MATCHING MANAGERS TO STRATEGIES: DO MULTINATIONAL COMPANIES NEED MULTICULTURAL TOP MANAGEMENT TEAMS?

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Abstract

Multinational companies (MNCs) increasingly nominate foreign nationals to their top management team (TMT). It is expected that the cultural heterogeneity created by such team reorganization benefits the firm by providing the requisite cognitive capacity to manage increasing global complexity. To date, empirical confirmation of this assumption is absent. In this article, we develop and empirically test: 1) a theoretical framework that links TMT cultural heterogeneity with team processes and performance, and 2) a contingency model for the impact on performance of a fit between the degree of MNC internationalization and the degree of TMT cultural heterogeneity. The findings indicate that there are benefits as well as costs associated with TMT cultural heterogeneity. Furthermore, companies matching their TMT degree of cultural heterogeneity with the internationalization strategies pursued outperform firms that fail to do so. Core implications for practice and future research are outlined.

Keywords: Internationalization; TMT cultural heterogeneity; firm performance; strategy-manager fit

INTRODUCTION

International expansion represents the core strategic objective of companies all around the world. The degree of internationalization of companies in terms of foreign sales, production, employees, and equity holdings is now higher than ever before. In fact, for the average European company, overseas sales to total sales recently exceeded the 50% mark (UNCTAD, 2000). In the foreseeable future, US and Japanese companies on average are expected to follow. Given that a company's financial success in the 21st century will depend predominantly on its foreign operations, the question of effective management of international expansion becomes decisive.

A major premise of research into international business is that the management of a company with dispersed international operations differs in many significant ways from one whose business activities are confined to the home market. In order to be able to successfully compete in the international business environment, managers need to foresee and address worldwide market, political, and social dynamics in a timely, flexible, and differentiated manner (Kogut, 1985; Prahalad & Doz, 1987). Resources need to be redistributed in response to shifting scale, scope and cost advantages while potential problems arising from coordination, communication and motivation in culturally dispersed subsidiaries must be continually monitored and addressed (Hofstede, 1980; Perlmutter, 1969; Roth & O'Donnell, 1996). In view of the considerable complexity of such a task, a central question arises: Are there certain top management team characteristics that provide the critical competencies requisite for effective global leadership?

By the end of the 1990s, managers had begun to believe that in order to be able to effectively manage increasing internationalization, TMT composition needs to reflect the multinational composition of a company's sales, production locations, and equity holdings (Derr & Oddou, 1993; Prahalad & Lieberthal, 1998; Ruigrok, Peck & van der Linde, 1999). As a result, between 1995 and 1998, the proportion of companies with one or more foreign directors increased from 39 to 60 percent on a worldwide basis. Over the same period of time, the proportion of companies with three or more executives of foreign nationality rose from 11 to 23 percent (The Conference Board, 1999). In discussing the dominant driver for such TMT

internationalization, researchers suggested that placing foreign nationals in top management teams creates the cultural heterogeneity and concomitant cognitive capacity requisite for the successful management of internationally dispersed firms (Adler, 1997; Elron, 1997; Hambrick, Davison, Snell & Snow, 1998; Hitt, Hoskisson & Kim, 1997).

Although the need for TMT internationalization in multinational companies has intuitive appeal, researchers so far have not been able to empirically pinpoint the exact consequences of TMT cultural heterogeneity on team processes and performance. By employing survey research and empirical analysis of secondary data, we shall attempt to shed some light on this issue in this article. Particularly, we will report our findings relating to the following questions: What are the particular costs and benefits of TMT cultural heterogeneity as perceived by members of multinational top management teams? Do MNCs, in general, benefit from TMT cultural heterogeneity or is it important to find a match between particular internationalization strategies and TMT profiles?

TOP MANAGEMENT TEAM CULTURAL HETEROGENEITY AND ITS IMPACT ON TEAM PROCESSES AND PERFORMANCE

Ever since Hambrick and Mason (1984) focused their attention on the upper echelons of management, researchers in the field of strategic management have attempted to understand the antecedents, dynamics and influences of TMT composition. One significant subordinate line of inquiry sought to address the issue of team heterogeneity and its effects on team processes and performance.

In their comprehensive review of this team heterogeneity literature, Milliken and Martins (1996) identified four intervening variables through which group heterogeneity, in general, influences team performance: cognitive capacity, emotional conflict, communication fluency, and symbolic power. Below, we will adapt these variables to the top executive level and international arena to develop propositions concerning the impact of TMT cultural heterogeneity on team processes and performance.

Cognitive capacity

Research indicates that as firms expand internationally, managers face increasing information-processing demands (Calori, Johnson & Sarnin, 1994). Compared to single-culture TMTs, multicultural TMTs of MNCs are seen as being in a more favorable position to identify and accurately interpret critical pieces of information available worldwide. Due to their multicultural composition they are likely to have a superior knowledge of foreign customer bases, investor and employee communities, and political and social idiosyncrasies of foreign market environments. Furthermore, they are considered to be able to more quickly locate and effectively address coordination, communication and motivation demands extant in culturally dispersed multinational firms (Hofstede, 1980; Schneider & Barsoux, 1997). On the whole, TMT cultural heterogeneity can be expected to positively influence a team's ability to process information, identify and react to environmental change or impulse, and generate new and more innovative ideas and alternatives for superior decision quality. Thus:

P 1: By increasing TMT intra-group cognitive capacity, cultural heterogeneity positively impacts decision quality.

Emotional conflict

TMT cultural heterogeneity, like member heterogeneity in general, can be expected to have negative emotional implications for team functioning. In particular, directly observable physical behavioral differences or diversity of demeanor can cause emotional conflict and thus reduce group interaction by triggering off prejudices and stereotypes. This in turn is likely to result in a loss of group cohesion and identification, low member satisfaction, and a general disruption in communication (Hambrick et al., 1998; Tsui, Egan & O'Reilly, 1992). In addition, a diversity of values or the occurrence that executives exhibit different underlying belief systems may cause low interpersonal attraction, thus exerting a negative impact on the social integration of executives. Again, a loss of cohesion, distrust, and dwindling member satisfaction might well be the outcome (Ancona & Caldwell, 1992; Cox, 1991; Pfeffer, 1983). Considering these points together, TMT cultural heterogeneity is

likely to cause emotional conflict, concomitant delays in decision making, and low decision commitment.

P 2: By increasing TMT intra-group emotional conflict, cultural heterogeneity negatively impacts decision timeliness and decision commitment.

Communication fluency

Culturally heterogeneous TMTs are generally accompanied by language heterogeneity. Language heterogeneity itself -where top executives speak different first languages- does not necessarily imply certain costs. However, culturally heterogeneous TMTs will communicate in a company or working language agreed upon in advance. Executives will differ in their working language proficiency and thus create some sort of working language diversity (Hambrick et al., 1998). The working language 'gap' between executives can be expected to be detrimental to the team's communication fluency (Gudykunst, 1991; Hitt, Hoskisson & Ireland, 1994). Therefore, we argue that TMT cultural heterogeneity is likely to result in working language diversity with a negative impact on communication fluency and thus decision timeliness.

P 3: By detracting from TMT intra-group communication fluency, cultural heterogeneity negatively impacts TMT decision timeliness.

Direct interaction capability

Team heterogeneity is considered to lead to more effective *direct interaction* with a company's multiple internal and external constituencies (Boddewyn, 1988; Milliken & Martins, 1996). Culturally heterogeneous TMTs in particular are likely to exhibit a superior understanding of the values, goals, and rules of interaction of worldwide company stakeholders. Thus, they can be expected to more effectively communicate and interact with global employees, clients, investors, governments, media, and trade unions. In view of the rising importance of adequate global public and

corporate affairs management, one may consider the capacity for inter-group mediation, arbitration, negotiation, and networking as a major strength of culturally heterogeneous TMTs (Ancona & Caldwell, 1988; Ghoshal, Korine & Szulanski, 1994; Hillman, Cannella & Paetzold, 2000; Krackhardt, 1990; Pfeffer, 1972). Overall, culturally heterogeneous TMTs might be considered to be in an excellent position to fulfill the important task of global stakeholder management.

P 4: By improving TMT inter-group direct interaction capability, cultural heterogeneity positively impacts global stakeholder satisfaction.

Symbolic power

TMT cultural heterogeneity may be expected to have a *symbolic impact* on key company stakeholders such as employees, customers, and investors (Hambrick, 1994; Pfeffer, 1981). Firstly, cultural heterogeneity at the top executive level might signal to employees worldwide that career advancement is not confined to national or cultural affiliations. This perception of equal job opportunity, even at the highest level, might serve as an invaluable stimulus for superior job performance. Secondly, cultural heterogeneity may hold symbolic meaning for international customers, who may feel more encouraged to engage in business ties with foreign-based companies run by culturally diverse TMTs. Finally, culturally heterogeneous TMTs are in a favorable position to address agency problems inherent in multinational business operations (Peck & Ruigrok, 2000; Roth, 1995; Sanders & Carpenter, 1998; Wright, 1995). Thus, they may be expected to be more likely to enjoy credibility among internationally active investors and lenders. All in all, it may be argued that TMT cultural heterogeneity generates positive symbolic stimuli for key company stakeholders and thus improves global stakeholder satisfaction.

P 5: By increasing TMT inter-group symbolic power, cultural heterogeneity positively impacts global stakeholder satisfaction.

Direct impact on MNC performance

The above propositions suggest that there are benefits as well as costs associated with TMT cultural heterogeneity. Previous research findings indicate that managers operating in multicultural teams tend to be under the subjective impression that the group is not functioning well, although company performance may indicate otherwise (Elron, 1997; Jehn, 1995). The reason for such behavior is that human beings tend to overemphasize the negative consequences resulting from situations of conflict. The costs of emotional conflict associated with cultural heterogeneity are therefore subjectively reinforced and the benefits of constructive conflict are undermined. Therefore:

P 6: Members of culturally heterogeneous TMTs perceive the costs to outweigh the benefits. TMT cultural heterogeneity is therefore believed to be detrimental to MNC performance.

PERFORMANCE IMPACT OF ‚FIT'

Contingency theorists argue that the fit between TMT composition and strategic orientation determines organizational success. Researchers have emphasized that companies matching top executive profiles with the requirements of their strategies outperform firms that fail to achieve such coalignment (Athanassiou & Nigh, 1999; Bartlett & Ghoshal, 1989; Gupta, 1984; Kotter, 1982; Thomas, Litschert & Ramaswamy, 1991; Roth, 1995).

With respect to internationalization strategies, it is assumed that the internationalization of top management teams as reflected by a team's degree of cultural heterogeneity has a positive impact on the performance of MNCs (Elron, 1997; Hitt et al., 1997; Hoskisson & Hitt, 1994; Kogut, 1985, 1989). Indeed, as suggested above, it can be argued that multicultural TMTs exhibit the requisite cognitive capacity, direct interaction capability, and symbolic power to effectively manage international business markets and to cultivate external dependencies with respect to a company's global stakeholders. However, multicultural TMTs are also likely to be associated with major costs that adversely affect performance. As

indicated, these costs are likely to stem from emotional conflict and communication disruptions which result in low decision timeliness and low decision commitment.

The simultaneous existence of costs and benefits does not allow us to claim a universalistic impact of TMT cultural heterogeneity on MNC performance. Addressing the need for more differentiation, the concept of requisite variety in organizational theory (Ashby, 1956; Lawrence & Lorsch, 1969; Morrison, 1992; Weick, 1979) suggests that corporations should mirror their nature *and* extent of environmental complexity in their intra-company complexity. In matched settings the benefits will outweigh the costs and vice versa. Therefore, we argue that MNCs facing a high degree of environmental international complexity (as reflected by a firm's degree of internationalization) benefit from a high degree of intra-company international complexity (as reflected by a TMT's degree of cultural heterogeneity) and vice versa.

In summary, MNCs are expected to match their TMT degree of cultural heterogeneity or group complexity with their particular degree of internationalization or task complexity. Further, we argue that MNCs achieving a greater degree of coalignment between group and task complexity exhibit superior performance. The following propositions reflect these arguments:

P 7: MNCs pursuing low DOIs will be led by TMTs characterized by a low degree of cultural heterogeneity. MNCs pursuing high DOIs will be led by TMTs characterized by a high degree of cultural heterogeneity.

P 8: MNCs that match their TMT degree of cultural heterogeneity with their DOI significantly outperform companies that fail to do so.

Figure 1 depicts the tripartite research model[1] proposed and Table 1 presents a summary of the hypotheses derived from propositions 1-8.

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DEDINITIONS AND METHODS

Definition of ‚top management team'

This study's statistical analyses are based on a company sample drawn from Germany, the European Union's largest economy. Germany's company board model has a two-tier structure encompassing the *Vorstand* (management board) and the *Aufsichtsrat* (supervisory board). Under company law, the management board is responsible for strategic decision-making and planning, day-to-day management of the business, and review of corporate performance in the MNC. The supervisory board monitors and supervises the management board, yet is not empowered to engage itself in corporate management. In the course of this study, the term TMT refers to the *management board* of German companies.

Definition of ‚culture'

Culture in this study is defined as the "mental program" (Hofstede, 1980: 11) shared by a group of people as reflected in a distinct value schema. In his classical study, Hofstede (1980) was able to reveal nation-specific cultural characteristics by surveying 116,000 IBM employees in 40 different countries. He pinpointed four[2] cultural dimensions on which nations do vary: power distance, uncertainty avoidance, individualism/collectivism, and masculinity/femininity. *Power distance* refers to the extent to which people in one country tolerate power inequality in institutions and organizations. *Uncertainty avoidance* describes the degree to which members of one society dislike uncertainty and favor predictability, security, and steadiness. *Individualism/collectivism* separates nations into those in which people tend to look solely after themselves and their immediate families (individualist) and those in which members also cultivate major emotional bonds to other groups and institutions (collectivist). Finally, *masculinity/femininity* relates to a nation's tendency to promote either masculine (assertiveness, competitiveness, materialism) or feminine values (nurturing, quality of life, and relationships). In his study,

Hofstede (1980) assigned national culture scores for each dimension to each of the 40 nationalities examined.

Empirical analysis of primary data

Data sources and variable operationalization

In order to identify the process implications of TMT cultural heterogeneity, a survey instrument was developed and distributed to 686 top executives of 152 German MNCs in four non-service industries: Chemicals, Machinery, Metals and Construction, and Automobiles. In compiling the list of organizations, we initially identified Germany's largest 1000 manufacturing companies by sales volume in 1999 (*Dafne*, 2000). Companies without FDI nor a foreign national on the top management team were then excluded, leaving the final company sample.

The questionnaire (both in German and English) mailed to the members of multinational top management teams included items that assessed all team process and performance variables of interest. A five point Likert scale was used as the response format. The survey's response rate was 22.4% with 154 responses from 94 companies being received (i.e., an average of 1.64 questionnaires per company). In the 22 cases for which responses were available from two or more members of the same team, a high level of agreement in the rating of key variables was identified. This trend was also evident in the few cases in which the answers of members of differing nationalities were compared. Su]TJu-e4()11 TF fnagewithoy sain the fa.n.stheTw[(Th.2(

arrived at a team-level heterogeneity composite (*cf.* Allison, 1978; Elron, 1997). A top management team that is perfectly culturally homogeneous would have a variation coefficient of zero. Hence, larger scores indicate greater cultural heterogeneity. Table 2 illustrates the computation of the cultural heterogeneity index for two fictitious TMTs.[3]

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Analysis techniques

For the testing of Hypothesis 1a-5a which posit the effects of only one independent variable -TMT cultural heterogeneity- on team processes, we used the Pearson product-moment correlation coefficients between the variables in question. In contrast, multiple regression analysis was necessary to test for Hypotheses 1b-3b, 1c-3c, 1d-3d, and 4b/5b which propose that multiple independent variables have an impact on team performance (i.e., cognitive capacity, emotional conflict, and communication fluency on intra-group performance; and direct interaction capability and symbolic power on inter-team performance). Multiple regression analysis was also employed to test Hypotheses 6a-e, i.e., the direct impact of decision quality, decision timeliness, decision commitment, global stakeholder satisfaction, and cultural heterogeneity on company performance.

Empirical analysis of secondary data

Data sources and variable operationalization

The starting point for the second stage of empirical analysis -identification of performance implications by way of examining secondary data, Hypotheses 7 and 8- was the 94 MNCs for which we had the 'TMT degree of cultural heterogeneity' composite. Next, we sorted firms according to the availability of data for their degree of internationalization and performance.

Under German company law, firms are only required to provide data on the ratio of foreign sales to total sales, not on asset, employee, subsidiary, or equity dispersion

between the home country and foreign countries. Thus, to acquire a statistically valid sample size, we had to rely on the ratio of foreign subsidiary sales to total sales (FSTS) as the 'degree of internationalization' measure.[4] Data for 1999 were obtained from the annual manual of the 'Handbuch der deutschen Aktiengesellschaften' (Hoppenstedt Verlag, 2000).

In order to provide adequate research validity and comparability, we chose to conceptualize performance on two dimensions; financial and operational. Pre-tax ROA was used as the financial performance indicator. Cost efficiency, defined as: one minus the sum of the ratios of a company's material costs to sales and employee costs to sales, was chosen as the operational performance measure. Whereas the former represents a commonly applied accounting measure signifying book return, the latter measure allows for the testing of the widely held belief that the reduction of material and labor costs represents a major benefit of international expansion (Porter, 1985). Performance data were obtained from *Dafne* (2000), a database with financial figures for German companies.

Complete data were available for 88 German companies distributed across the four industries in the following manner: Automobiles (21); Chemicals (24); Metals and Construction (21); and Machinery (22). In summary, the company sample is representative for medium to large German manufacturing MNCs led by multinational top management teams in the year 1999.

Analysis Step 1: Determination of DOI clusters or core internationalization strategies

We used the 'degree of internationalization' ratio to split MNCs into two sub-groups: those companies exhibiting low and those exhibiting high degrees of internationalization. Firms having an FSTS ratio above the sample median were defined as pursuing high-level DOIs while MNCs with a ratio below the median were defined as pursuing low-level DOIs.

The median FSTS ratio was determined at 51% indicating that, at that particular point in time, German MNCs demonstrated equal distribution across two key internationalization strategies: one half pursuing a 'peripheral' internationalization

strategy considering foreign activities merely as an “adjunct to domestic business” (Magaziner & Reich, 1985: 8) and one half pursuing ‘focused’ international expansion with a clear strategic focus on foreign markets. The clustering procedure assigned 40 MNCs to the ‘peripheral’ DOI cluster (sales predominantly generated in the home market) and 48 companies to the ‘focused’ DOI group (sales predominantly generated in foreign markets).

Analysis Step 2: Determination of ideal TMT profiles

Coalignment in the course of this study’s statistical analyses was conceptualized as the degree of correspondence between the ideal and actual TMT profile in terms of degree of cultural heterogeneity (Drazin & Van de Ven, 1985; Venkatraman & Prescott, 1990). Separate ideal TMT degree of cultural heterogeneity scores for the two DOI clusters were empirically identified as follows. First, the MNCs in each group were ranked on the basis of the two performance criteria being used (i.e., ROA and cost efficiency). Then, the top 10 percent (*cf.* Thomas et al., 1991) of MNCs in each cluster were used to calculate standardized means representing the ideal TMT profiles with respect to TMT cultural heterogeneity. Table 3 presents the identified ideal profiles for the two DOI clusters.

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Analysis Step 3: The performance impact of fit

The degree of misfit for each DOI cluster was operationalized as the Euclidean distance from the respective ideal TMT profile and derived by the following equation (*cf.* Van de Ven and Drazin, 1985):

$$\text{MISFIT} = \sqrt{\sum \left(X_i - X_j \right)^2}$$

where X_i = score for ideal TMT degree of cultural heterogeneity
where X_j = score for j^{th} MNC on TMT degree of cultural heterogeneity

To test for the impact of misfit on performance, this measure was correlated with the two performance measures for both DOI clusters. Our central proposition that MNCs should match their degree of internationalization with their TMT degree of cultural heterogeneity would be confirmed should an increasing degree of misfit result in declining performance.

RESULTS AND DISCUSSION

In the following we shall restate the two core research questions being addressed in this essay and present the respective answers as suggested by our findings.[5]

1. *What are the particular benefits and costs of TMT cultural heterogeneity as perceived by members of multinational top management teams?*

The findings suggest that cultural heterogeneity, by increasing the cognitive capacity of the top management team, enhances decision quality. It was also shown that cultural heterogeneity, by causing emotional conflict, reduces decision timeliness and decision commitment. Therefore, in conclusion, Hypotheses Sets 1 and 2 are confirmed. These results are not counterintuitive and largely confirm related research on team cultural heterogeneity at other organizational levels (for multicultural task groups see Earley & Mosakowski, 2000 and Watson, Kumar & Michaelsen, 1993; for multicultural management teams at overseas subsidiaries of companies see Elron, 1997; and for multicultural project teams in international joint ventures see Salk & Brannen, 2000).

The proposition that TMT cultural heterogeneity, by impairing communication fluency, has a negative impact on decision timeliness was rejected (i.e., Hypotheses Set 3). Although the effect was not significant, the results suggest rather that TMT cultural heterogeneity improves TMT communication fluency and thus enhances decision timeliness. There are two possible interpretations of this finding. First, the result could indicate that the costs of working-language diversity are less significant than expected. Top executives may have a sufficient working-language proficiency or the application of effective translation systems minimizes time loss due to language barriers. Secondly, an alternative explanation for the finding could be the fact that multicultural TMTs have a better on-call knowledge of global business

markets than single-culture teams. Such an advantage may compensate for any time loss owing to slower team communication.

With respect to inter-group processes, the findings show that TMT cultural heterogeneity has symbolic value for a MNC's global stakeholders (Hypotheses Set 5). The demographic characteristic appears to indicate the commitment of TMTs to adequately represent the interests of their company's employees, customers, and investors. As a result, TMT cultural heterogeneity can be argued to motivate the workforce, drive sales acquisition, and induce investor loyalty on a global scale.

In contrast to its positive *symbolic power*, cultural heterogeneity exhibited a negative impact on the capability of TMTs to *directly interact* with stakeholders worldwide. Therefore, Hypothesis Set 4 was rejected. Contrary to our expectations, members of multicultural top management teams appear to have significant problems with respect to direct interaction with internal and external constituencies of the firm. One may speculate that differing cultural value systems and/or behavioral rules are likely to result in situations of inter-group conflict similar to those extant within the team itself. Statements and behavior on the part of members of multicultural TMTs may easily be misunderstood or misinterpreted by culturally diverse company stakeholders.

Finally, Hypotheses Set 6 posited a negative relationship between TMT cultural heterogeneity and company performance. It was expected that members of culturally heterogeneous TMTs subjectively perceive the costs to outweigh the benefits. Although the sign of the coefficient was negative as hypothesized, the impact turned out to be insignificant. Thus, Proposition 6 is not confirmed.

Tables 4 and 5 present the results of the statistical analyses of survey data. Figure 2 depicts the final variable schema identified.

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2. *Do MNCs, in general, benefit from TMT cultural heterogeneity or is it important to find a match between particular internationalization strategies and TMT profiles?*

As described above, the findings obtained from the research survey indicated the existence of benefits *and* costs of TMT cultural heterogeneity. Consequently, we are unable to argue for a universalistic and direct impact of TMT degree of cultural heterogeneity on company performance. The rejection of Proposition 6 supports this conclusion. In order to be able to provide valuable advice regarding the necessity and appropriate degree of TMT cultural heterogeneity in MNCs, it is necessary to identify those settings in which the benefits outweigh the costs and vice versa.

In Hypotheses Sets 7 and 8, we suggested that the appropriate degree of TMT cultural heterogeneity will be contingent upon the particular internationalization strategy pursued by the MNC. MNCs pursuing a 'peripheral' internationalization strategy (low DOI) were hypothesized to achieve a fit with a TMT characterized by a low degree of cultural heterogeneity. In contrast, MNCs pursuing a 'focused' internationalization strategy (high DOI) were argued to achieve a fit with a TMT exhibiting a high degree of cultural heterogeneity. In matched settings, the benefits of TMT cultural heterogeneity will outweigh the costs. Deviation from the defined 'fit' scenarios was hypothesized to result in decreased performance.

The results obtained largely confirm expectations. Table 6 shows the results of the *t*-test used to determine whether theoretically expected TMT profiles are indeed related to particular DOI clusters. The findings indicate that MNCs located at different DOI levels exhibit significantly different degrees of TMT cultural heterogeneity in the manner expected. Therefore, Proposition 7 is confirmed. With respect to performance implications (Table 7), the results indicate that for MNCs operating at low DOI levels, increasing degrees of misfit are negatively related to ROA at the 0.1 significance level. With respect to cost efficiency, the results also suggest a negative relationship, however at an insignificant effect size. MNCs

pursuing high DOI levels were found to experience a significant negative impact from misfit on *both* performance measures ($p<0.1$ for ROA; $p<0.05$ for CEFF).

The insignificant relationship between misfit and cost efficiency for MNCs operating at low DOI levels could perhaps be explained by the DOI-specific nature of internationalization benefits. Companies following 'peripheral' international expansion are argued to dominantly generate internationalization benefits that accrue from economies of scale. Such economies of scale have a direct impact solely on accounting performance measures such as ROA (Magaziner & Reich, 1985). In contrast, the internationalization experience gained during the expansion process enables MNCs that pursue 'focused' globalization to set up the structures, mechanisms, and systems requisite for the successful exploitation of imperfections in global factor markets. Therefore, in addition to benefits derived from economies of scale, MNCs operating at high DOIs are able to generate internationalization benefits (i.e., cost efficiencies) that stem from access to cheap raw materials and low labor costs.

Despite the lack of general statistical significance, the results obtained confirm Hypotheses Set 8 and provide convincing support for the tripartite research model proposed. MNCs pursuing differing internationalization strategies do not benefit from the same degree of TMT cultural heterogeneity. Rather, companies need to coalign their degree of internationalization with their TMT degree of cultural heterogeneity. MNCs that accomplish this goal outperform those that fail to do so.

IMPLICATIONS

The identification of a moderating impact of TMT cultural heterogeneity on the relationship between corporate degree of internationalization and performance has major implications for academic theorizing and modeling in the international business, international management, and strategic management fields of study.

Hitherto research on the relationship between degree of internationalization and performance has produced inconsistent and contradictory findings. Those who have reviewed the literature have concluded that, after three decades of inquiry, we do not know whether and, if so, how international expansion affects corporate performance

(*cf.* Annavarjula & Beldona, 2000; Ramaswamy, 1992; Sullivan, 1994). This conclusion is based on previous studies that have tested throughout for a universalistic impact of a firm's degree of internationalization on its performance. Our finding of a moderating impact of TMT cultural heterogeneity on the relationship between degree of internationalization and performance, however, points toward the need to apply contingency perspectives. Internationalization appears to be a necessary but by no means sufficient condition for financial success. Successful international expansion is likely to be contingent upon the appropriate reconfiguration of organizational design elements in response to changing environmental complexity. Thus, future research may seek to identify those intra-company mechanisms, structures, and systems that fit the particular international complexity faced by multinational corporations.

Empirical work conducted to date on the relationship between internationalization and performance has conceptualized the degree of a company's internationalization on three dimensions: structural, financial, and psychological (*cf.* Sullivan, 1994). It is argued that the structural degree of internationalization depicts a company's dependence upon foreign production and may be operationalized by a firm's country scope, foreign assets to total assets, and the number of foreign subsidiaries to total subsidiaries. The financial dimension of internationalization relates to a firm's monetary dependence on foreign markets and can be measured with the help of foreign sales to total sales, foreign profits to total profits, and foreign taxes to total taxes. Finally, it is argued that a corporation's psychological or qualitative degree of internationalization is reflected in the international background of its TMT. TMT national diversity, cultural heterogeneity, and international educational and professional experience have been suggested for operationalizing a firm's psychological degree of internationalization (Sambharya, 1996; Sullivan, 1994). So far, the few scholars who have tested for a direct impact of a firm's psychological DOI on its performance have generated insignificant findings (e.g., Peterson, Sargent, Napier & Shim, 1996; Ramaswamy, Kroeck & Renforth, 1996). Likewise, this study's statistical analyses rejected the existence of a direct impact of TMT cultural heterogeneity on company performance. However, we were able to disclose a significant *moderating* impact of TMT cultural heterogeneity on the relationship between a company's financial degree of internationalization and its performance. Thus, future research may start to conceptualize the psychological DOI of

companies as an intra-firm moderator variable of the relationship between structural/financial DOI and company performance.

The findings of this study offer general support for upper-echelons theory (Hambrick & Mason, 1984). TMT characteristics appear to have a significant impact on team processes and performance, and ultimately also on organizational outcomes. However, the confirmation of the requisite variety concept in the course of the statistical analyses challenges the comprehensiveness of a major assumption underlying upper-echelons theory. The theory is built on the argument that strategic decision-making at the top level is, in general, subject to high environmental complexity and concomitant uncertainty. Yet, in the course of this study we showed that, in the international context, complexity might be better operationalized as a continuous, dynamic variable. It is argued that firms in the initial stage of internationalization face less environmental complexity than firms with high degrees of internationalization. Hence, the finding of a performance impact of a coalignment between MNC degree of internationalization and TMT degree of cultural heterogeneity suggests that the application of upper-echelons theory in the international context requires a more specific elaboration of its underlying assumptions.

With respect to practical implications, this study's findings advise companies to pay careful attention to the composition of their top management team. Given the importance of foresighted action and selection, executive nomination committees and boards of directors must ensure that TMT member characteristics adequately reflect the current and future strategic needs with respect to the company's customer base, and employee and investor communities. Any gaps in the portfolio of required skills will have to be identified and addressed in a timely manner. For companies pursuing international expansion, the TMT characteristic 'cultural heterogeneity' was found to represent an important element in the match between strategic demands and managerial competencies.

The findings also indicate that TMT cultural heterogeneity is likely to result in intra-group and inter-group emotional conflict. If not properly managed, associated costs can outweigh any benefits and thus cause TMT cultural heterogeneity to have a negative impact on MNC performance. In view of these potentially devastating

effects on group processes, adequate management of this type of diversity becomes critical. Companies that have decided to appoint culturally heterogeneous TMTs need to constantly confront potential negative consequences (e.g., by way of conflict resolution strategies and socialization tactics, effective decision-making techniques and rules of team interaction, a clear definition of TMT members' duty of representation, and principles of interaction with key external constituencies).

LIMITATIONS

This study's company sample suggests that MNCs employ culturally heterogeneous TMTs for three major reasons: 1) to acquire foreign-market knowledge; 2) to improve the team's symbolic appeal to, and direct interaction capability with, global stakeholders; and 3) to cause constructive conflict in the decision-making group per se. However, one limitation of large sample analysis is its incapacity to provide in-depth elaboration on situation-specific and company-specific drivers and consequences of TMT cultural heterogeneity. Thus, researchers in the future are encouraged to pursue case-study research including interviews and observational inquiry in order to discuss in detail the question of why particular companies enforce certain cultural compositions of their TMT. Helpful illustrations and best practice examples could be the result of such research.

To address a potential methodological limitation of this study, we must direct the reader's attention to the operationalization technique chosen for TMT cultural heterogeneity. Critics of Hofstede's (1980) culture scores have pointed out that the cultural dimensions identified are not exhaustive. Further, it could be claimed that the construction of his survey and the interpretation of results is inherently biased by Hofstede's own culture.[6] Finally, the questionnaire used by Hofstede (1980) was limited to IBM employees and therefore one may ask to what extent the particular culture of that organization has influenced the findings. Despite the existence of such valid points for criticism, Hofstede's research is widely considered to be the most comprehensive work on the measurement of cultural differences across nations (Kogut & Singh, 1988). To date, numerous researchers have used Hofstede's (1980) numerical scales and provided convincing support for the construct validity of his four cultural dimensions (*cf.* Hofstede & Bond, 1984; Morosini, Shane & Singh, 1998; Schwartz, 1994; Smith, Dugan & Trompernaars, 1996; Sondergaard, 1994).

Furthermore, it is recognized that the clustering technique used to assign MNCs to particular strategy types (‘peripheral’ and ‘focused’) is rather simplistic and coarse. However, as Ghoshal and Nohria (1995: 50) noted, “managers need simple organizational models and classification schemes as a starting-point for thinking about the core attributes of their organizational needs. Similarly, academics need them in order to build theory and develop analytical and testable propositions.” This statement is particularly true for research subjects that, like ‘TMT internationalization’, represent still largely uncharted territory.

Another limitation of this study is the fact that the cross-sectional research approach used is only able to investigate isolated moments in time. Questions about the dynamics of TMT cultural heterogeneity are left unanswered. How do multicultural teams evolve over time? Does emotional conflict vanish and cognitive capacity and communication capability improve, i.e. do multicultural teams learn how to cooperate effectively over time? Similarly, matching is a dynamic process. Few, if any, MNCs are ever in a state of ideal equilibrium. Rather, they are constantly “shooting at a moving target of coalignment” (Thompson, 1967: 234). Here, one may inquire into the organizational and environmental factors which, in addition to organizational performance, drive MNCs either away from or towards a perfect state of TMT fit (e.g., recruiting problems). In conclusion, future research may wish to pursue path and/or longitudinal analyses able to provide answers to these and other questions relating to the dynamics of the issue under consideration.

Finally, we used medium to large manufacturing companies for the statistical analyses. Thus, before we are able to announce generalizations on the exact nature of the relationships between TMT cultural heterogeneity, corporate degree of internationalization, team processes, and team and company performance, we must await further research that verifies this study’s findings for small MNCs and companies operating in the services sector.

Endnotes

[1] The model used builds on Thomas et al.'s (1991) research framework which represents a higher level of abstraction (i.e., that coalignment between executive characteristics and strategic orientation should affect organizational performance).

[2] In a subsequent study, Hofstede (1991) added a fifth cultural dimension: long-term orientation. Since this new study, however, did not provide the respective culture scores for all TMT member nationalities represented in the sample, we could not include the 'time' dimension in the analyses.

[3] The variable TMT degree of cultural heterogeneity was significantly correlated with another potential measure for TMT internationalization: percentage of foreign nationals (i.e., non-Germans) on the team ($r=0.592$, $p<0.001$). However, we do believe that the heterogeneity measure applied is more expressive. Solely distinguishing between foreign nationals and home nationals ignores each executive's cultural affiliation. A TMT composed of an American, a Canadian, and an Australian manager would be equated with a team composed of an American, a Japanese, and an Italian executive. The TMT cultural heterogeneity index clearly distinguishes between those two teams.

[4] Prior research has identified significant correlations between FSTS and other degree of internationalization measures such as foreign-assets-to-total-assets and country scope (*cf.* Gomes & Ramaswamy, 1999; Sambharya, 1995; Tallman & Li, 1996).

[5] It was found that the answers were generally consistent across all four industries examined. To test for industry impact, we applied ordinary least squares regression analysis with a binary dependent variable (agreement=1; disagreement=0). The method measures to what extent industry membership influenced the probability that respondents agreed with the statements in the questionnaire. The results indicated an insignificant ($p>0.10$) impact of the industry dummy variables on respondents' perception of process and performance consequences of TMT cultural heterogeneity.

6 One could, of course, also argue that our own cultural affiliation may have led to the application of biased research methods and distorted the interpretation of findings reported in this article. However, given that the author team of this article comprised two nationalities with fairly differing value schemas, this limitation applies only to a lower degree.

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TABLE 1
Hypotheses derived from propositions 1 to 8

H1a: TMT cultural heterogeneity is positively related to intra-group cognitive capacity
H1b: Intra-group cognitive capacity is positively related to decision quality
H1c: Intra-group cognitive capacity is not related to decision timeliness
H1d: Intra-group cognitive capacity is not related to decision commitment

H2a: TMT cultural heterogeneity is positively related to intra-group emotional conflict
H2b: Intra-group emotional conflict is not related to decision quality
H2c: Intra-group emotional conflict is negatively related to decision timeliness
H2d: Intra-group emotional conflict is negatively related to decision commitment

H3a: TMT cultural heterogeneity is negatively related to intra-group communication fluency
H3b: Intra-group communication fluency is not related to decision quality
H3c: Intra-group communication fluency is positively related to decision timeliness
H3d: Intra-group communication fluency is not related to decision commitment

H4a: TMT cultural heterogeneity is positively related to inter-group direct interaction capability
H4b: Inter-group direct interaction capability is positively related to global stakeholder satisfaction

H5a: TMT cultural heterogeneity is positively related to inter-group symbolic power
H5b: Inter-group symbolic power is positively related to global stakeholder satisfaction

H6a: TMT cultural heterogeneity is negatively related to company performance
H6b: Decision quality is positively related to company performance
H6c: Decision timeliness is positively related to company performance
H6d: Decision commitment is positively related to company performance
H6e: Global stakeholder satisfaction is positively related to company performance

H7: TMTs of MNCs pursuing a low DOI (Strategy Type 1: 'peripheral' internationalization) exhibit lower cultural heterogeneity than TMTs of MNCs pursuing high DOIs (Strategy Type 2: 'focused' internationalization)

H8a: Type 1 MNCs headed by TMTs with low cultural heterogeneity have higher organizational performance than other Type 1 MNCs
H8b: Type 2 MNCs headed by TMTs with high cultural heterogeneity have higher organizational performance than other Type 2 MNCs

TABLE 2
Cultural heterogeneity of two fictitious TMTs based on Hofstede's (1980) national culture scores*

Team 'Heterogen'

	PD	UA	I	M	
NET	38	53	80	14	
NOR	31	50	69	8	
MEX	81	82	30	69	
SIN	74	8	20	48	
USA	40	46	91	62	
SPA	57	86	51	42	
GER	35	65	67	66	
Mn	51	56	58	44	
Sd	19	24	24	23	
Vc	**.36**	**.43**	**.41**	**.52**	**.43**

Team 'Homogen'

	PD	UA	I	M	
SWI	34	58	68	70	
GER	35	65	67	66	
GER	35	65	67	66	
GER	35	65	67	66	
GER	35	65	67	66	
GER	35	65	67	66	
GER	35	65	67	66	
Mn	35	64	67	67	
Sd	.35	2.45	.35	1.4	
Vc	**.01**	**.04**	**.01**	**.02**	**.02**

PD: Power distance; UA: Uncertainty Avoidance; I: Individualism; M: Masculinity
Mn: Mean; Sd: Standard deviation; Vc: Variation coefficient

$$Mn = \frac{\sum_{i=1}^{n} x_i}{n};\ Sd = \sqrt{\frac{1}{n}\sum_{i=1}^{n}\left(x_i - \bar{x}\right)^2};\ Vc = \frac{Sd}{Mn}$$

* Nationality abbreviations as used by Hofstede (1980)

TABLE 3
Ideal TMT degree of cultural heterogeneity for MNCs operating at different DOI levels

Performance measure	Ideal TMT degree of cultural heterogeneity for MNCs exhibiting low DOIs (n=40)	Average TMT degree of cultural heterogeneity (n=88)	Ideal TMT degree of cultural heterogeneity for MNCs exhibiting high DOIs (n=48)
ROA	.136	.152	.170
CEFF	.132	.152	.167

ROA=Return on assets
CEFF=Cost efficiency

TABLE 4
Means, standard deviations, and correlations

	Variables	Mean	Sd	2	3	4	5	6	7	8	9	10
1.	Cultural heterogeneity	.15	.05	.351*	.496**	.151	-.297*	.572***	.246	-.185	-.118	-.114
2.	Cognitive capacity	2.13	1.03		-.027	-.158	-.155	.221	.585**	.18	-.275	.274
3.	Emotional conflict	3.84	.88			.473**	-.231	.012	-.198	-.402**	-.579**	-.216
4.	Communication fluency	3.09	1.18				-.248	.121	-.162	.398**	.416**	.01
5.	Direct interaction capability	1.98	.69					.152	.115	.006	-.216	.017
6.	Symbolic power	1.91	.85						.256	-.053	-.19	.279
7.	Decision quality	2.04	.9							-.301*	-.265	.288
8.	Decision timeliness	3.2	1.12								.421**	0
9.	Decision commitment	3.8	1.1									-.388**
10.	Global stakeholder satisfaction	1.67	.64									

* Correlation is significant at the .05 level (2-tailed)
** Correlation is significant at the .01 level (2-tailed)

TABLE 5
Regression analysis for top management team and company performance

Variables	Top management team performance				Company performance
	Decision quality	Decision timeliness	Decision commitment	Global stakeholder satisfaction	
Cognitive capacity	.508***	.145	.195		
Emotional conflict	-.198	-.362*	-.636***		
Communication fluency	.016	.229*	-.128		
Direct interaction capability				.087	
Symbolic power				.218*	
Decision quality					.142*
Decision timeliness					.029
Decision commitment					.179**
Global stakeholder satisfaction					.531***
Cultural heterogeneity					-2.045
Intercept	1.78***	1.41*	1.50***	1.36***	1.14*
F-value	8.21***	4.19**	9.79***	2.87*	8.90***
Adj. R2	.33	.18	.38	.09	.47

* $p<.10$ ** $p<.05$ *** $p<.01$

TABLE 6
TMT degree of cultural heterogeneity (CulH) for MNCs operating at low and high degrees of internationalization (DOIs)

DOI	n	Mean CulH	*t*-test
Low (FSTS<51%)	40	.11	
			$p<0.001$
High (FSTS>=51%)	48	.18	

Median FSTS=.51
Median CulH=.16

TABLE 7
Performance impact of a misfit between MNC DOI and TMT degree of cultural heterogeneity

	ROA	CEFF
Low DOI	-.342*	-.269
High DOI	-.39*	-.456**

* $p<.10$
** $p<.05$

FIGURE 1
The tripartite research model

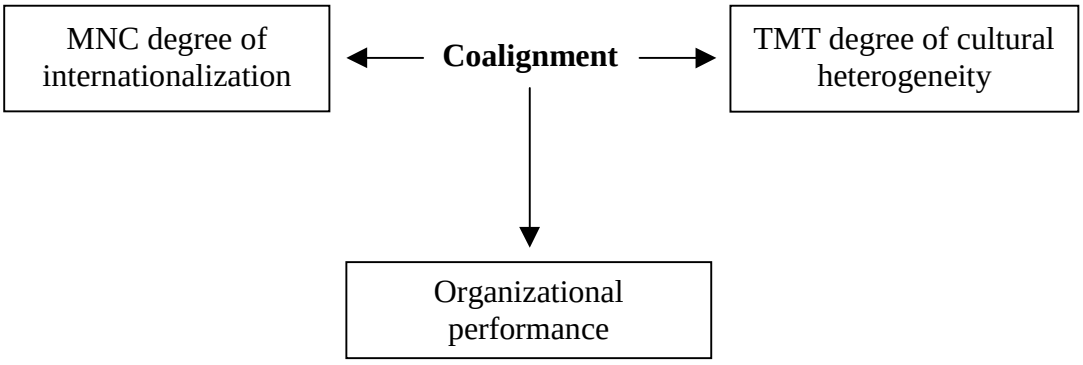
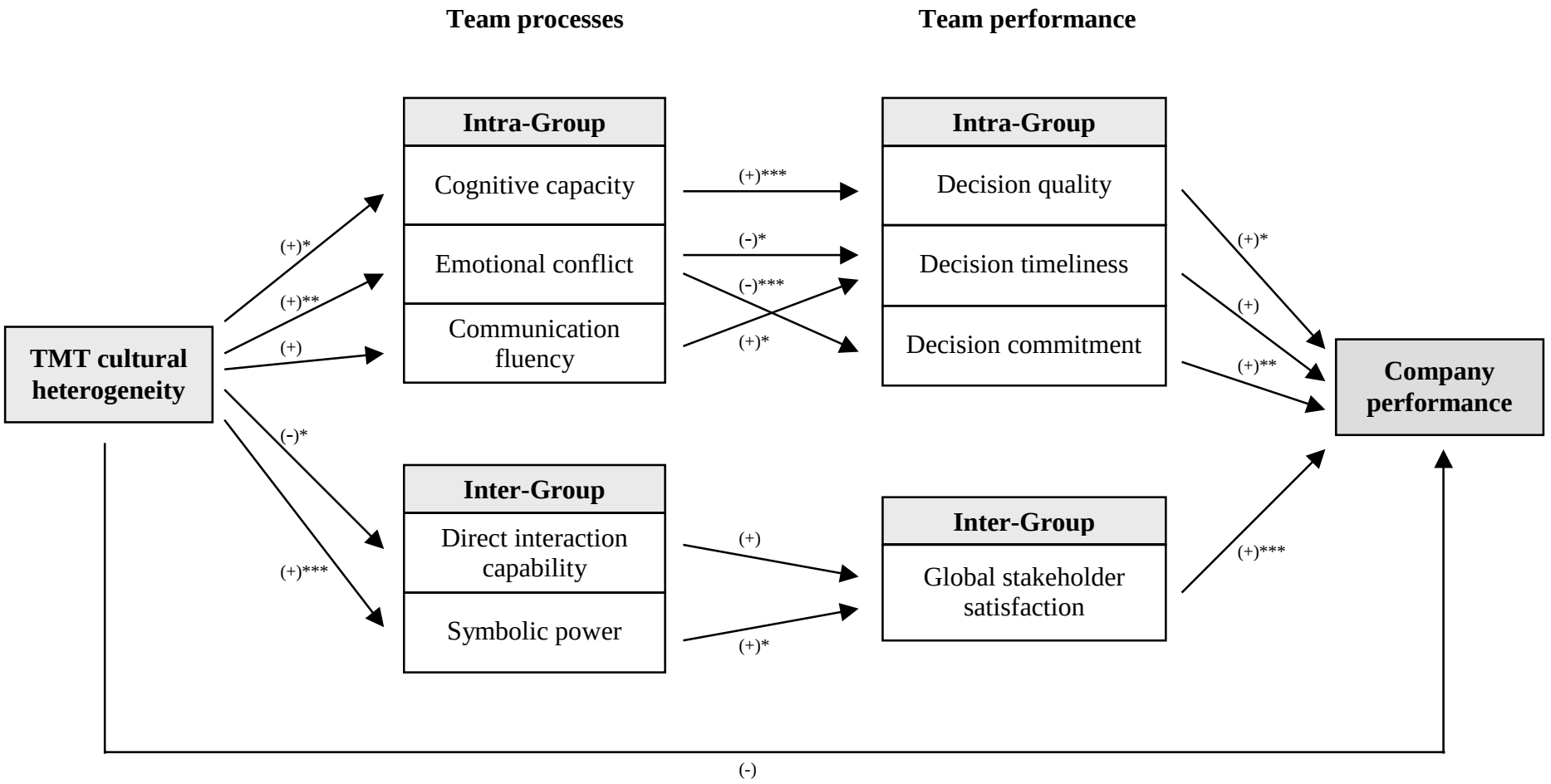


FIGURE 2
The impact of top management team (TMT) cultural heterogeneity on team processes and performance



* p<.10 ** p<.05 *** p<.01