaction cost perspective, which, I would argue, cannot cope with all the issues raised by it.

[32] As compared with markets.

partnerships now being formed cannot be construed as arms length transactions as the participants have a continuing knowledge sharing relationship with each other (Dunning, 1995; UN, 1998). The advent of alliance capitalism, which may be perceived as a variant of hierarchical capitalism, offers opportunities for new inter-firm organizational modalities, the rationale for which internalization theory can only partly explain.

In Table 4 we set out some of the mainstream theories which have attempted to explain why, given a set of O and L specific advantages, firms prefer to own their foreign value added or creating activities, rather than lease the right to use their O advantages to independently owned foreign firms. It is our contention that changing world economic events, the growing multinationality of many foreign investors, and the need for firms to engage in highly specific cross-border alliances and in asset augmenting fdi, is necessitating both a reappraisal of static organizational theories, and an integration between 'production based', 'innovation based' and 'transaction based' theories of the firm.

Again, we do not think these approaches to internalization are mutually exclusive. At the end of the day, managers will take decisions, which in any particular context (including those of competitor firms) will come closest to meeting an amalgam of short term and long term objectives. Yet, to be effective, these decisions need to take account of, and resolve in a holistic way, conflicts between very specific objectives. It is extremely unlikely, for example, that a firm will be successful, at one and the same time, in minimizing short-run transaction costs, maximizing short run and long run productive efficiency, accessing new markets, optimizing the net benefits of asset creation and asset augmenting activities, and pursuing a variety of cost-effective strategies to improve their competitive position, vis à vis that of their main rivals — all within a macro-economic environment of uncertainty and volatility.

This, then suggests that any comprehensive explanation of the existence and the growth of the contemporary MNE must almost inevitably be 'judiciously pluralistic' (Foss 1996, 1997), unless the context in which the explanation is being made is very narrowly delineated. And, it is a fact that most new explanations of the territorial expansion of firms tend to be incremental to extant theories, rather than a replacement of them. Any conflict between alternative theories or models is, as likely as not, to be about the relevance of, or emphasis placed on, these theories or models, rather than about their logical construction.

We would make one other point. In discussing alternative interpretations of the I component of the OLI triumvirate, organizational scholars such as Chris Bartlett, Sumantra Ghoshal, Yves Doz and C K. Prahalad, focus on the individual manager — rather than on the firm — as their main unit of analysis. This results in a somewhat different analytical perspective towards the rationale for existence of hierarchies and the internalization of markets, than that offered by Williamson (1985, 1986, 1990), notwithstanding the fact that, in his various writings, he incorporates the concept of managerial discretion as an explanation for the behavior of firms. Moreover, for the most part, Williamson's analysis tends to be concerned with the efficiency of asset exploitation, rather than that of asset augmentation. Because of this, his focus is more on the optimal mode of coordinating the use of existing resources and capabili-

Table 4
Theories explaining why firms choose to own foreign value added facilities

	1) MS	2) RS	3) ES	4) SAS
1. Orthodox Internalization Theory				
i. Resource or productivity enhancing (Caves, 1996; Dunning, 1993)	•To capture coordinating and transactional benefits of common governance of related activities; to benefit (mainly through M and As), from innovating, production or marketing scale/scope economies			
ii. Cost reduction (Anderson & Gatignon, 1986; Aoki, Gustafson & Williamson, 1990; Buckley & Casson 1976, 1981, 1985, 1998a,b; Hennart 1982, 1989; Rugman 1982, 1996)	•To reduce transaction and coordinating costs of arm's length markets and/or non-equity contractual relations. Such costs include opportunism and shirking, and those designed to protect the reputation of the contractor. Most empirical work relates to entry modes. See, for example, Anderson and Gatignon (1986)			
iii. Risk reduction (Vernon, 1983)	•To reduce organizational and related risks implicit in (ii) above			
2. Dynamic Internalization Theory. (Buckley & Casson, 1998a; Ghoshal, Hahn & Moran, 1997)				•To tap into learning and experience related assets and to speed up the innovation process. To capture the advantages of Schumpeterian integration and the common governance of R&D related activities
3. Agency Theory. (Eisenhardt, 1989; Jensen & Meckling, 1976; Strong & Waterson, 1987)	•As with internalization theory, but primarily to reduce risks of external agents behaving against the interests of the principals •To reduce moral hazard and adverse selection			
4. Market Power Theories. (Cowling & Sugden, 1987; Hymer, 1960, Hymer, 1976)	•Growth by M and As intended to increase market power, rather than to upgrade efficiency			
5. Efficiency Related Theories. (Caves 1982, 1996; Lie, 1998; Teece 1981, 1984)	•To capture scale related production economies. To raise dynamic technical efficiency through shared knowledge, learning experiences and management expertise. To capture the advantages of signaling			
6. Knowledge Acquisition and Sharing Theories. (Antonelli, 1998; Kogut & Zander, 1994; Makino, 1998; Wesson 1993, 1997; Teece et al., 1997)				•To augment existing intellectual assets, thereby increasing competitive prowess •To capture synergies of knowledge creation and augmenting activities

ties, rather than on that of upgrading such resources and capabilities, by innovating and other means.

5. Conclusions: the eclectic paradigm as an envelope for complementary theories of MNE activity

In the three previous sections we have suggested that, for the most part, the many and varied explanations of the extent and structure of fdi and MNE activity are complementary, rather than substitutable for, each other, and are strongly context specific. We have further observed that, as the international production by MNEs has grown and taken on new patterns, as the world economic scenario has changed, and as scholars have better understood the raison d'être for fdi, so new explanations of the phenomena have been put forward, and existing explanations have been modified and, occasionally, replaced.

According to Kuhn (1962) and Foss (1996, 1997), an existing paradigm can accommodate several contrasting theoretical models as long as these are not addressing exactly the same questions or addressing these in the same context.[33] At the same time, a paradigm that leaves no issues unresolved is of dubious value as a guide to further theorizing (Loasby, 1971). By contrast, a paradigm shift may be required when new phenomena arise which cannot be addressed within the existing paradigm, or where there are serious and irreconcilable conflicts among the theories contained in the paradigm.

However, we believe that the criteria for a successful paradigm are more demanding. More specifically, we would mention three of these. The first is that the sum of the value of the constituent theories must be greater than the whole. This suggests that there are intellectual interdependencies or externalities to each of the theories, which a paradigm can 'internalize' through its integrated approach. It follows then that the more any general paradigm of international production can advance understanding about the determinants of its constituent parts, the more successful it may be judged. Viewed in this way, we would aver that dynamizing the eclectic paradigm, and recognizing the interdependence of the OLI components not only adds value of its original conception, but helps point the way to improving a variety of the individual theories it embraces.

Second, we would aver that the strength of a paradigm also depends on the extent to which it can offer some generic hypotheses, or, indeed, predictions about the phenomena being studied. In the case of the earlier versions of the eclectic paradigm, we offered some general hypotheses about the nature of the relationship between the O L and I variables and fdi (Dunning 1977, 1980). However, we did not think it appropriate to put forward specific hypotheses about the relationship between parti-

[33] Thus, for example, although the transaction cost and resource based theories of the firm offer alternative predictions of the behavior of firms, they, in fact, are addressing different aspects of that behavior, e.g. the former is concerned with defining the boundaries of a firm's activities and the latter with the origins of its competitive advantages.

cular OLI variables and particular kinds of fdi — as the paradigm itself was not context specific.

In the case of the contemporary version of the paradigm, which embraces alliance related and asset augmenting MNE activity, even generic hypotheses are harder to make without knowing whether a firm is contemplating a fdi to exploit a competitive strength or to overcome, or counteract, a competitive weakness. Only by treating the search for, and acquisition of, competitive advantages as part of the dynamic and cumulative process of sustaining and advancing O specific advantages (rather than a discrete and once and-for-all transaction) can this conundrum be resolved. This, then, suggests that the eclectic paradigm might better address itself to explaining the *process* of international production, than to its level and composition at a particular moment of time.

Third, a paradigm may be judged to be robust if it continues to address relevant problems and offers a satisfying conceptual structure for resolving them (Loasby, 1971); and if there are no serious contenders to it. Here, it would be foolish to deny there are not other paradigms which seek to offer general explanations of the internationalization process of firms and/or their international management strategies. But, for the most part, we would not consider these to be competing paradigms.

Managerial related paradigms, for example, are interested in explaining the behavior of managers in harnessing and utilizing scarce resources, not the overall level and pattern of fdi or MNE activity. Moreover, unlike fdi theories, they tend to be process oriented, unlike most fdi theories (Buckley, 1996). Organizational paradigms are directed to evaluating the costs and benefits of alternative institutional mechanisms for organizing a given set of resources and capabilities, independently of the location of these assets. Paradigms offered by marketing scholars usually focus on the process and/or form of international market entry and/or growth (Johanson & Vahlne, 1977; Luostarinen, 1979; Welch & Luostarinen, 1988; Anderson & Gatignon, 1986). Technologically related paradigms of international production (Cantwell 1989, 1994; Kogut & Zander, 1994) come nearest to our own approach, but cannot comfortably explain fdi in developing countries and in some service sectors. With a few exceptions (notably Gray, 1996; Markusen, 1995), modern paradigms of international trade ignore or downplay the significance of firm specific advantages. Finance related paradigms can offer only limited insights into the growth of corporate networks and cross-border strategic alliances.

We conclude, then, that an add-on dynamic component to the eclectic paradigm, and an extension of its constituent parts to embrace both asset augmenting and alliance related cross-border ventures can do much to uphold its position as the dominant analytical framework for examining the determinants of international production. We believe that recent economic events, and the emergence of new explanations of MNE activity have added to, rather than subtracted from, the robustness of the paradigm. While accepting that, in spite of its eclecticism (sic), there may be some kinds of foreign owned value added activities which do not fit comfortably into its construction, we do believe that it continues to meet most of the criteria of a good paradigm; and that it is not yet approaching its own 'creative destruction' (Foss, 1996).[34]

[34] For a somewhat different, and highly refreshing, approach to some of the concepts dealt with in this paper, see a recently published article by Boddewyn and Iyer (1999).

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