



# **John Dunning's Influence in International Business/Strategy Research: A Bibliometric Study in the Strategic Management Journal**

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**Abstract.** In this paper we undertake a literature review analyzing John Dunning's contribution for international business and strategy research. We examine Dunning's articles and other works and carry out a bibliometric study in the Strategic Management Journal, in the period from 1980 to 2009, a thirty years period. We conclude that beyond the more obvious contribution to the international business discipline with the Eclectic paradigm (OLI – Ownership, Location, Internalization), Dunning's influence extends to other theories and concepts. Specifically, we observe connections to the resource-based view, transaction costs theory, the evolutionary theory and more broadly to the theory of the multinational enterprise.

**Keywords:** John Dunning, OLI, literature review, eclectic paradigm, bibliometric study, international strategy research.

## **1. Introduction**

In this paper we examine John Dunning's influence in the international business and strategy research over the past three decades. Our goal is to assess the theoretical contribution to the development of the discipline and the author's influence that extends beyond the initial restricted area of international business to currently include corporate strategy.

The Eclectic paradigm is one of the most well known theoretical models in international business (Stoian & Filippaios, 2008). A majority of the research work being pursued in the discipline is influenced either directly or more covertly by Dunning's view on the nature of the international production of firms and of the factors that affect their geographic dispersion, or location. Dunning's

taxonomy of the factors that support the decision to internationalize, the choice of where to locate production and the choice among the alternative governance forms – namely the internalization of the transactions, especially of intermediate products, has been foundational even to contemporary research. Indeed it has been foundational to research on the operations of multinational corporations (MNCs) over the past three decades. The importance of Dunning's extensive work, conducted over a life span of about fifty years of a prolific academic career, and his contribution are evident once we notice the many citations to his initial works (Dunning, 1958, 1972, 1973, 1977) on the eclectic paradigm and on why multinationals exist (Dunning, 1981, 2000b).

Huggins, Demirbag and Ratcheva (2007) describe the eclectic paradigm as a holistic approach that explains the level of activity and the patterns observable in international production. According to Huggins and colleagues, Dunning was able to combine effectively, arguably as no other approach, the main factors that are explanatory for MNCs operations and their investments abroad (see also Dunning, 2000b).

In this literature review paper we examine the influence of Dunning's work. To carry out this endeavor we examine the papers published in the *Strategic Management Journal*, in the period ranging from 1980 to 2009. By doing this we are better able to understand the intellectual structure bonding theories and authors (White & McCain, 1998; Ramos-Rodriguez & Ruiz-Navarro, 2004), which permits us to position Dunning's and the Eclectic paradigm's contribution for the international strategy research published in this well reputed outlet (the SMJ is considered the top strategy-oriented journal) for strategy studies.

This paper is structured as follows: first, we examine the emergence of the eclectic paradigm, followed by a brief review of the three core factors put forward: ownership advantages, location and internalization advantages. In the third part, we present the method deployed, procedure and sample. In the fourth part we observe the results. We conclude with a broad discussion, noting some limitations and clarifying possible avenues for future scholarly inquiry.

## **2. The Eclectic Paradigm and Its Origins**

Dunning's research career was essentially focused on the gradual development of the eclectic paradigm (Dunning, 2004a). The eclectic paradigm is a view on the international production of firms, that is, on the production undertaken in foreign countries through the realization of foreign direct investment (FDI). The core of the paradigm is to provide a more integrative form to explain the motives and reasons (why), location (where) and the manner (how) the international operations of MNCs are carried out. In sum, the eclectic paradigm tries to explain why MNCs exist and why they are relatively more successful than simply domestic firms (Dunning, 1988b, 2001; Dunning & Wymbs, 2001). Although it

captured the contributions of other scholars, the fact is that the paradigm is associated intimately to Dunning's work (1977, 1981, 1988, 1993, 2000). Moreover, the paradigm is referred to as eclectic because it integrates different theoretical approaches and views, with different explanatory perspectives and converts them into a single taxonomy.

Dunning's work might be traced back to its origins, in 1958, and his doctoral dissertation – *American investment in British manufacturing industry*, when he observed that firms operating in the United States had greater levels of productivity than their British counterparts (see Dunning, 2001). This data led him to suggest two types of factors that would be gradually developed to what became to be known as *ownership advantages* – these are the advantages that the firm holds and that it could transfer to operations abroad – and *location advantages* – which are the advantages provided by certain specific locations (regions or countries or cities) that may only benefit the firms that are located. That is, to benefit from location advantages firms must have operations in those locales. One of his most remarkable findings was that the subsidiaries of the North American corporations in England would have an intermediate level of performance *vis-a-vis* the domestic operations in the US and the competing firms in England. This finding may be at the origin of the hazards of being foreign, often referred to as a *liability of foreignness* (Hymer, 1960/1976; Zaheer, 1995; Zaheer & Mosakowski, 1997).

Dunning's studies on the ownership and location advantages complement the dominant neoclassical theories, especially those founded in factor allocation (e.g., Leontieff, 1953; Hymer, 1960/1976; Posner, 1961). There were at the time a number of other scholars researching several dimensions specific to the MNCs and their context, such as Vernon (1966) who emphasized an evolutionary life cycle influencing MNCs decisions, Hufbauer (1966, 1970) focusing technological differences, Johnson (1970), whose research delved in the role of knowledge on the foreign direct investment, trade and production, Knickerbocker (1973) whose core was on the oligopolistic reaction, among many other strands of thought.

Nonetheless, the eclectic paradigm had some noteworthy differences to the main theories, principally by considering that many factor allocations were specific to the firm and as such were mobile – since firms could move – even if imperfectly (Dunning, 1972; Hennart, 1982; Dunning & Lundan, 2008b). The stark contrast to the trade theories was also clear since the trade theories tended to see the locational factor endowments as fixed, locally bounded, and per definition highly resilient to dislocation, albeit accessible to whoever was willing to invest the time and effort to access them (Dunning, 1998).

A differentiating aspect in Dunning's work was the emphasis placed not on the structural restrictions on the access to local factors (such as, for example, the tariff barriers, ownership restrictions, etc.), but rather on the imperfect transfer of the ownership advantages that hindered, or impeded, firms from transferring their

specific strategic resources (or assets) to a foreign country (Rugman, 1981). In the 60's, the economic dominant view dictated that assets could be transferred only if structural market imperfections (such as governmental intervention or monopolies) could be removed (Dunning & Rugman, 1985). Notwithstanding, Dunning's perspective as to the ownership and location advantages was reasonably close to the trade theories, in which the MNCs have an important role in the country competitiveness. In his presentation at the Nobel Symposium, in 1976, on the international location of economic activity he concludes (see Dunning, 1977, p. 410):

To summarize: the international competitiveness of a particular country will depend on the ownership endowments of its enterprises and its locational endowments, relative to those of other countries; and the transfer costs in moving goods and services from one country to another. The locational advantages will be the key influence of where production takes place, that is, the form of international involvement.

The third component of the eclectic paradigm emerges later. In an academic environment in which different schools of thoughts collided, the role and importance given to institutions and to the internalization of the activities was taking shape<sup>1</sup>. Dunning (1995 a, b) will coin them as the *endemic market failures* that emerged from information asymmetries, assets' rigidities, uncertainty and other characteristics common to market-based transactions. This is the context leading Dunning to formulate the *internalization advantages*, thus completing the three factors that compose the eclectic paradigm: ownership, location and internalization (see also, Dunning, 1981).

The concept of internalization advantages resides in the benefits for firms of exploiting their ownership advantages internally, rather than through market-domiciled transactions. The issue is seemingly simple: why do firms chose not to commercialize their specific advantages instead of exploiting them internally? The internalization component will be crucial in building up the eclectic paradigm because only with this type of advantages is clearly possible to explain the existence of MNCs – it could be preferable, for instance, to license rather than exploit internally through the set up of foreign subsidiaries. Stephen Guisinger (2001) suggested changing the I, in OLI, by an M, standing for mode of entry – since the internalization option reflects on the selection of the entry mode into foreign countries.

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1. Notably the works by: Alchian, A. & Demsetz, H. (1972) Production, information costs, and economic organization. *American Economic Review*, 62: 777-795; Akerlof, G. (1970) The market for 'lemons': Quality uncertainty and the market mechanism, *Quarterly Journal of Economics*, 84: 488-500; Spence, A. (1976) Informational aspects of market structure: An introduction, *Quarterly Journal of Economics*, 90: 591-597; Williamson, O. (1971) The vertical integration of production, *American Economic Review*, 61: 112-123; among many others.

Including the internalization advantages is not disconnected from the evolutions in the transaction costs theory, and the concept of the firm as a nexus of internal contracts (that differ from the external contracts, or in the markets). In these evolutions we find authors such as Buckley and Casson (1976), North (1984, 1985), Teece (1981, 1983, 1986), Nelson and Winter (1982) and Williamson (1975, 1985). It is also not disconnected from the observation of the growing importance of intra-firm exchanges compared to the inter-firm exchanges in the international trade flows of the post-second world war (Dunning, 1983), highlighting the role of the MNCs.

Neoclassic theory and its oligopolistic variant (Knickerbocker, 1973), was largely inadequate in explaining simultaneously the choice of location of international productions and the governance model for all the assets globally dispersed of the MNCs.

The eclectic paradigm maintained itself, over the years, quite attached to the issues of FDI and international production. However, in the 80s there was a better understanding that ownership advantages, by themselves, were not sufficient to explain the international operations of the MNCs. Notwithstanding, with the emergence of the Resource-based view the focus was dislocated to the internal aspects of firms (Barney, 1986, 1991; Teece, Pisano & Shuen, 1997; Peng, 2001). A fundamental extension occurs with Dunning's (1988) work that starts to include two types of ownership advantages – those related with the assets (Oa) and those related to the transactions (Ot) – reflecting greater ability of firms to capture the rents of the activities carried in-house contrasted to those carried in the market. The contribution was to extend the analysis of the competitive advantages associated with the ownership to the creation and appropriation of the rents with operations transactionally more complete. Still, it is evident that the paradigm remains to a large extent based on the availability of factors and in the market failures – as Dunning (1988, pp. 3) noted, in *The eclectic paradigm of international production: A restatement and some possible extensions*,

...without international market failure, the raison d'être for international production disappears" "(b)ut once it (market failure) exists, explanations of trade and production may be thought of as part of a general paradigm based upon the international disposition of factor endowments, and the costs of alternative modalities for transacting intermediate products across national boundaries.

The eclectic paradigm keeps evolving (see Table 1) and the publication of "*The eclectic paradigm in an age of alliance capitalism*" (Dunning, 1995) reveals how the focus shifts from the investment and international production issues to start encompassing the structure of the MNCs – these MNCs are growingly seen as networks (Hedlund, 1986; Bartlett & Ghoshal, 1989; Li, Ferreira & Serra, 2009). In fact, it is the nature of the MNCs' activities that differs. MNCs' activities may be categorized in market seeking, resource seeking, efficiency seeking and strategic asset seeking (Dunning, 1993). In this vein, there is also an

increasing focus on understanding MNCs' resource seeking activities and especially strategic resource seeking (Cantwell, 1989; March, 1991; Kogut & Zander, 1992, 1993). The location factor loses some importance to the ownership and internalization advantages, as necessary conditions to the MNCs' operations.

*Table 1: Genealogy of the OLI paradigm*

<b>Year</b>	<b>Title of the paper/book</b>	<b>Contribution</b>
1958	Dunning, J. (1958) <i>American investment in british manufacturing industry</i> , London: George Allen and Unwin.	The O and L components are identified in the US foreign direct investment in the british industry.
1972 & 1973	Dunning, J. (1972) The location of international firms in an enlarged EEC. An exploratory paper. Manchester, <i>Manchester Statistical Society</i> . Manchester, 45. Dunning, J. (1973) The determinants of international production. <i>Oxford Economic Papers</i> , 25(3): 289-336.	O and L components are used to explain the probable consequences of the United Kingdom joining the European Common Market.
1976	Dunning, J. (1977) Trade, location of economic activity and the MNE: A search for an eclectic approach', in Ohlin, B. Hesselborn, P., Wijkman, P. (Eds.), <i>The International Allocation of Economic Activity</i> , London: Macmillan, 395-441.	Eclectic theory is presented. The I component is added to build the OLI.
1980	Dunning, J. (1981a) Explaining the international direct investment position of countries: Towards a dynamic or developmental approach, <i>Weltwirtschaftliches Archiv</i> , 117: 30-64.	Eclectic theory is applied to explain the shifts in the position of FDI of the countries over the stages of economic development.
1981	Dunning, J. (1981) <i>International production and the multinational enterprise</i> . London: Allen and Unwin.	Change in terminology. Eclectic theory is now referred to as the eclectic paradigm. This change is explained.
1988	Dunning, J. (1988) The eclectic paradigm of international production: A restatement and some possible extensions. <i>Journal of International Business Studies</i> , 19(1): 1-31.	Separation of the ownership advantages in two types: those based on the assets (Oa) and those based on the transaction (Ot).
1993 a	Dunning, J. (1993) <i>Multinational enterprises and the global economy</i> , Addison-Wesley Publishing Company.	A new version of the eclectic paradigm that now includes FDI to augment the resource pool (parallel to the FDI seeking to explore the resources already held).
1993 b	Dunning, J.H. (1993b) <i>The globalization of business</i> , London and New York: Routledge.	Recognizes strategy as a dynamic, firm-specific variable, capable of influencing the configuration of the OLI each MNC faces.
1995	Dunning, J. (1995) Reappraising the eclectic paradigm in the age of alliance capitalism, <i>Journal of International Business Studies</i> 26(3): 461-491.	The paradigm is extended to include the advantages emerging from value added operations, relations with institutions and resources located in foreign countries. That is, it incorporates phenomena characteristic of an age of alliances among firms.
1996	Dunning, J. & Narula. R. (Eds.) (1996) <i>Foreign direct investment and governments</i> . London and New York: Routledge.	Extends the current thought on internationalization as an <i>investment development path</i> adding a fifth stage of development that includes asset seeking FDI.

1998/9	Dunning, J. (1998) Location and the multinational enterprise: A neglected factor, <i>Journal of International Business Studies</i> , 29(1): 45-66. Dunning, J. (1999) Globalization and the theory of MNE activity, in Hood, N. e Young, S. (Eds.), <i>The Globalization of Multinational Enterprise Activity</i> , London: Macmillan, 21-54.	Examines how technological developments and globalization affect the content and configuration of the OLI advantages, making specific reference to the growth of the triad countries, FDI and type of resources sought. That is, explains the intra-triad investments as resource seeking motivated.
1999	Dunning, J. & Dilyard, J. (1999) Towards a general paradigm of foreign direct and foreign portfolio investment, <i>Transnational Corporations</i> , 8(1): 1-52.	Extends the OLI incorporating portfolio investment (that is, short term investments).
2000	Dunning, J. (2000) The eclectic paradigm as an envelope for economic and business theories of MNE activity, <i>International Business Review</i> , 9(1): 163-190.	The paradigm is presented as an envelope theory of the multinational corporation, joining theories and concepts from different disciplines from economics to management.

Source: Dunning, J. (1999) *A Rose by any other name...? FDI theory in retrospect and prospect*, Mimeo, University of Reading and Rutgers University.

## 2.1. Dunning's Eclectic Paradigm

Dunning's eclectic paradigm seeks to explain why MNCs exist and why these firms may be more successful than the domestic firms in the host countries where MNCs operate (Dunning, 1988b, 2001; Dunning & Wymbs, 2001). The eclectic paradigm, in its initial formulation, according to Dunning (1988), seeks to explain why the MNCs decide to manufacture internationally using the three criteria, or advantages. Indeed, for the foreign firms to compete effectively with the domestic firms in the host countries, they must hold some sort of competitive advantage. This competitive advantage must be sufficient to overcome the costs and liabilities of foreignness (Hymer, 1976; Zaheer, 1995) and the costs of installing and operating a subsidiary abroad. That is, the foreign firm needs to generate more value added than the domestic firms.

The three advantages that need to be simultaneously present for the MNCs to prefer to conduct FDI (compared to other alternative entry modes) are (Dunning, 1977, 1981a,b, 1988, 1995, 2001): ownership, location and internalization advantages. Following, we briefly review these advantages.

Ownership advantages evidence a competitive advantage supported on holding a resource, *capability* or specific asset that confers the MNC an ability to generate superior value. Ownership advantages may be supported in a variety of operations, technologies employed, intangible assets, manufacturing or distribution process and better management know how, among others.

Location advantages refer to the foreign place where the operations are conducted. In selecting the location, the MNC need to take into account location-specific factors, such as: cost of the production factors, accessibility, availability

of knowledge, governmental industrial policies, size and potential of the market, among others. The location selected for the operations influences the firm's ability to exploit its assets, or specific-resources (that is, its ownership advantages). Inherent to the analysis of location advantages is that the resources cannot be transferred to other location (Rugman, 1981, 1985). As such, the resources cannot be appropriated at a distance and require a local presence to benefit from these location-specific resources.

Internalization advantages indicate an option to internalize or externalize activities. In certain instances, the benefits from conducting operations internally, particularly to better exploit firm-specific resources, are superior – and in these cases the MNC conducts FDI. In other instances, it might be preferable contracting in the market using modes such as licensing to external partners. As a general rule of thumb, the more important for exploiting ownership advantages abroad, the higher the propensity for internalizing operations through FDI.

The combined advantages above – *ownership, location and internalization* – composed the OLI. The OLI seeks to explain the scope and geographic distribution of the MNCs' activities (see, for example, Dunning, 1993, 2001). In sum, firms conduct FDI when they combine their specific competitive advantages with location advantages and when they prefer governing the transactions in-house to minimize transaction costs.

The three basic internationalization forms are: export, licensing and foreign direct investment. The crucial condition for firms to internationalize is that they must hold an initial competitive advantage – an ownership advantage. Notwithstanding, as shown in Table 2, those ownership advantages must combine with the advantages of internalizing operations in an optimal location.

Table 2: Advantages and entry modes

		Type of advantage		
		Ownership	Internalization	Location
Mode of entry	Licensing	✓	✗	✗
	Export	✓	✓	✗
	FDI	✓	✓	✓

Source: Adapted from Dunning, J. (1981b) *International production and the multinational enterprise*, London and Boston. Allen & Unwin.

Dunning (1988) advances four different types of foreign direct investment motives:

- Resource seeking – to access natural resources, raw materials or other productive factor in more advantageous conditions.
- Market seeking – to enter a new market and enlarge the pool of potential clients.



- Efficiency seeking – to improve the efficiency of the firm, making it more productive.
- Strategic asset seeking – to develop the firm’s competences, resources and capabilities, thus contributing to augment its competitive advantage.

The eclectic paradigm has known multiple applications and uses. For instance, it is possible to analyze the availability of certain country’s resources, its position, or location advantages to understand how firms in a given industry will likely act (Stopford, Strange & Henley, 1991). In table 3 we synthesize four situations where ownership and location advantages vary. When firms have high competitive advantages (or ownership advantages) but manufacturing in the home market is more expensive and the transportation costs incurred to export are high, firms will tend to prefer investing directly in the host market (the top right corner in table 3). However, if the home country confers firms will location advantages, it will be more likely that firms will prefer to concentrate production domestically and serve the foreign markets through exports (top left corner in table 3). Analyzing the remaining situations is quite straightforward, but warrants a warning: firms that do not hold any form of competitive advantage will hardly have an incentive to internationalize their operations.

Table 3: Trade and pattern of FDI to industries and countries

		Location advantages	
		Strong	Weak
Ownership advantages	Strong	Exports	FDI outflows
	Weak	FDI inflows	Imports

Source: Stopford, J., Strange, S. & Henley, J. (1991) *Rival states, rival firms*. Cambridge University Press.

The eclectic paradigm also evolved to refer to models of inter-firm cooperation (Dunning, 1995, 1997) such as strategic alliances. In fact, inter-firm cooperation permits a reduction of market imperfections, at least in some circumstances, lowering the need to internalize activities as a manner to benefit from possessing valuable resources.

One of the core contributions of Dunning’s work is that firms must hold a firm-specific competitive advantage as a condition for the very existence of the multinational corporation. In effect, much of the emphasis of international business/strategy research delves nowadays into what are the strategic resources and how they influence the MNCs’ actions – in an array of decisions, from market selection to entry modes and including even the configuration of inter-subsidiary ties (Bartlett & Ghoshal, 1989; Kogut & Chang, 1991; Kogut & Zander, 1992, 1993; Morck & Yeung, 2001; Li, Ferreira & Serra, 2009). Currently, this line of

research is known as the *Resource-based view*, developed by scholars such as Barney (1986, 1991), Wernerfelt (1984), Penrose (1959), Tallman (1991), Peteraf (1993), among others. Specifically, knowledge has been pointed as explaining the existence of the MNCs (Kogut & Zander, 1992). The mechanisms on how firms access novel knowledge (Ferreira, 2005) and how it is transferred internally (Li et al., 2009) among subsidiaries of the same headquarters gain scholarly attention.

In sum, according to Dunning (1988), the way MNCs act in a certain market is a combination of three factors that vary with the country, the industry and the firms' characteristics. First, the firm must hold ownership (O) advantages, that compensate the hazards of being foreign and provide a good competitive position in the host market. Second, location (L) advantages of the host market must be identified and evaluated in the lenses of the firm's strategy. That is, it must take into account the specific advantages that a certain location has and the factors that cannot be transferred, or traded, to other locations (*non-tradeable goods*). Third, it is necessary to evaluate whether the ownership advantages might be better than internalization (I) or whether it is preferable to engage in partnerships with other firms or any other alternative market-based governance form (Dunning, 1977, 1988, 2000; Dunning & Lundan, 2008). These advantages are summarized in Table 4 below.

Table 4: OLI advantages

<b>Ownership or firm-specific advantages</b>	<b>Location advantages</b>	<b>Internalization advantages</b>
Access markets, products and factors.	Market potential.	Reduction of transaction costs. Protection of property rights.
Product differentiation; risk diversification; specific endowments	Differences in input prices. Quality of the inputs (e.g., natural resources, sophistication of the labor). Financial resources. Transport costs, communications and infra-structures.	Asymmetric information among suppliers and buyers (market imperfections). Reduction of exchange rate costs. Agreements are possible.
Greater efficiency, coordination and leverage of the resources accessed in each location improving firm's capabilities and resource pool.	Barriers to free trade (e.g., import quotas, tariffs). Distance to the factor markets and inputs.	Avoid or exploit governmental intervention (such as tariffs or investment incentives).
Use of headquarter's resources (e.g., through transfer prices).	Investment policies; country risk, tax incentives of the host country.	Reduction of buyer and/or supplier uncertainty.
Larger size, economies of scale and scope. Prior multinationality.	Physical distance, language, culture.	Control the supply in terms of quality and quantity. Control sales.
Flexibility in the acquisition or production due to better location. Recognition of opportunities for mergers and acquisitions, new competitive advantages or increase of the market share.	<i>Clusters</i> of related firms, benefiting from agglomeration externalities.	Strategic gains. Internalization of externalities.

Source: Adapted from Dunning, J. (1999) A Rose by any other name...? FDI theory in retrospect and prospect, Mimeo, University of Reading and Rutgers University.

## 2.2. Main Critiques of the Eclectic Paradigm

Despite the importance of the eclectic paradigm in international strategy/business research for the past three decades, there are a number of critiques that warrant recognition (see, for instance, Kojima, 1982; Rugman, 1981, 1985; Vernon, 1985). By its nature and genesis, the eclectic paradigm synthesizes several conceptual contributions from an array of backgrounds, from industrial economics (with Hymer's work, for instance), transaction costs (Coase and Williamson) and international location.

A frequent critique is the explanatory power of the identified variables, that albeit numerous, raises concerns over its predictive power, as Dunning (1988) himself noted. In reality, the measurable variables to compose the OLI are supported in theory. For example, the variables specific to the internalization (I) dimension are related to the costs and benefits of each governance model to coordinate economic activity. It is clear the role of Williamson's work (1975,

1985) on the transaction costs theory of Coase (1936) and Penrose (1959), on the nature and growth of the firm. The argument expressed in the eclectic paradigm, through the internalization advantages is that the higher the costs of production and transaction (or the lower the benefits) of using the external markets – comparatively to using internal coordination – the higher the incentive for firms to conduct FDI. It matters, nonetheless, to note that the core of Dunning's contribution is not on providing a model that is explanatory of all foreign investment and foreign production decisions, but rather only to establish a method for analyzing firms decisions of carrying foreign operations.

Some authors noted that the OLI dimensions are not completely independent. For instance, the way firms react to location variables might influence the ownership advantages and even the attractiveness of internalizing foreign operations. Rugman (1981, 1985), for example, argues that internalization is the only one of the three dimensions that really determines FDI and that the eclectic paradigm only sets conditions that are important when analyzing FDI. However, it does not sustain a choice between FDI and other alternative foreign entry modes, such as exports, licensing and joint ventures.

The crucial importance of ownership advantages was also criticized, albeit it is the foundational dimension in the paradigm. In reality, it is likely that a firm may decide on internationalization only on the basis of location advantages – or the comparative advantages among countries – as the more traditional international trade theories suggested (e.g., Vernon, 1966).

Another critique to the paradigm is that it does not leave room for firms' strategies, making it a rather static perspective. In its defense, Dunning (1988) argued that strategy has in effect a relevant role since it may influence the OLI configuration – namely through actions that alter the internalization and ownership advantages. In the same vein, there might be external variations, for example in the prices of the raw materials, demographic, in governmental policies, and so forth, that may have a substantial impact.

Lastly, the critiques are based on the difficulty of operationalizing the concepts in a manner as to convert the paradigm to a truly empirically tested theory.

### **3. Bibliometric Study in the SMJ**

#### **3.1. Method**

The method used follows Ramos-Rodriguez and Ruiz-Navarro (2004) in their analysis of the changes in the intellectual structure of the research published in the *Strategic Management Journal* from 1980 to 2009. This is a bibliometric study since we examine the papers published and attempt to identify patterns and trends.

Specifically, we used a citation and co-citation analysis (White & Griffith, 1981; White & McCain, 1998). Citation analysis depends on the use of documents (books, papers published, working papers, and so forth) that we usually identify in the references section when writing a paper. The use of those references is a signal of the importance that prior work has on our own new writing. Hence, it is reasonable to argue that the more a specific piece is cited, the more important, or influential, it is for the discipline and knowledge development (Tahai & Meyer, 1999). The co-citation analysis, on the other hand, examines possible groups, or pairs, of papers that are cited together in an article. That is to say that works that are cited jointly in a paper will probably have some content identity or contribute to a desired goal. Using this process we may determine groups of authors and themes, or theories, and how they might be related (we recommend reading in this regard, White & Griffith, 1981; McCain, 1990; White & McCain, 1998).

### 3.2. Procedure and Sample

The bibliometric study conducted resorted to the *Strategic Management Journal* (SMJ). The SMJ is recognized as the top scholarly journal in strategy and the papers published are available for download in the databases commonly used by the universities worldwide. We further decided not to limit the period of observation and hence we examined the entire track record of the SMJ – from 1980 to 2009, a period of 30 years. During this period, SMJ published a total of 1,752 articles.

The SMJ is the main publication of the Strategic Management Society, which is organized in nine interest groups, one of which is global strategy. This is likely to be the group publishing work broadly defined as international strategy. The global strategy group defines the area as:

This Interest Group focuses on international or global firms. It is explicitly concerned with the impact of evolving global, international, and regional cultural, social, economic, technological, environmental, and political forces on the development and content of organization forms and strategies. Other specific interests include comparative strategic and organizational studies, cross-border management of corporate or business strategy and operations, parent-subsidiary relationships, and foreign location entry strategies. (Accessed in [http://strategicmanagement.net/ig/global\\_strategy.php](http://strategicmanagement.net/ig/global_strategy.php), 15/01/2011).

We selected every paper that cited at least one of John Dunning's Works. This initial search summed 90 articles, with at least one citation to Dunning. We downloaded these papers and collected all the references used in each of the 90 articles. Any incongruence of titles, volumes or issue were corrected. As for the books cited, we used the first edition.

The data collected was organized using the software Bibexcel<sup>2</sup> to generate the citation and co-citation matrices. In all instances we followed the method advanced in Ramos-Rodriguez and Ruiz-Navarro (2004).

#### 4. Results

During the period under investigation (30 years), 32 of Dunning's Works were cited (Table 5 shows the number of citations per paper/book). However, for this analysis we only used the top three most cited works (2 books and 1 article).

*Table 5: Dunning's most cited articles*

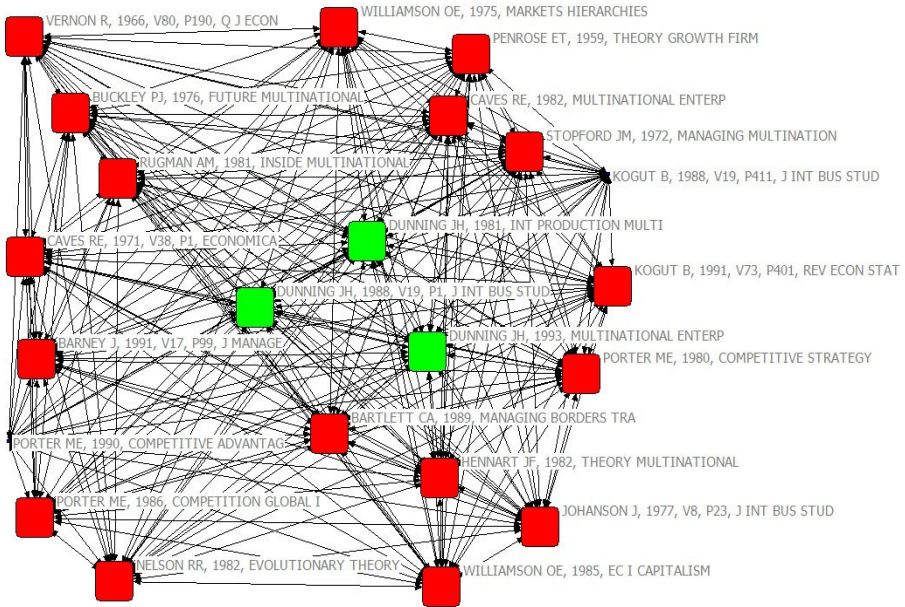
# citations	References
20	Dunning, J. (1993) <i>Multinational enterprises and the global economy</i> , Addison-Wesley Publishing Company.
14	Dunning, J. (1981) <i>International production and the multinational enterprise</i> . London: Allen and Unwin.
14	Dunning, J. (1988) The eclectic paradigm of international production: A restatement and some possible extensions. <i>Journal of International Business Studies</i> , 19(1): 1-31.
10	Dunning, J. (1977) Trade, location of economic activity and the MNE: A search for an eclectic approach. In Ohlin, B., Hesselborn, P. and Wijkman, P. (Eds). <i>The international allocation of economic activity</i> , Macmillan, London, 395-418.
7	Dunning, J. (1980) Toward an eclectic theory of international production: Some empirical tests, <i>Journal of International Business Studies</i> , 11: 9-31.
7	Dunning, J. (1988) <i>Explaining international production</i> , London: Unwin Hyman.
7	Dunning, J. (1998) Location and the multinational enterprise: A neglected factor, <i>Journal of International Business Studies</i> , 29(1): 45-66.
6	Dunning, J. (1973) The determinants of international production, <i>Oxford Economic Paper</i> 25: 289-325.
4	Dunning, J. & Rugman, A. (1985) The influence of Hymer's dissertation on the theory of foreign direct investment, <i>American Economic Review</i> , 75: 228-32.
4	Dunning, J. (1995) Reappraising the eclectic paradigm in the age of alliance capitalism, <i>Journal of International Business Studies</i> , 26(3): 461-491.
3	Dunning, J. (1986) <i>Japanese participation in British industry</i> , London: Croom Helm.
3	Dunning, J. (1996) The geographical sources of competitiveness of firms: Some results of a new survey, <i>Transnational Corporations</i> , 5(3): 1-30.
2	Dunning, J. (1958) <i>American investment in british manufacturing industry</i> , London: Allen and Unwin.
2	Dunning, J. (1979) Explaining changing patterns of international production: In defence of the eclectic theory, <i>Oxford Bulletin of Economics and Statistics</i> , 41: 269-296.
2	Dunning, J. & McQueen, M. (1981) The eclectic theory of international production: A case study of the international hotel industry, <i>Managerial and Decision Economics</i> , 2: 1-15.
2	Dunning, J. (1983) Market power of the firm and international transfer of technology: A historical excursion, <i>International Journal of Industrial Organization</i> , 1(4): 333-351.

2. Available at <http://www.umu.se/inforsk/Bibexcel>

2	Dunning, J. (1993) <i>The globalization of business: The challenge of the 1990s</i> , London and New York: Routledge.
2	Dunning, J. (1994) Re-evaluating the benefits of foreign direct investment, <i>Research Policy</i> , 23: 9-22.
2	Dunning, J. (1998) Globalization, technological change and the spatial organization of economic activity, in Chandler, A., Hagström, P. & Sölvell, O. (Eds.) <i>The Dynamic Firm</i> , Oxford: Oxford University Press, 289-314.
1	Dunning, J. (1973) The determinants of international production, <i>Oxford Economic Paper</i> , 25: 289-325.
1	Dunning, J. (1974) Economic analysis and the multinational enterprise - <i>Economic analysis and the multinational enterprise</i> , London, George Allen & Unwin Ltd.
1	Dunning, J. (1981) <i>The eclectic theory of the MNC</i> , London: Allen & Unwin
1	Dunning, J. & Stopford, J. (1983) <i>Multinational enterprises: Global trends and company performance</i> , Basingstoke: Macmillan.
1	Dunning, J. & Rugman, A. (1985) The influence of Hymer's dissertation on the theory of foreign direct investment, <i>American Economic Review</i> , 75: 228-32.
1	Dunning, J. & Pearce, R. (1985) <i>The world's largest industrial enterprises 1962-82</i> , Farnham: Gower Press.
1	Dunning, J. & Robson, P. (1988) <i>Multinationals and the European community</i> , Oxford: Basil Blackwell.
1	Dunning, J. (1990) <i>The globalization of firms and the competitiveness of countries: Some implications for the theory of international production</i> , Craford Lectures 2, Institute of Economic Research, Lund University Press, Sweden.
1	Dunning, J. (1992) <i>The theory of transnational corporations</i> , UNCTC Library on Transnational Corporations, London: Routledge.
1	Dunning, J. & Narula, R. (1995) The R&D activities of foreign firms in the US, <i>International Studies of Management and Organization</i> , 25: 39-73.
1	Dunning, J. (1997) <i>Governments, globalization and international business</i> , Oxford: Clarendon Press.
1	Dunning, J. (1998) MNEs: An overview of relations with national governments, <i>New Political Economy</i> , IV(1): 280-84.
1	Dunning, J. (2000) The eclectic paradigm as an envelope for economic and business theories of MNE activity, <i>International Business Review</i> , 9(1): 163-90.
1	Dunning, J. & Lundan, S. (2008) Institutions and the OLI paradigm of the multinational enterprise, <i>Asia Pacific Journal of Management</i> , 25(4): 573-593.

In figure 1 we present a co-citation map for the top 20 most cited papers, including Dunning's three most cited. We further evidence the connections among these papers. In the figure, the dimension of the squares is proportional to the citation frequency. The lines connecting the authors and papers reflect the co-citations and illustrate the relationships between the ideas of different authors.

Figure 1: Co-citation map of the 20 most cited papers



### 5. Discussion and Final Remarks

In this paper we set out to examine the influence of Dunning’s work in strategic and international business research, noting his main theoretical contributions for the advancement of the discipline. We summarize the core features of the knowledge associated with Dunning and empirically look at the papers published in the *Strategic Management Journal*, during a thirty years period. With these procedures we try to understand the structure of the intellectual links between theories and authors, inferring Dunning’s contribution – the Eclectic paradigm – to the extant research.

In his 1988 paper, one of the most cited papers, Dunning defends the eclectic paradigm. In fact, his work is based on the inputs from various streams and theories of thought, but Dunning also contributes to the enrichment of other theories and perspectives, especially to the study of multinational corporations, international strategy and international business more broadly. In fact, examining figure 1 we observe that there are substantial linkages between different authors and theories and Dunning’s work. Moreover, we may observe that the figure includes several of the core theories in international strategy/business.

Porter (1980, 1985) represents the contribution to the industrial organization, particularly with the strategy-structure-performance paradigm. The work of Porter extends to the understanding of competitive strategy (1980), namely when



applied to the competition in global industries (1986) and to the competitive advantage of nations (1990) – studies that are relevant, in an international business lenses, including to the international strategy decisions, and foreign location selection. In this stream of research we highlight the work of Caves (1982) on the multinational corporations, in an industrial organization perspective. The work of Vernon (1966) aids in explaining trade and investment flows and the selection of locations where to place foreign production.

Dunning's research is cited jointly with some of the foundational papers on the resource-based view (RBV). One of the most cited papers on the RBV is Barney (1991), where he identifies four features that strategic resources must possess to confer a competitive advantage. Among the seminal papers on the RBV is Penrose's (1959). Kogut and Shang (1991) analyzed the importance of technological resources specific to the firms in their decision to undertake FDI.

Dunning's Works are also used on transaction costs theory-based articles. The co-citation analysis identifies works by Williamson (1975, 1985), Hennart (1982) and Rugman (1981) cited jointly with Dunning. Buckley and Casson's (1976) book also focuses on the existence of the multinational corporation as a manner to overcome market imperfections in the intermediate products, especially knowledge. Stopford and Wells (1972) is also influenced by the transaction costs theory, focusing on foreign entry mode decisions in the context of uncertainty but where firm's experience plays a relevant role on the choice of the entry mode.

It is worth pointing out the link with Nelson and Winter's (1982) evolutionary theory. Johanson and Vahne (1977) examine internationalization as a gradual and evolutionary process that suggests a set of sequential stages on international expansion. This is known as the Nordic School of internationalization, originated at the University of Upsala during the 70's. The paper by Kogut and Singh (1988) on the effect of national culture on the choice of the foreign entry modes was a pioneer in creating a measure of cultural distance. Other studies have focused on the uncertainty involved in entering foreign markets, but as firms accumulate experience and knowledge on the markets and more broadly on operating internationally (Ferreira, 2005), the uncertainty associated with operating in diverse environments, namely culturally diverse, is reduced. The MNC may thus evolve more easily to modes of entry involving higher commitment of resources, such as greenfield startup investments and acquisitions of existing firms, probably in the host country.

Our paper has some limitations in its empirical component. Broadly stated these are limitations regarding the bibliometric method employed. One limitation is manifest in the choice of the journal to carry out the analysis. The SMJ is recognized as the most reputed outlet for strategic management research and is available in most universities' databases but by using only one journal we limit the potential scope of the results. In fact, the articles identified are but a mere fraction of all research published, albeit it may be representative of the highest

quality research. Nonetheless, perhaps the results could be different by using a broader set of journals.

The limitations of the bibliometric method are related to the difficulty in identifying the context in which a certain citation is made. That is, we do not know what was the authors' intention when he cites another paper in his own work (see about this Ramos-Rodriguez & Ruiz-Navarro, 2004). Indeed we do not know, for instance, if when making a citation the author intends to make a critique of that work or, conversely, whether if he intends to build on the knowledge it puts forward. On the other hand, there may be some references missing from the reference list of the papers used to construct the co-citation analysis.

Moreover, it is likely that the older papers – those published longer ago – be more often cited than more recent papers. The effect is obvious, older articles are better known than newer articles and thus have a larger number of citations. Nonetheless, we should point out that the most cited, most recognized papers are actually older. And it is noticeable that we tend to cite the seminal pieces, perhaps more often than desirable, since it gives research a somewhat outdated look and there is new research that could be cited. In this regard, we did a brief analysis of which of Dunning's papers were more cited and we noted that his 1988 piece "The Eclectic Paradigm of international production: A restatement and some possible extensions" has been cited 387 times, considering only the journals included in the IsiKnowledge – thus from ISI journals.

Lastly, the co-citation method permits the analysis of only small groups of articles, in this case of pairs of articles. The analysis would be profoundly richer if it were possible to analyze the entire set of references in each article published, to better understand the citations made in each paper. Future research may overcome this limitation by drawing from a more sophisticated technique.

In future research we may use a larger number of journals. Eventually, it will be possible to analyze the interrelationships among authors and theories. It is likely that network related techniques will permit identify clusters of papers, theories and authors. These techniques may even detect who are the more central players in the intellectual structure of the field. Network techniques may permit examining the maps of citations and co-citations to this end.

Understanding the structure of knowledge and the interrelationships among theories, concepts, schools of thought and authors, helps us in capturing an integrative, or holistic, of the current status of the discipline. Dunning's works are outstanding in the systematization of different decisions that firms undertake in their internationalization. His contribution extends to the forms or models for internationalization, the modes firms organize to transact in the market and even to the location selection. If Dunning's work is remarkable for its depth and extent, reflection of a fifty years career devoted to academia, his impact crosses the narrow boundaries of his matter discipline.

**References:**

- Anderson, E. & Gatignon, H. (1986) Modes of foreign entry: A transaction cost-analysis and propositions. *Journal of International Business Studies*, 17(3): 1-26.
- Barkema, H. & Vermeulen, F. (1998) International expansion through start-up or acquisition: A learning perspective. *Academy of Management Journal*, 41(1): 7-26.
- Barkema, H., Bell, J. & Pennings, J. (1996) Foreign entry, cultural barriers and learning. *Strategic Management Journal*, 17(2): 151-166.
- Barney, J. (1986) Strategic factor markets: Expectations, luck and business strategy. *Management Science*, 42: 1231-1241.
- Barney, J. (1991) Firm resources and sustained competitive advantage. *Journal of Management*, 17(1): 99-120.
- Bartlett, C. & Ghoshal, S. (1989) *Managing across borders: The transnational solution*. Harvard Business School Press, Boston, Massachusetts.
- Buckley, P. & Casson, M. (1976) *The future of the multinational enterprise*. Macmillan: London.
- Cantwell, J. (1989) *Technological innovation and multinational corporations*. Oxford: Basil Blackwell.
- Caves, R. (1971) International corporations: the industrial economics of foreign investment. *Economica*, 38: 1-27.
- Caves, R. (1982) *Multinational enterprise and economic analysis*. The Cambridge University Press, Cambridge.
- Chang, S. (1996) An evolutionary perspective on diversification and corporate restructuring: Entry, exit, and economic performance during 1981-1989. *Strategic Management Journal*, 17: 587-612.
- Chang, S. (1995) International expansion strategy of Japanese firms: Capability building through sequential entry. *Academy of Management Journal*, 38: 383-407.
- Coase, R. (1937) The nature of the firm. *Economica*, 4: 386-405.
- Cohen, W. & Levinthal, D. (1990) Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35: 128-152.
- Dierickx, I. & Cool, K. (1989) Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12): 1504-1511.
- DiMaggio, P. & Powell, W. (1983) The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147-160.
- Dunning, J. (1958) *American investment in British manufacturing industry*. London: George Allen and Unwin.
- Dunning, J. (1972) The location of international firms in an enlarged EEC. An exploratory paper. Manchester, *Manchester Statistical Society*. Manchester, 45.
- Dunning, J. (1973) The determinants of international production. *Oxford Economic Papers*, 25 (3): 289-336.
- Dunning, J. (1977) Trade, location of economic activity and the MNE: A search for an eclectic approach, in Ohlin, B.; Hesselborn, P.; Wijkman, P. (Eds.) *The International Allocation of Economic Activity*, London: Macmillan, 395-418.
- Dunning, J. (1981a) Explaining the international direct investment position of countries: Towards a dynamic or developmental approach, *Weltwirtschaftliches Archiv*, 117: 30-64.
- Dunning, J. (1981b) *International production and the multinational enterprise*. London and Boston: Allen & Unwin.
- Dunning, J. (1983) Changes in the level and structure of international production. In Casson, M. (Ed.), *The Growth of International Business*, 84-139. London: Allen & Unwin.
- Dunning, J. & Rugman, A. (1985) The influence of Hymers' dissertation on the theory of foreign direct investment. *American Economic Review*, 75(2): 228-232.
- Dunning, J. (1988) The eclectic paradigm of international production: a restatement and some possible extensions. *Journal of International Business Studies*, 19(1): 1-31.
- Dunning, J. (1990) *The globalization of firms and the competitiveness of countries: Some implications for the theory of international production*, Craford Lectures 2, Institute of Economic Research, Lund University Press, Sweden.

- Dunning, J. (1993a) *Multinational enterprises and the global economy*. Reading, Mass, and Wokingham, England: Addison-Wesley.
- Dunning, J. (1993b) *The globalisation of business*. London and New York: Routledge.
- Dunning, J. (1995) Reappraising the eclectic paradigm in the age of alliance capitalism. *Journal of International Business Studies*, 26(3): 461-491.
- Dunning, J. & Narula, R. (1996) *Foreign direct investment and governments: Catalysts for economic restructuring*. London and New York: Routledge.
- Dunning, J. (1997) *Alliance capitalism and global business*. London and New York: Routledge.
- Dunning, J. (1998) Location and the multinational enterprise: A neglected factor. *Journal of International Business Studies*, 29(1): 45-66.
- Dunning, J., Hoessel, V. & Narula, R. (1998) Third world multinationals revisited: New developments and theoretical implications, In Dunning, J. (Ed.), *Globalization, Trade and Foreign Direct Investment*, Oxford: Pergamon Press, 255-286.
- Dunning, J. (1999) Globalization and the theory of MNE activity. In Hood, N. & Young, S. (Eds.), *The globalization of multinational enterprise activity*, London: Macmillan, 2 1-54.
- Dunning, J. (1999) *A rose by any other name...? FDI theory in retrospect and prospect*. Mimeo, University of Reading and Rutgers University.
- Dunning, J. & Dilyard, J. (1999) Towards a general paradigm of foreign direct and foreign portfolio investment. *Transnational Corporations*, 8(1): 1-52.
- Dunning, J. (2000) The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, 9(1): 163-190.
- Dunning, J., Kim, C. & Lin, J.-D. (2001) Incorporating trade into the investment development path: A case study of the Republic of Korea and Taiwan. *Oxford Development Studies*, 29: 145-154.
- Dunning, J. & Wymbs, C. (2001) The challenge of electronic markets for international business theory. *International Journal of the Economics of Business*, 8(2): 273-301.
- Dunning, J. (2003a) The contribution of Edith Penrose to international business scholarship. *Management International Review*, 43(1): 3-119.
- Dunning, J. (2003b) Some antecedents of internalization theory. *Journal of International Business Studies*, 34(1): 108-115.
- Dunning, J. (2004) An evolving paradigm of the economic determinants of international business activity. In Cheng, J. & Hitt, M. (Eds.). *Managing multinationals in a knowledge economy: Economics, culture, and human resources*, 15, 3-27. Amsterdam: Elsevier.
- Dunning, J. & Narula, R. (2004) *Multinationals and industrial competitiveness: A new agenda*. Cheltenham, UK: Edward Elgar.
- Dunning, J. & Narula, R. (2004b) Relational assets: The new competitive advantages of MNEs and countries. In Dunning, J. and Narula, R. (Eds.) *Multinationals and industrial competitiveness*. Edward Elgar Publishing.
- Dunning, J. (2006) Comment on dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23(2): 139-141.
- Dunning, J. (2006) *Space, location and distance in international business activities*. Paper presented at annual meeting of *European Academy of International Business*, Fribourg, Switzerland.
- Dunning, J. & Lundan, S. (2008a) Institutions and the OLI paradigm of the multinational enterprise, *Asia Pacific Journal of Management*, 25(4): 573-593.
- Dunning, J. & Lundan, S. (2008b) *Multinational enterprises and the global economy*. 2nd Edition, Basingstoke, Edward Elgar.
- Ferreira, M. P. (2005) *Building and leveraging knowledge capabilities through cross border acquisitions: The effect of the multinational corporation's capabilities and knowledge strategy on the degree of equity ownership*. Tese de doutoramento não publicada, The University of Utah, EUA.
- Grant, R. (1996) Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17: 109-122.
- Guisinger, S. (2001) From OLI to OLMA: Incorporating higher levels of environmental and structural complexity into the eclectic paradigm. *International Journal of the Economics of Business*, 8 (2): 257-272.
- Hufbauer, G. (1966) *Synthetic materials and the theory of international trade*. Cambridge MA: Harvard University Press.

- Hufbauer, G. (1970) The impact of national characteristics and technology on the commodity composition of trade in manufactured goods. In Vernon, R. (Ed.), *The Technology Factor in International Trade*. New York: Columbia University Press.
- Hedlund, G. (1986) The hypermodern MNC: A heterarchy?, *Human Resources Management*, 15: 73-90.
- Hennart, J-F. (1988) The transaction costs theory of joint ventures: An empirical study of Japanese subsidiaries in the United States. *Management Science*, 37(4): 483-497.
- Hennart, J.-F. (1982) *A theory of multinational enterprise*. University of Michigan Press: Ann Arbor.
- Hennart, J.-F. (1988) A transaction costs theory of equity joint ventures. *Strategic Management Journal*, 9(4): 361-374.
- Hitt, M., Hoskisson, R. & Kim, H. (1997) International diversification: Effects on innovation and firm performance in product diversified firms. *Academy of Management Journal*, 40: 767-798.
- Hymer, S. (1960/1976) *The international operations of national firms: A study of FDI*. Cambridge, Mass.: MIT Press.
- Huggins, R., Demirbag, M. & Ratcheva, V. (2007) Global knowledge and R&D foreign direct investment flows: Recent patterns in Asia Pacific, Europe, and North America. *International Review of Applied Economics*, 21(3): 437-451.
- Johanson, J. & Vahlne, J. (1977) The internationalisation process of the firm: A model of knowledge development and increasing foreign market commitment, *Journal of International Business Studies*, 8: 23-32.
- Johnson, J. (1970) The efficiency and welfare implications of the international corporation. In Kindleberger, C. (Ed.) *The international corporation: A symposium*. Cambridge, MA: MIT Press.
- Knickerbocker, F. (1973) *Oligopolistic reaction and the multinational enterprise*. Harvard University Press, Vambridge, Mass.
- Kobrin, S. (1991) An empirical analysis of the determinants of global integration. *Strategic Management Journal*, 12: 17-31.
- Kogut, B. (1983) Foreign direct investment as a sequential process, Selected conference paper in Kindleberger, C. e Audretsch, D. (Eds.) *The multinational corporation in the 1980's*, MIT Press.
- Kogut, B. & Chang, S. (1991) Technological capabilities and Japanese foreign direct investment in the United States. *Review of Economics and Statistics*, 73: 401-413.
- Kogut, B. & Singh, H. (1988) The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19: 411-432.
- Kogut, B. & Zander, U. (1992) Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3: 383-397.
- Kogut, B. & Zander, U. (1993) Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, fourth quarter: 625-645.
- Kogut, B. (1988) Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9(4): 319-332.
- Kojima, K. (1982) Macro economic versus international business approaches to foreign direct investment, *Hotosubashi. Journal of Economics*, 23: 1-19.
- Kostova, T. & Zaheer, S. (1999) Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1): 64-81.
- Li, D., Ferreira, M.P. & Serra, F. (2009) Technology transfer within MNEs: Inter-subsidiary competition and cooperation. *Revista de Administração e Inovação*, 6: 139-158.
- Leontieff, W. (1953) Domestic production and foreign trade: The American capital position re-examined. *Proceedings of the American Philosophical Society*, 97.
- March, J. (1991) Exploration and exploitation in organizational learning. *Organization Science*, 2(1): 71-87.
- McCain, K. (1990) Mapping authors in intellectual space: A technical overview. *Journal of the American Society for Information Science*, 41: 433-443.
- McManus, J. (1972) The theory of the multinational firm, in Paquet, G. (Ed.) *The Multinational Firm and the Nation State*. Toronto: Collier-Macmillan.

- Mitchell, W., Shaver, J. & Yeung, B. (1994) Foreign entrant survival and foreign market share: Canadian companies' experience in United States medical sector markets. *Strategic Management Journal*, 15(7): 555-567.
- Morck, R. & Yeung, B. (1991) Why investors value multinationality. *Journal of Business*, 64(2): 165-87.
- Nelson, R. & Winter, S. (1982) *An evolutionary theory of economic change*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- North, D. (1984) Transaction costs, institutions and economic history. *Zeitschrift für die Gesamte Staatswissenschaft (JITE)*, 140(1): 7-17.
- North, D. (1985) Transaction costs in history. *Journal of European Economic History*, 14(3): 557-574.
- Peng, M. (2001) The resource-based view and international business. *Strategic Management Journal*, 27: 803-829.
- Penrose, E. (1959) *The theory of the growth of the firm*. Oxford University Press: New York.
- Peteraf, M. (1993) The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3): 179-191.
- Porter, M. (1986) Competition in global industries: A conceptual framework, in Porter, M. (Ed.) *Competition in global industries*, Harvard Business School Press, Boston.
- Porter, M. (1980) *Competitive strategy: Techniques for analyzing industries and competitors*. New York, Free Press.
- Porter, M. (1980) *The competitive advantage of nations*. New York, Free Press.
- Posner, M. (1961) International trade and technical change. *Oxford Economic Papers*, 13(3): 323-341.
- Prahalad, C. & Hamel, G. (1990) The core competence of the corporation, *Harvard Business Review*, 68(3): 79-91.
- Prahalad, C. & Doz, Y. (1987) *The multinational mission: balancing local demands and global vision*. New York: Free Press.
- Ramos-Rodriguez, A. & Ruiz-Navarro, J. (2004) Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal, 1980-2000. *Strategic Management Journal*, 25(10): 981-1004.
- Rugman, A. (1981) *Inside the multinationals: The economics of internal markets*. London: Croom Helm.
- Rugman, A. (1985) Multinationals and global competitive strategy. *International studies of management and organization*, XV(2): 8-18.
- Shaver, J. (1998) Accounting for endogeneity when assessing strategy. *Management Science*, 44(4): 571-585.
- Stinchcombe, A. (1965) Social structure and organizations. In March, J. (Ed.) *Handbook of Organizations* (142-193). Chicago, IL: Rand McNally & Company.
- Stoina, C. & Filippaios, F. (2008) Dunning's eclectic paradigm: A holistic, yet context specific framework for analyzing the determinants of outward FDI: Evidence from international Greek investments. *International Business Review*, 17(3): 349-367.
- Stopford, J. & Wells, L. (1972) *Managing the multinational enterprise: organisation of the firm and ownership of the subsidiaries*. New York: Basic Books.
- Stopford, J., Strange, S. & Henley, J. (1991) *Rival states, rival firms*. Cambridge University Press.
- Tahai, A. & Meyer, M. (1999) A revealed preference study of management journals' direct influences. *Strategic Management Journal*, 20(3): 279-296.
- Tallman, S. (1991) Strategic management models and resource-based strategies among MNEs in a host market. *Strategic Management Journal*, 12 (sp. Issue): 69-82.
- Teece, D. (1986) Transaction cost economics and the multinational enterprise: An assessment. *Journal of Economic Behavior and Organization*, 7(1): 21-45.
- Teece, D. (1981) The multinational enterprise: Market failure and market power considerations. *Sloan Management Review*, 22(3): 3-17.
- Teece, D., Pisano, G. & Shuen, A. (1997) Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7): 509-533.
- Teece, D. (1977) Technology transfer by multinational firms: The resource cost of transferring technological know-how. *The Economic Journal*, 87: 242-261.

- Teece, D. (1983) Technological and organizational factors in the theory of the multinational enterprise. In Casson, M. (Ed.), *Growth of International Business*. London: Allen & Unwin.
- Vernon, R. (1985) Comment on chapter by J. H. Dunning and G. Norman. In Erdilek, A, (Ed.) *Multinational as mutual invaders*. London: Croom Helm.
- Vernon, R. (1966) International investments and international trade in the product cycle. *Quarterly Journal of Economics*, 80: 190-207.
- Wernerfelt, B. (1984) A resourced-based view of the firm. *Strategic Management Journal*, 5(2): 171-180.
- White, D. & McCain, K. (1998) Visualizing a discipline: An author co-citation analysis of information science, 1972–1995. *Journal of the American Society for Information Science*, 49: 327–355.
- White, H. & Griffith, B. (1981) Author co-citation: a literature measure of intellectual structure. *Journal of the American Society for Information Science*, 32: 163–171.
- Williamson, O. (1975) *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Williamson, O. (1985) *The economic institutions of capitalism: Firms, markets, relational contracting*. New York: The Free Press.
- Zaheer, S. (1995) Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2): 341-363.
- Zaheer, S. & Mosakowski, E. (1997) The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal*, 18(6): 439-464.

