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THE IMPACT OF U.S. COMPANY INTERNATIONALIZATION ON TOP MANAGEMENT TEAM ADVICE NETWORKS: A TACIT KNOWLEDGE PERSPECTIVE

NICHOLAS ATHANASSIOU[1]* AND DOUGLAS NIGH[2]
[1]*College of Business Administration, Northeastern University, Boston, Massachusetts, U.S.A.*
[2]*College of Business Administration, University of South Carolina, Columbia, South Carolina, U.S.A.*

This study surveys 37 U.S. multinational corporations (MNCs) to examine the effect of internationalization on one dimension of the top management team's (TMT's) character: international business advice network density. This study draws on international business (IB) theory, the resource-based view of the firm, and philosophy of science and its view of tacit knowledge. Results show that both the firm's internationalization extent, and the interdependence that exists across its country–market activities, are positively related to the TMT's IB advice network density. As the extent of the MNC's business outside the United States grows and the linkages among its IB units intensify, the demand for IB expertise within the TMT increases, TMT members share each other's knowledge of IB more extensively and the TMT's IB advice network density increases.

INTRODUCTION

Building on Hambrick and Mason's seminal work on upper echelons (Hambrick and Mason, 1984), researchers of top management teams (TMT) have successfully examined the effect of TMT characteristics—demographic and relational—on a number of organizational outcomes. Pettigrew (1992) recognized the value of these contributions and challenged researchers to focus on the TMT characteristics themselves as organizational outcomes. He observes that '[we] still know little about why and how top teams and others look the way they do, the processes by which top teams go about their tasks, how the CEOs engage with their immediate subordinates, and how, why, and when the upper echelons engage in fundamental processes of problem sensing, decision making, learning, and change' (1992: 178). A similar view is articulated by Finkelstein and Hambrick, who identify environmental and organizational contextual conditions as antecedents to TMT composition, structure, and process. Finkelstein and Hambrick (1996: 118–120) identify a need for studies which ask: what is the nature of the interaction within TMTs and how do contextual conditions affect TMTs?

If studies of the interactions within TMTs are rare, studies of TMTs in multinational corporations are rarer still. In their review of 222

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* Correspondence to: Nicholas Athanassiou, College of Business Administration, Northeastern University, 313 Hayden Hall, Boston, MA 02115, U.S.A.

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articles in leading international business (IB) and strategic management journals from 1986 to 1995, Lohrke and Bruton found top management team studies to be 'notably absent' in the international strategic management literature (1997: 41).

This study takes up Pettigrew's challenge and examines a particular interaction among members of TMTs of MNCs, the seeking of advice concerning IB matters. This study proposes that TMT members form unique advice networks to share tacit knowledge about their MNC's IB activities and markets. In particular, it examines the extent to which the density of the TMT's IB advice network is affected by the MNC's international strategy.

This paper has three sections: the first develops the theoretical foundations upon which the hypotheses on the TMT character are built. The second reports on the research methods employed, and the third discusses results and conclusions.

THEORY AND HYPOTHESES

Theoretical framework

This research rests on two key premises of international strategy. First, an MNC's strategy aims at achieving global competitive advantage through disaggregation of its activities and their dispersion across country markets to form its international network (Bartlett and Ghoshal, 1989; Kogut, 1985a, 1985b). Second, the MNC's strategy focuses on the integration of these dispersed activities across the firm's multinational network. This paper proposes that these disaggregation and integration strategies, which are manifested by an MNC's *internationalization extent*, by its choice of IB activities' *modes*, and by the nature of its cross-national activities' *interdependence*, mold the TMT's IB advice network.

The resource-based perspective on strategy describes the MNC's activities as a bundle or stock of tangible and intangible resources (Nelson and Winter, 1982; Penrose, 1980) which are dispersed across the nodes of the firm's multinational network (Kogut, 1990). This disposition of the MNC's unique stock of resources determines its transactions (Williamson, 1983) both within its own boundaries and with its external diverse environment, an environment which may span several country markets. Further, these resources are a source of sustained competitive advantage under three specific conditions: when they create unique value; when they are rare; and when they are imperfectly imitable (Barney, 1991; Rumelt, 1984). The imperfectly imitable character and the disposition of the MNC's stock of resources are both the result of the firm's unique historical circumstances and founding actions (Stinchcombe, 1965); its character and disposition are also dependent on the MNC's trajectory of actions (Dierickx and Cool, 1989).

The MNC's evolving bundle of resources can be expected to permeate its organization structure, a structure which includes its TMT (Hambrick, 1987). The composition and character of the TMT can be expected to change as unique institutional knowledge accrues to its members (Collis, 1991; Kogut, 1990; Nonaka, 1990). Thus, we can predict that the MNC's strategy will both build on and result in the creation of additional idiosyncratic knowledge. This knowledge is embedded in and determines the character of the MNC's top management team. At any particular time, this idiosyncratic knowledge will be reflected in the TMT's experience, the experience it has gained from coordinating the MNC's uniquely dispersed activities and from leveraging the sequential advantages of the MNC's multinational network.

Idiosyncratic knowledge which is accrued by the members of the MNC's TMT is both articulate and tacit (Nonaka, 1990, 1994; Polanyi, 1962). Articulate knowledge can be codified in terms of written language, formulae, and numbers in order to be transferred through written or verbal communication. Polanyi (1962, 1966) explains how the tacit dimension of knowledge is the deeper understanding, developed experientially, which cannot be codified and communicated explicitly. Each person gives unique meaning to articulate knowledge stocks and flows based on the corresponding set of his/her idiosyncratic tacit knowledge. A TMT member develops tacit knowledge stocks with which to understand articulate knowledge particular to each of the MNC's overseas markets through physical presence in these markets. Each TMT member develops unique tacit knowledge stocks either through personal contact with managers responsible for particular dispersed MNC activities or through personal contact with key external constituents in the markets within which these activities take place.

Tacit knowledge is not transferable, but people can learn from each other's tacit knowledge stocks. This seeming paradox is explained by Polanyi in his description of how the deeper awareness of tacit knowledge may be learned through an understanding of the concepts or skills—the articulate knowledge—which the tacit knowledge informs. He observes that in a specific context 'a teaching which appears meaningless to start with has in fact a meaning which can be discovered by hitting on the same kind of indwelling as the teacher is practicing' (Polanyi, 1966: 61). Until this 'same kind of indwelling' can be achieved, the learner must accept the teacher's meaning because the teacher is able to communicate only the concepts or skills described by details—without the tacit knowledge which gives meaning to these details.

Thus, any TMT member's tacit knowledge can be understood by other members only through personal contact over time (Winter, 1987). We must remember that though the articulate part of knowledge can be codified for transfer, it takes meaning only through a corresponding tacit dimension (Polanyi, 1966) which accrues to each TMT member. It is this accrual of shared tacit knowledge which shapes the TMT into a unique, valuable and inimitable asset over time because it gives meaning to the articulate knowledge which flows among the MNC's multinational network nodes (Bettis and Prahalad, 1995). Therefore, we propose that the TMT may be viewed as the unique asset whose members become a network of individuals who accumulate and share among themselves tacit knowledge stocks about the MNC's worldwide activity network. The TMT's tacit knowledge-sharing process is facilitated by links developed among TMT members, who find that they need to share individual tacit knowledge stocks on IB issues which arise from the extent of the MNC's internationalization. This sharing of individual tacit knowledge stocks on IB issues is reflected in a particular type of interaction among TMT members that is the focus of this study, the seeking of advice concerning IB matters. In particular, we examine the relationship between the MNC's strategy—its internationalization—and the extent to which members of the TMT seek IB advice from other TMT members. For the group as a whole, this interaction can range from no TMT member's seeking IB advice from any other member to every member's seeking such advice from every other member. In this study, this interaction is defined as the density of the TMT's IB advice network.

Internationalization extent and advice network density

The MNC's *internationalization extent* reflects the degree to which the firm is present in international markets. *Internationalization extent* is represented by the level of international sales and export sales as a percentage of total sales, the number of international employees as a percent of total employees, and the level of international assets as a percent of total assets (Sullivan, 1994). The relative level of international sales for the most recent fiscal year reflects results achieved from the firm's past international strategy decisions. Equally, the relative level of assets and employees indicates the extent of the firm's commitment to growth through foreign direct investment (FDI) and to the firm's direct involvement in international operations.

This study asserts that as the firm's *internationalization extent* increases, the TMT must develop more complex tacit knowledge stocks to cope with increased demands to decode articulate knowledge. The MNC's *internationalization extent* may increase because the company may be operating in a larger number of country markets or because the company may be increasing its involvement in its existing set of markets. In the first case, increasing *internationalization extent* through multiplying markets, each distinct market can be expected to have its unique institutional environment (DiMaggio and Powell, 1983; Rosenzweig and Singh, 1991). This multiplicity of institutional environments relevant to the company will require that the TMT develop a distinct set of tacit knowledge stocks with which the TMT members can decode the articulate knowledge which flows from each market. In the second case, an increase in involvement in existing markets, the *internationalization extent* increase may come from a stable set of growing markets each with its institutional environment. In this case, the importance of correct TMT decoding of articulate knowledge flows from each of these markets can be expected to increase along with the importance of these markets to the company's well-being. Thus in the second

case, the TMT may be expected to maintain deeper tacit knowledge stocks of each market pertinent to the MNC.

In order to share individual tacit knowledge stocks about the MNC's overseas activities, TMT members share individual understandings of articulate knowledge flows. This interaction among TMT members is reflected in the TMT's IB advice network, which is defined as the pattern of relations among members in which one member seeks IB advice from another member. This is a directional relationship with an origin and a destination. Member A's seeking IB advice from member B is different from member B's seeking IB advice from member A. The density of the TMT's international business advice network is the ratio of the actual number of IB advice-seeking relationships among pairs of TMT members to the total number of possible IB advice-seeking relationships among pairs of TMT members.

This study argues that as the firm's internationalization extent increases, the TMT must develop more complex tacit knowledge-stocks to cope with increased articulate knowledge-decoding demands. In this situation we can reasonably expect that certain TMT members are likely to become more knowledgeable about IB issues. Furthermore, we can expect that other TMT members need to seek more advice from those members who are more knowledgeable on IB issues because their work requires enhanced IB understanding. These TMT members increasingly view IB advice seeking as instrumental in the achievement of their business objectives. Thus, the TMT's international business advice *network density* will increase as the firm becomes more *extensively* dependent on international operations and TMT members need to intensify the extent to which they share their tacit knowledge stocks.

Hypothesis 1: The greater the MNC's internationalization extent, the greater the TMT international business advice network density.

International involvement mode and advice network density

An MNC can choose any combination of international business modes of involvement to carry out its activities in foreign markets. Some modes require foreign direct investment in an overseas subsidiary company and differ by degree of equity ownership, e.g., wholly-, majority-, minority- or 50 percent ownership with/without control. Other modes involve no equity ownership and are contractual, e.g., franchising, licensing, and exporting.

These IB modes of involvement differ in the extent to which each may be considered internal, as opposed to external to the corporation, i.e., in the extent to which the firm is extending its hierarchy and organizational boundaries across national borders vs. the extent to which the firm is engaged in arm's-length, contract-based interactions with outside entities in foreign markets (Williamson, 1983). In this study, we define an *internal mode* to be one which clearly provides the MNC with control of subsidiaries via majority equity ownership.

MNCs that rely more heavily on an *internal mode* of involvement in IB have control and management responsibility over a set of wholly- or majority-owned foreign subsidiaries. These *internal mode* subsidiaries may be expected to carry out a full chain of primary and secondary value-adding activities (Porter, 1985). In contrast, MNCs that rely less on an internal mode and more on an external mode tend to have fewer value-adding activities in foreign markets over which they have management responsibility.

As an MNC relies more on an *internal mode* of involvement in IB, its TMT must manage a broader spectrum of primary and support value chain activities in more than one country–market. Also, the TMT will need to get involved with a larger number of issues in the external international environment. Thus, as a consequence of relying more on an internal mode, TMT members can be expected to exhibit an increased need to share a broader set of tacit knowledge stocks on IB issues.

Hypothesis 2: The greater the MNC's reliance on an internal mode of international involvement, the higher the TMT's international business advice network density.

Cross-national interdependence and advice network density

Our discussion to this point has focused on the extent of value chain activities managed by the

MNC's TMT in overseas markets. An MNC's strategy also determines these activities' links across markets. These cross-national value chain activity links lead to interdependencies (Kogut, 1985a, 1985b) which can be expected to add to the complexity of the management task faced by the TMT and, therefore, also affect its character.

Baliga and Jaeger (1984) draw on Thompson (1967) to explain that the least-integrated MNCs will show pooled interdependence—the weakest form of interdependence—on the financial activity dimension, manifested in terms of capital flows and overall performance tracking information. By contrast, MNCs with the highest interdependence across many activities will show reciprocal or sequential interdependence. In such a case, activities such as product development, manufacturing, and marketing will be coordinated and integrated across the MNC's different country locations. Therefore, a TMT which manages an MNC network with highly *interdependent* activities across markets will need to maintain tacit knowledge stocks about the linkages among these markets, as well as tacit knowledge stocks about the management of the value-added activities within these markets. Then, an MNC with high *interdependence* among its cross-border activities can be expected to impose a higher tacit knowledge stock maintenance demand on the TMT than an MNC with low interdependencies.

Thus, the degree of *interdependence* across the MNC's subsidiary network is likely to affect the need for the TMT members to use an IB advice network. The MNC's TMT members can be expected to need to share more of their tacit knowledge about activities in and across discrete international markets in order to manage the desired linkages among their activities in these markets.

Hypothesis 3: The greater the level of the MNC's activities' interdependence across markets the greater the TMT's international business advice network density.

METHODS

Sample definition, recruitment, and data collection

The TMT group examined in this study is defined by cooperating CEOs. There are three reasons why the CEO was asked to define the TMT. First, this study examines personal interactions among TMT members, a focus which requires that the criterion for selection to the TMT is operational roles. The TMT's membership with such a focus is not fully disclosed in published reports. Second, this study's sample of firms includes several privately held firms on which there is little published information. And finally, this study captures primary data on interactions of complete TMTs, an effort which requires CEO endorsement and support.

A sample of companies was recruited based on the cooperation of the CEO and his/her endorsement of our follow-up with other TMT members. All companies recruited had to be domiciled in the United States, have at least one overseas affiliate, and focus primarily on a single business. Because there may be country-specific reasons why firms internationalize in a particular way, a sample of U.S.-based MNCs controls for confounding influences due to variation in home country. Further, our selection of companies that focus on a single business or are dominated by a single business increases the likelihood that the TMT is involved in strategy implementation as well as formulation. Compact disclosure (1994) included 3678 U.S. firms with sales between $50 and $800 million of which 910 (24.7%) met our MNC definition. We contacted 197 of these firms chosen randomly. We also contacted a further 63 firms, which included several privately held firms not on *Compact Disclosure* and with which we had personal or institutional contacts. After an initial communication with the CEO, of these 63 firms 45 were determined to fit our study's criteria. We found no significant differences in size (total annual sales) or internationalization (international sales/total sales) for the participating vs. the nonparticipating MNCs.

The 37 participating companies' TMTs had a total of 256 managers. Of these teams, 35 provided information on all the members identified by the CEO and had an average team size of 6.6 (S.D. = 2.61). The 37 companies in this study come from a broad range of industries and are based in 17 states within the United States. The distribution of companies across four broad areas of the country—southeast 40 percent, central/mid-west 17 percent, northeast 17 percent, west 10 percent—assures that the sample is not regionally biased.

Two similar instruments were developed for this study: a CEO and a team member questionnaire. In addition to personal data, the CEO questionnaire provided for the TMT identification and extracted information about the extent and mode of the firm's internationalization.

Variable definition

Advice network density describes the number of manager pairs which form among TMT members to facilitate the exchange of advice and information on international operations divided by the total possible pairs in the TMT network. The network was treated as asymmetrical: a pair formed by team member A seeking advice from member B is different from the pair formed by team member B seeking advice from team member A. For the purpose of measuring this variable, each team member was asked how often he/she seeks every other team member's IB advice. Answers to the question rated as 'very often' and 'extremely often' were considered to indicate a primary source of IB advice information. The network analysis program UCINET (Borgatti, Everett, and Freeman, 1992) was used to measure the density of the TMT's IB advice network.

Internationalization extent measures the degree to which the firm has extended its business activities outside its home country. The measure which was developed to represent internationalization extent has three items which were reported by the CEO: international sales as a percentage of total sales, international assets as a percentage of total assets, and number of international employees as a percentage of total employees. Because these three items are highly correlated and measure different dimensions of the same construct (Sullivan, 1994), factor analysis was used to arrive at a combined measure. The resulting composite internationalization measure represents the factor scores computed from this procedure. The use of factor analysis was considered appropriate as the ratio of observations to items is approximately 12 in this analysis. This procedure produced one factor with significant loadings from all three internationalization extent items measured.

Internal mode was defined as the extent to which a company attains its IB objectives through an internal transaction mode. *Internal mode* was measured as the sum of the percentages of IB activity attributed to doing business through wholly-owned subsidiaries and majority-owned subsidiaries. Majority-owned subsidiaries were included in *internal mode* because the MNC can be expected to exercise substantial control over most of the activities of such a subsidiary. To measure this variable, the CEO was asked the percentage of the company's IB activity which is conducted through each of seven modes which total 100 percent of the MNC's international activities.

Interdependence is the extent to which a firm's entities which are dispersed across the nodes of its international network are linked in terms of knowledge flows and product flows (Bartlett and Ghoshal, 1989; Kogut, 1985a; Roth, Schweiger, and Morrison, 1991). The nature of the MNC's interdependence reflects the type of international strategy being pursued by the firm to coordinate the various value-adding activities performed by its international subsidiaries. A summed average score given by the team along the eight dimensions (described below) had an acceptable reliability (Cronbach $\alpha = 0.83$). Interdependence was reported by all TMT members.

There is also considerable evidence (Roth, 1995; Roth *et al.*, 1991) that interdependence may have more than one underlying dimension. To examine the possible presence of more than one interdependence dimension, a common factor analysis (Hair, Anderson and Tatham, 1987) with a subsequent varimax rotation was performed using the eight scale items. This analysis was performed on the 37 TMT average scores on the interdependence items. Because of the low ratio of observations to items several precautions were taken to assure that the data set was adequate and that the output was valid (Stewart, 1981). First, the Keiser–Meyer–Olkin Measure of Sampling Adequacy was found to be adequate at the 0.75 level. Second, the Bartlett Test for Sphericity was determined to be significant at the $p < 0.0001$ level which indicates that 'the data are appropriate for factor analysis' (Stewart, 1981: 57). Third, significant factor loadings were at the 0.60 level or above. Hair *et al*. (1987) indicate that samples smaller than $n = 100$ must show such levels for the loadings to be significant rather than the 0.30 cut-offs which are generally considered acceptable. Finally, when the factor analysis was performed on interdependence data

reported by the 37 CEOs, the solution led to identical conclusions.

A purification procedure similar to that suggested by Churchill (1979) led to a two-factor solution. The four items which load significantly on Factor 1 are all related to *upstream* activities (Porter, 1985). These four items are Production, Product R&D, Manufacturing R&D, and Manufacturing Process Technology. The remaining two items, Sales and Marketing Activities, which load on Factor 2, are related to *downstream* activities. The deleted items are Procurement and Management/Employee Development. The factor scores were saved as values of the two international interdependence variables which were used to test the hypotheses.

Three control variables were used: *team size*, *TMT tenure*, and *company sales*. TMT literature recognizes that *team size*, the number of members of the team, and *TMT tenure*, the average number of years of TMT membership, influence many outcomes affected by TMT characteristics (Hitt and Tyler, 1991; O'Reilly, Snyder, and Boothe, 1993; Smith *et al*., 1994). Equally, social network research shows that network density is affected by the number of members in the network (Wasserman and Faust, 1994). Further, the firm's size, defined as company annual sales, is a key factor in TMT demography analyses (Blau, 1970; Govindarajan, 1988).

Analysis method

This study uses multiple regression analysis to test the three hypotheses developed above. The overall model is as follows: *Advice network density* = F {*internationalization extent, internal mode, upstream interdependence, downstream interdependence, team size, TMT tenure, company size*}. We expect to find a positive relationship between advice network density and each of the independent variables involved in our three hypotheses. Consequently, we employ one-tail *t*-tests.

RESULTS

Table 1 presents the descriptive statistics and correlations for all variables. Table 2 presents the results of the regression analysis. First we note that collinearity diagnostics indicate that the regression estimates are not degraded by collinearity (Belsley, 1990; Belsley, Kuh, and Welsch, 1980). Further, the overall model is significant ($F = 3.57$) with an $R^2 = 0.48$ (Table 2).

We find the coefficient of *internationalization extent* to be significant and positive, as expected, thus providing support for the acceptance of Hypothesis 1. Likewise, the coefficients of both *upstream interdependence* and *downstream interdependence* are significant and positive, as expected, thus providing support for the acceptance of Hypothesis 3. In contrast, the coefficient of *internal mode* is not significant. The regression results provide no support for the acceptance of Hypothesis 2.

Based on the findings of this study, it seems that both (1) the extent of the internationalization of the firm and (2) the degree to which its activities (both upstream and downstream) are interdependent positively affect the density of the IB advice network among the members of the firm's TMT.

Finally, Table 2 shows that the control variables *TMT tenure* and *company size* were not significant, while *team size* was significant and related to *advice network density* with the expected negative sign.

DISCUSSION AND CONCLUSION

This study makes contributions along four different dimensions. First, it establishes that an MNC's international strategy shapes the character of its TMT. Thus, this study begins to satisfy Pettigrew's (1992) call for research which explains why TMTs look the way they do and how they engage in fundamental processes of problem sensing and learning. Specifically, this study confirms that the character of the MNC's TMT is affected by the firm's level of internationalization and the extent to which the different subsidiaries' activities are interdependent. The higher the firm's *internationalization extent*, the higher the density of the advice network formed among TMT members to exchange information and share their tacit knowledge stocks of IB issues. Further, the need to exchange IB advice among TMT members increases as both *upstream* and *downstream* activity interdependence of the firm's international operations intensifies. Thus, TMT members increase the intensity with which they share their

Table 1. Means, standard deviations, and correlation coefficients

Variables	Mean	S.D.	1	2	3	4	5	6	7
1. Advice Network Density	0.37	0.21							
2. Internationalization Extent	0.00	1.00	0.35*						
3. Internal Mode	0.49	0.38	0.03	0.28*					
4. Upstream Interdependence	0.00	1.00	0.28*	0.02	0.09				
5. Downstream Interdependence	0.00	1.00	0.33*	0.40**	0.05	0.01			
6. TMT Size	6.60	2.61	–0.45**	–0.03	0.15	0.05	0.10		
7. TMT Tenure	7.71	3.47	0.13	0.23	0.37*	–0.12	0.05	–0.11	
8. Company Sales (log)	2.25	0.58	0.00	0.06	0.01	0.37*	–0.08	0.20	0.06

$N = 37$ except in the case of correlations with Advice Network Density where $N = 35$
$^{*}p < 0.05$; $^{**}p < 0.01$.

Table 2. Results of multiple regression analysis

Independent variables	
Internationalization Extent	0.042^
	(0.03)
Internal Mode	–0.009
	(0.09)
Upstream Interdependence	0.066*
	(0.03)
Downstream Interdependence	0.061*
	(0.03)
TMT Size	–0.039**
	(0.01)
TMT Tenure	0.003
	(0.01)
Company Sales (log)	–0.001
	(0.06)
Constant	0.617***
	(0.15)
R^2	0.48
Adjusted R^2	0.35
F	3.57**

Standard errors in parentheses.
$N = 35$
$^{\wedge}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$

respective tacit knowledge stocks as the MNC becomes more internationalized with a more globally integrated strategy. Finally, contrary to our hypothesis, the TMT's *advice network density* was not dependent on the MNC's use of an *internal mode* of international involvement. Perhaps there are differences in exactly which executives are considered as members of the TMT for MNCs that have low vs. high use of internal modes of involvement. Perhaps, contrary to our expectations, external and internal modes of IB involvement generate just as much need for sharing tacit knowledge among the executives who are members of the TMT.

Second, this research expands the study of TMTs into the area of the firm's IB activities. To date only one other published study has addressed an aspect of such TMT activities (Sambharya, 1996)—a study which takes a more traditional upper echelon perspective. Today, the international dimension of business is increasing and study of international management phenomena is gaining in importance.

Third, this study's findings suggest that the TMT becomes a key coordinating mechanism through its tacit knowledge sharing and IB advice network processes. This finding is similar to findings of prior research which clearly indicate that normative integration of an international company's managers is a most effective means of controlling an MNC's multinational network (Bartlett and Ghoshal, 1989; Boyacigiller, 1990; Edström and Galbraith, 1977; Ghoshal and Nohria, 1989; Prahalad and Doz, 1987; Roth and Nigh, 1992; Roth *et al.*, 1991). Normative integration creates global strategic advantage through knowledge-sharing and -enhancing activities such as informal task forces and committees which nurture learning so that tacit knowledge-sharing linkages are developed.

Fourth, this present study has introduced social network aspects to the study of TMTs and their management of tacit knowledge. Social network analysis offers a useful approach to researchers interested in how TMTs function as a process. Through social networks, we can begin to understand the process by which managers capitalize on each other's experientially gained tacit knowledge of the MNC's complex overseas activities.

Thus, social network analysis can be a useful tool to study the roles of different members of the TMT. For example, future research can use social network analysis to examine the roles of CEOs based on their relative TMT network position, power, and influence. These CEO roles could be examined as strategy antecedents or outcomes.

Finally, future research should examine the links among MNC internationalization strategy, the TMT advice network characteristics and MNC performance. If MNCs internationalize idiosyncratically and develop TMTs which are rare, inimitable and valuable resources, then an MNC which develops the best fit between its internationalization strategy and its TMT advice network characteristics may be expected to achieve superior performance over MNCs who do not develop such a fit.

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