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MULTINATIONALITY-PERFORMANCE RELATIONSHIP: A REVIEW AND RECONCEPTUALIZATION

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Numerous empirical investigations have attempted to study the relationship between multinationality and firm performance. Results from these studies have produced conflicting findings about this relationship. We argue that one of the causes of the conflicting findings may be an imprecise conceptualization of multinationality. We propose a multidimensional conceptualization based on a methodological review of previous research.

The last five decades have witnessed a tremendous growth in international trade, fueled by the rapid expansion of multidivisional, multiproduct firms that consider the whole world as their potential market. These firms have supplanted the traditional single-function firm, primarily geared toward product/service specialization catering to a single location. This shift toward exploring business opportunities beyond borders has given rise to what are popularly known as "multinational corporations" (MNCs). These multinationals, also called "transnational" or "global" corporations, are characterized by active management of their worldwide activities such as production of goods and services, coordination of value-adding activities, and integration of corporate strategies. However, in the current context of increasingly dynamic, complex, and competitive world markets, multinationality (being multinational) is perceived as being a critical ingredient in corporate strategy and as a means of sustenance and growth; it is fast becoming a corporate inevitability. It is also viewed as an important strategic option for those firms that are in pursuit of a sustainable competitive advantage (Hamel & Prahalad, 1985; Porter, 1990).

On the academic front, insights and precepts supported by the resource-based perspective (Wernerfelt, 1984), foreign direct investment (FDI) theories (Caves, 1971; Dunning, 1981; Hymer, 1960; Rugman, 1982), and portfolio diversification

theory (Markowitz, 1952) have triggered several empirical studies examining the relationship between multinationality and performance. However, these studies have, by and large, yielded mixed or conflicting results.

The present study is an attempt to achieve a clearer understanding of this relationship in order to help build a bridge between academic insights and practical business applications.

Multinationality

Multinationality refers to the extent to which firms operate internationally by investing in assets and/or controlling activities outside their home country (Cantwell & Sanna-Randaccio, 1992; Teece, 1981). There are several ways in which an organization can be defined as a multinational. These can be broadly classified as operations, ownership, and orientation.

Operations

A firm may source its physical and intellectual inputs overseas (Maisonrouge, 1974), it could base its production activities overseas (Dunning, 1971; Maisonrouge, 1974), or it could locate its sales/service activities abroad (Rolfe, 1970). Porter (1985) calls these "value activities" (p. 92). Accordingly, conceptualizations of MNCs can be made in terms of the "content" of these value-adding activities. For example, the proportion of overseas sales to total sales, overseas subsidiaries to total subsidiaries, overseas employees to total employees, etc.—the overall assumption being that the larger the total number of foreign countries involved or the higher the overall level of overseas operations, the more the firm is "multinationalized."

Thus, while consumer goods conglomerate Procter & Gamble is a multinational that has significant foreign production capabilities, petroleum giant Royal Dutch-Shell is a multinational with significant foreign sales generated by its numerous foreign subsidiaries. Pharmaceutical firms like Merck and Hoechst are multinationals that conduct significant overseas research and development (R&D) activities in addition to overseas sales. Automobile giants Honda, Toyota, and Mitsubishi are multinationals known for their significant foreign assets in addition to their manufacturing and sales activities abroad.

Ownership

Ownership refers to the extent to which a company owns value-generating assets abroad, as well as the extent to which it is owned by individuals and institutions abroad. A MNC might own assets abroad, such as land or real estate, or hold stock in another company that may result in a controlling interest in that foreign company. For example, Shell Oil Company owns oil refineries in Sudan, gas stations in Brazil, and restaurants in France. These businesses are run by Shell's personnel and generate economic rents to Shell.

On the other hand, foreign individual or institutional investors could own an MNC; its stocks may be traded in multiple stock exchanges both at home and

abroad. It may also be that individuals or institutions from more than one country may own a domestic company (e.g., Nestle, Unilever).

Orientation

Orientation indicates the attitudinal posturing or “intent” of the multinational company and its management in terms of its vision, strategy, and structure. Perlmutter (1969) classifies such posturing as ethnocentric, polycentric, regiocentric, or geocentric depending on the relative importance that a MNC attaches to its strategy. This, in turn, sets the tone for the decision making of the firm. For example, an *ethnocentric* orientation suggests that the firm is more likely to extend the strategies and decisions that have originated in the home country into the host country, based on the assumption that these are globally applicable. A *geocentric* approach is quite the opposite in that it is more situation and contingency driven.

As described above, conceptualizations of multinationality can vary in intent, content, and the extent of value-adding activities. Table 1 contains a selected list of previous researchers and their definitions of “multinationality.” All these definitions are useful and essential for a comprehensive characterization of multinationality, which here is viewed as a combination of the ideas of intent, content, and extent, representing the orientation, operations, and ownership respectively, of a multinational firm.

Performance Implications of Multinationality

The idea that multinationality enhances corporate performance has its roots in the following three broad perspectives.

Resource-Based Perspective

Most of the research examining the multinationality–performance linkage has its roots in the resource-based perspective (Barney, 1991; Grant, 1991). This perspective, in turn, has its origins in the industrial organization theory as proposed by Hymer (1960), and further developed by Knickerbocker (1973). According to this theory, a firm’s performance is greatly influenced by the quality and utilization of a set of resources (either tangible or intangible) that is internal to the firm. Examples of these resources include firm-specific knowledge, skilled labor, capital, and organizational structure.

In the context of a multinational organization, resources with performance implications include diversity in products, processes, and markets, as well as firm-specific knowledge. These factors are key not only to exploiting superior economic rents, but also to erecting entry barriers for potential competitors in the international arena.

Table 1
Definitions of Multinationality by Previous Researchers

Researcher(s)	Definition
Lilienthal, 1960	Corporations that have their home in one country but operate and live under the laws and customs of other countries, as well (p. 117).
Behrman, 1969	An international company is a closely controlled single enterprise, located in markets separated by national boundaries, and operating under several national governments (p. 62).
Kindleberger, 1969	The international corporation has no country to which it owes more loyalty than any other, nor any country where it feels completely at home. It equalizes the returns on its invested capital in every country, after adjustment for risk (p. 182).
Perlmutter, 1969	A [multinational] enterprise could be conceptualized in terms of its attitudes or orientations: ethnocentric (or home-country oriented), polycentric (or host-country oriented), or geocentric (world orientation) (p. 11).
Brook & Remmers, 1970	An MNC is any firm that performs its main operations, either manufacture or the provision of service, in at least two countries (p. 5).
Rolfe, 1970	An international company may be defined as a company with a proportion of foreign sales, investment, production, or employment of at least 25 percent (p. 17).
Aharoni, 1971	A multinational corporation is one that controls a group of corporations, each created in the country of operation but all controlled by one headquarters (p. 35).
Dunning, 1971	A multinational enterprise is one that owns or controls facilities (such as factories, mines, oil refineries, distribution outlets, offices, etc.) in more than one country (p. 16).
UNCTAD, 1995	Multinational is one that competes in regional and global markets using internationally integrated production methods.

Table 1 (contd.)

Researcher(s)	Definition
Maisonrouge, 1974	For a company to be truly multinational, (a) it must operate in many countries at different levels of economic development, (b) its local subsidiaries must be managed by nationals, (c) it must carry out manufacturing and R&D activities in several countries, (d) it must have a multinational central management, and (e) it must have multinational stock ownership (p. 8).
Miller & Pras, 1980	Multinational diversification describes foreign investment by the firm in two or more countries (p. 794).
Michel & Shaked, 1986	Multinational corporations are those in which (a) foreign sales account for at least 20 percent of revenues, and (b) direct capital investment exists in at least six countries outside the United States (p. 92).
Benvignati, 1987	Multinationality is "ownership and control of income-generating assets" in two or more foreign locations . . . having a worldwide network of affiliates centrally coordinated by a domestic headquarters and supported by a global communications system (p. 449).
Cantwell & Sanna-Randaccio, 1992	[The degree of] multinationality is the value of international production carried out by affiliates in other countries relative to the value of domestic production of the parent company in its home country (p. 276).

Market-Power Perspective

According to this view, market power is accumulated by the multinational firm by virtue of its size and expertise in operations developed in domestic markets. This may enable it to breach entry barriers to similar industries in other countries, and possibly exploit any monopolistic profits available in such markets. Additionally, multinational presence allows the firm to cross subsidize, and thus enables it to edge out competitors in the race for international market share (Hamel & Prahalad, 1985).

Portfolio Diversification Perspective

This perspective views product and process diversification across international boundaries as having the potential to improve investors' risk/return performance since the economic activities in different countries are less than perfectly correlated with each other. Although individual investors may have the intention and capability to invest in an international portfolio by themselves, institutions such as MNCs are considered better vehicles for realizing extranormal returns because they have better access to information and superior abilities to capitalize on them. Thus, MNCs have an added incentive in the form of "investor recognition" to multinationalize their activities.

Factors Determining Performance

Based on these broad perspectives, the performance implications of multinationality can be determined by strategic, operational, and financial factors.

Strategic Influences on Performance

Rugman (1981) observed that a broad geographic scope yields a competitive advantage by allowing a firm to "internalize" greater proportions of its activities. Kogut (1985) and Porter (1985) argue that this larger geographic scope also provides the firm with benefits of economies of scale, scope, and experience, and that this helps a firm to cross subsidize its various national markets. Hamel and Prahalad (1985) reiterated this advantage in their study of leading companies Michelin, Goodyear, RCA, and Canon (among others).

Cantwell and Sanna-Randaccio (1992) contend that multinationality gives a firm an opportunity to internationally integrate production activities. The benefits derive from the development of a more refined locational division of labor within an MNC, where each affiliate specializes in accordance with specific characteristics of local supply and demand.

Operational Influences on Performance

The operational influence of multinational performance has been explained within the context of industrial organization and transaction cost economics. According to this view, firms invest abroad in order to exploit certain intangible firm-specific assets, the markets for which are characterized by various imperfec-

tions including factor immobilities, unreliable information, and monopoly rents (Caves, 1971, 1982). Intangible assets include such aspects as superior managing and marketing skills, product differentiation, and patent-protected technology.

Dunning (1977) argues that ownership, locational, and internalization (OLI) factors best explain the FDI behavior of multinational firms. Ownership factors refer to the unique advantages that the firm possesses in terms of the nature and form of firm ownership; locational factors are those that are not transferable across national boundaries; and internalization factors lead the firm to internalize production processes based on market imperfections in resource allocation, availability, and governance.

In sum, the generalized prediction of Dunning's theory is that, at any given point in time, the more a firm sees itself as possessing these advantages (OLI), the more it is likely to engage in FDI to exploit these advantages and generate economic rents. Siddharthan and Lall (1982) and Vernon (1971) provided empirical evidence to show that firm-specific assets, reflected in a firm's R&D and advertising expenditure, are associated with positive outcomes.

Financial Influences on Performance

Most of the perceived influence that financial factors have on multinational performance revolves around the portfolio diversification theory. In addition to arguing that multinationality improves the risk-return trade-off of the individual and institutional investors, theory postulates that individual investors face physical and other resource constraints in diversifying their portfolios in international markets by themselves. Studies by Lessard (1973, 1976), Levy and Sarnat (1970), and Subrahmanyam (1975) have supported this view.

Researchers from a portfolio perspective argue that a multinational firm has the ability to stabilize cash flows through geographical diversification of its operations. Several empirical investigations support this view (Hughes, Logue, & Sweeney, 1975; Madura & Whyte, 1990; Michel & Shaked, 1986). Nevertheless, given the multifaceted, interdisciplinary nature of the MNC, past research has produced only partial and often conflicting explanations of an MNC's performance based on its multinationality. Although there have been some occasional attempts at synthesizing previous studies, there is no consensus regarding the theoretical structure that may address all the important aspects of MNCs.

Review of Previous Research

This review is based on 26 empirical studies between 1971 and 1998 that examined the relationship between multinationality and performance. The studies were selected from different disciplines (i.e., economics, finance, and organizational behavior) to gain a generalized understanding of the nature of the relationship. Traditionally, there have been two dominant approaches to examine the multinationality-performance relationship. Grant (1987) categorized the two research methodologies as "comparative" and "control."

The *comparative* approach examines the relative performance of domestic and multinational firms. Studies by Horst (1972), Hughes et al. (1975), Leftwich (1974), Shaked (1986), and Vernon (1971) fall into this category.

In contrast, *control* studies deal only with MNCs. These studies conceptualize multinationality as a continuous variable, and examine whether differing degrees of multinationality lead to different levels of organizational performance. These studies also control for extraneous factors such as firm size. Examples of control studies include those by Buckley, Dunning, and Pearce (1977); Chang and Thomas (1989); Daniels and Bracker (1989); Grant (1987); Kumar (1984); and Siddharthan and Lall (1982).

In view of the importance that firms attach to the globalization of business, it seems logical (theoretically) that diversification into international markets reduces the risk of bankruptcy and increases revenues, and that higher levels of multinationality will lead to higher accrued value for a firm. However, empirical research in this area has yielded a variety of correlations between multinationality and firm performance. These range from "positive" (Agmon & Lessard, 1977; Errunza & Senbet, 1984; Hirschey, 1981; Michel & Shaked, 1986), to "weak" (Jung, 1991; Morck & Yeung, 1991), to "negative" (Kohers, 1975; Shaked, 1986; Siddharthan & Lall, 1982), and even to an "inverted-U" (Daniels & Bracker, 1989; Geringer, Beamish, & daCosta, 1989).

As is evident from these studies' findings, there seems to be no clear consensus about the correlation between multinationality and performance. Although there is agreement that the relationship is important and worth examining, the conflicting nature of results from the existing literature seems to add confusion and fuel controversy for the weary reader. We propose that a more complete understanding of what is meant by multinationality may help to clarify its relationship to performance.

Conceptualization of Multinationality

Researchers have generally thought about multinationality in terms of what a MNC *does*. The most common definitions of multinationality are framed within the context of:

1. *Control*: Overall control and coordination of a firm's assets and related activities (Aharoni, 1971; UNCTAD, 1995).
2. *Diversification*: The nature and extent of a firm's diversity in product offerings as well as geographic segments that are serviced (Lilienthal, 1960).
3. *Operations*: The value and volume of a firm's sales, R&D, and production (Cheng & Ramaswamy, 1989; Maisonrouge, 1974).
4. *Orientation*: The attitudinal disposition of a firm in an international context (Perlmutter, 1969).

Accordingly, the measurement of multinationality has also followed a predictable path, having its roots in one or more of the above-mentioned conceptual bases.

Measurement of Multinationality

To facilitate ease of understanding, studies that have attempted to measure multinationality are categorized into the following: single-item measures of single dimensions, multiple-item measures of single dimensions, and single-index measures of multiple dimensions. Table 2 summarizes prior research based on these categories.

Single-Item Measures of Single Dimension

An overwhelming majority of the studies reviewed has employed a single-item measure such as proportion of foreign sales to total sales (FSTS) or proportion of foreign assets to total assets (FATA) to assess multinationality.

As noted by Sullivan (1994), a single-item measure might facilitate replication, but lacks validity and leads to spurious conclusions. Using a single-item measure creates a risk that the measure will be confounded by existing methodological biases (Nunnally, 1978), and the near impossibility of determining the reliability of a single-item measure increases the probability of a Type I or Type II error (Bagozzi, Youjae, & Phillips, 1991). For example, Sullivan (1994) notes that using the percentage of foreign sales to total sales as a measurement of multinationality is vulnerable to the risk that a firm's foreign sales in the period of study may be artificially inflated or deflated by some "conceptually irrelevant" factor, such as a random shock in currency rates. He adds that the chances of a theoretical construct being misrepresented increase with a single-item measure because it represents only a limited portion of the construct's domain. In addition, the sheer variety of single-item measures to assess multinationality reveals a lack of consensus on the choice of measurement variable to use. As Raghunathan and Subramaniam (1992) pointed out, the use of many different single-item measures may also suggest an assumption of interchangeability of variables to measure multinationality. That assumption, however, did not find empirical support in their study.

Multiple-Item Measures of Single Dimension

These studies can be further classified into two types: group-type measures and entropy-type measures.

Group-Type Measures. Studies by Eden and Olibe (1997) and Soenen (1990) used multiple items representing any one dimension of multinationality. For example, Soenen (1990) used the ratios of foreign sales to total sales, foreign assets to total assets, and foreign profits to total profits to study the stock market impact of the operational dimension of multinationality. Typically, such studies

Table 2
Multinationality—Operationalization in Previous Research

Basis	Single item/Single dimension Study	Operationalization	Single index/Multiple dimensions	
			Basis	Study
Assets	Al-Obaidan & Scully, 1995; Daniels & Bracker, 1989; Ramaswamy, 1992	FATA	Performance, Structural, Attitudinal	Sullivan, 1994
Production	Cantwell & Sanna-Randaccio, 1992	Proportion of foreign production		Composite index of five items: FSTS, FATA, TMIE, PDIO, OST5
Profits	Eppink & Van Rhijin, 1988;	Proportion of foreign profits		
Sales	Agmon & Lessard, 1977; Bühner, 1987; Haar, 1989; Hughes, Logue, & Sweeney, 1975;	FSTS		
Subsidiaries	Michel & Shaked, 1986; Siddharthan & Lall, 1982 Errunza & Senbet, 1984; Vernon, 1971	OSTS		
Basis	Multi-item/Single dimension Study	Operationalization	Multi-item/Multiple Dimensions	
Diversification	Kim et al, 1989; Vachani, 1991; Sambharya, 1995	Entropy-type measures for product and geographic diversification		
Operations	Eden & Olibe, 1997	FSTS, FATA, FITI, OST5		?

Note: FSTS, FATA, OST5, FITI refer to the proportion of foreign sales, foreign assets, overseas subsidiaries and foreign income respectively. PDIO refers to the psychic dispersion of a firm's international operations.

employ a comparison approach in reporting and interpreting results. However, the significant feature in these studies is that only one item at a time is used to study performance.

Entropy-Type Measures. This type of study has its origins in research by Jacquemin and Berry (1979) and Palepu (1985), who attempted to examine strategic management concepts from an industrial organization perspective. The result was an index to examine economic performance as a function of corporate diversification strategy. Kim (1989) extended this measure into a global context by modifying it to study a firm's multinationality in terms of the firm's type of diversification across borders. This measure was designed to distinguish three elements of corporate global diversification: (a) unrelated diversification, which reflects the extent of diversification across industry segments, (b) global market diversification, which is the extent of the multinational dispersion of a firm's operations, and (c) global related diversification, which explains the extent of global diversification across business segments within the industry affiliation of a firm. Using this approach, the global market diversification of a firm is mathematically represented as

$$GMD = \sum_{j=1}^M P_j \sum_{a \in j} P_{aj}^i \ln (1/P_{aj}^i),$$

where P_{aj} is the ratio of the j^{th} industry segment in the a^{th} market area to the total size of a firm, and $P_{aj}^i = P_{aj}/P_j$. The main difference between entropy-type measures and single-item measures is that, whereas in single-item measures the operational aspects of proportion of foreign sales, foreign assets, etc., are always pegged to the home country of operations, entropy-type measures use the "spread" of such activities across the world without any particular home-country reference.

Although these index measures provide a good assessment of multinational diversification across business and industry segments, their ability to capture the attitudinal attributes of a firm's diversification abroad is yet to be empirically established. Moreover, the implicit assumption in these methodologies is that all the variables have the same units of measure.

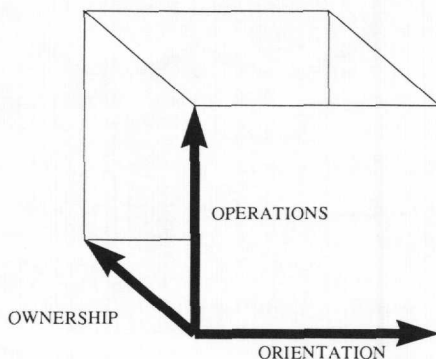
Thus, we find that although single-item measures are inadequate, mere proliferation of a variety of measures does not contribute to a comprehensive analysis, either. This is because most of the above-mentioned measures still do not address the issue of multidimensionality.

Single-Index Measures of Multiple Dimensions

Sullivan (1994) provided a composite measure for internationalization that combined *performance* (ratio of foreign sales to total sales), *structural* (ratio of foreign assets to total assets and ratio of foreign subsidiaries to total subsidiaries), and *attitudinal* (top management's international experience and the psychic dispersion of the countries in which the firm operates) dimensions. This combination had a correlation coefficient of .79 as a measure of internationalization.

This method, while addressing the important issue of multidimensionality, seems to overlook one fundamental constituent of empirical analysis: The performance, structural, and attitudinal aspects of multinationality as described by Sullivan (1994) represent conceptually distinct dimensions. Therefore, combining them into one index through an item-total-analysis method can not claim any theoretical support. To illustrate, length and breadth are two different dimensions of a rectangle. Merely adding them together conveys little meaning; however, measuring them simultaneously offers a better description of the object in question. Item-total analysis is a superior measurement method as long as the items being added all belong to a single dimension. This is clear from examining Figure 1. The alternate conceptualization of multinationality, showing a simultaneous representation of its constituent dimensions, is illustrated in Figure 2.

Figure 1
Dimensions of Multinationality



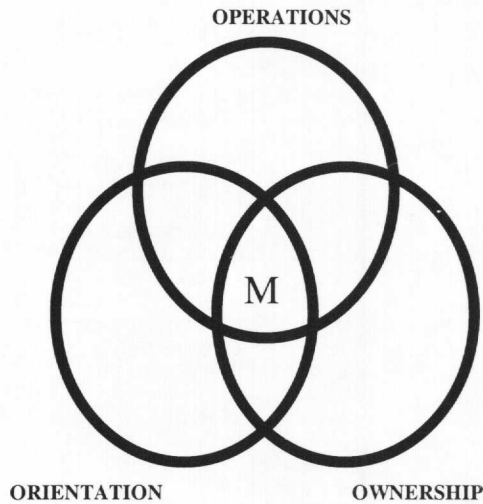
Multidimensional Measures of Multinationality

As is evident from the previous discussion, there is a need to develop and use a multiple- item, multidimensional measure to capture a comprehensive meaning of this complex concept.

Conceptualization

As mentioned previously, the majority of empirical investigations of performance in the multinational arena have their conceptual roots in the resource-based theory (Ramaswamy, 1992). This theory posits that performance is contingent on the efficiency with which resources and skills are utilized.

Figure 2
Overlapping Dimensions of Multinationality



Internalization of production activities can have major benefits for a MNC. In such a case, each affiliate of an MNC customizes its production methods based on the characteristics of local supply, such as availability of facilities, talent pool, and resource base. The affiliate may also attempt to specialize its product based on local demand, tastes, and preferences.

Measurement

As Table 3 illustrates, prior research has used a variety of means, mostly aggregate accounting measures, to assess performance. The most common measures used are return on assets (ROA) and return on sales (ROS). Very rarely have researchers explained the choice of one measure over another.

Almost all of the studies reviewed have employed absolute rather than relative measures for evaluating performance. However, in the international arena, where accounting methods, standards, and interpretations vary, accounting methods such as return on investment (ROI), ROA, or ROS may lack consistency. Al-Obaidan and Scully (1995) noted this potential discrepancy and utilized the "frontier function criterion" (Aigner, Knox, & Schmidt, 1977; Farrell, 1957) in their study, which associates the output of a firm to its inputs.

Economic efficiencies can be measured in terms of deviations from the best performance in a representative peer group. Thus, using the above method, economic performance is evaluated on a relative rather than an absolute basis. This is argued to be a more reliable estimate of firm performance than the usual

Table 3
Performance Implications of Multinationality Based on Outcome Variables Used

Outcome Variable	Study	Operationalization	Results
Financial Performance	Bühner, 1987;	ROE, ROA	Positive relationship
	Grant, 1987;	Profitability	
	Grant, Jammine, & Thomas, 1988;	ROA, ROE, ROS	
	Kim, Hwang, & Burgers, 1989;	ROA	
Firm Value	Vernon, 1971	ROS, ROA	Positive relationship
	Errunza & Senbet, 1981;	Difference between total market value of firm and book value of assets	
Growth	Hirschey, 1981	Composite of market power, systematic risk, advertising, and R&D intensity	Positive relationship
	Kim & Lyn, 1986;	Tobin's Q	
	Morck & Yeung, 1991	Tobin's Q	
	Cantwell & Sanna-Randaccio, 1992;	Logarithm of sales growth	
Risk	Grant, 1987	Change in value of sales	Positive relationship
	Al-Obaidan & Scully, 1995;	Reduction in business risk	
	Hughes, Logue, & Sweeney, 1975;	Risk-adjusted return	
	Michel & Shaked, 1986		
Stock Market Recognition	Agmon & Lessard, 1977;	Change in stock price	Positive relationship
	Soenen, 1990	Price/earnings ratio	

profitability measures, which may not take into consideration the differences in accounting methods and practices across countries.

Traditional performance measures such as ROA, ROI, and ROS have been criticized as too narrow in scope (Chakravarthy, 1986; Venkataraman & Ramanujam, 1986). Moreover, the performance of a firm and the policies it pursues could be interpreted differently by various stakeholders. Thus, there is a need for formulating performance measures based on the objectives of the internationalizing firm. Venkataraman and Ramanujam (1986) note that

A broader conceptualization of business performance would include emphasis on indicators of operational performance (i.e., nonfinancial) in addition to indicators of financial performance. Under this framework, it would be logical to treat . . . other measures of technological efficiency within the domain of business performance. The inclusion of operational performance indicators takes us beyond the "black box" approach that seems to characterize the exclusive use of financial indicators and focuses on those key financial success factors that might lead to financial performance. (p. 804)

In addition, by concentrating on financial measures only and ignoring the nonfinancial measures of performance (such as employee productivity and productivity in terms of cost savings), these studies are narrowly focused and do not include performance measures based on firms' multinational objectives. It may be that lack of data explains most of the aforementioned studies relying solely on financial measures of performance. As Venkataraman and Ramanujam (1986) recommend, the use of nonfinancial as well as financial indicators achieves a broader conceptualization of firm performance.

This view is supported by Dess and Robinson (1984) and Geringer and Herbert (1991), who point out that "validation" of financial performance by operational and subjective assessments is of vital importance in capturing as comprehensive a picture of firm performance as possible. In addition to supporting this view, this paper proposes that types of performance outcomes should be linked to dimensions of multinationality demonstrated by the firm. Such a linkage would also facilitate an evaluation of the benefits of multinationality based on the "fit" between the form of multinationality and the performance criterion. As Hergert and Morris (1989) and Ramaswamy (1992) have pointed out, the value-creating role of some activities has not been adequately recognized, due to a preference among academicians and practitioners to aggregate and generalize performance outcomes. A function-specific performance-assessment approach would perhaps throw more light on the relationship between multinational involvement and performance.

Ramaswamy (1992, p. 258) argued in favor of "function-specific performance outcomes," since each activity of the MNC has a unique and important contribution to the overall performance of the organization. This uniqueness and importance cannot be captured in its entirety by measuring the performance by a single dimension such as financial or operational performance.

One of the significant objectives of a corporation in pursuing multinational markets is an efficient utilization of factors of production, wherever available. These factors include cost, operations, employees, and stock value. A comprehensive scale to measure efficiencies in these individual areas would perhaps explain the performance of a firm better than traditional accounting-based measures of profitability. For example, important considerations in a firm's decision to engage in overseas production could be the opportunity of savings in labor or transportation costs, or access to cheaper raw materials. These will directly result in increased cost efficiency (Porter, 1985, 1990). Therefore, performance measured in terms of cost efficiency would be a better indicator for such firms than that measured in terms of operational efficiency (return on equity or ROI).

Conclusion

We reviewed a total of 26 empirical studies between 1971 and 1998 in an effort to ensure a comprehensive examination of the relationship between degree of multinationality and performance. This process revealed the heterogeneity and unreliability of many reported results. We argued that the concept of multinationality needs to be redefined to include the multidimensionality of its meaning, and the concept of performance refined within the context of this new meaning.

Multinationality is a multifaceted phenomenon, and its effects on firm performance are complex and yet to be fully understood. Although prior research in this area has yielded conflicting results, the need for addressing key research questions remains as pressing as ever.

The suggested three-dimensional definition of multinationality based on prior conceptual and empirical research provides a solid foundation for a comprehensive assessment of an organization's international involvement. The practicing manager will find the proposed framework useful in identifying key factors and determining optimal levels of multinational involvement in light of potential impacts on performance.

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