WHY DO FIRMS EMPLOY FOREIGNERS ON THEIR TOP MANAGEMENT TEAMS? A MULTILEVEL EXPLORATION OF INDIVIDUAL AND FIRM LEVEL ANTECEDENTS

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Working Paper

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ABSTRACT

In Europe, in particular, the number of foreigners appointed to top management teams has increased significantly over the past decade. However, the question of why some firms elect to employ foreign nationals on their top management teams remains unclear. This study utilizes a multi-level methodology to test the degree to which employment of a foreigner on the top management team is driven by individual level human capital characteristics versus firm level strategic considerations. Results from empirical tests on a sample of Swiss publicly listed companies suggest that degree of international diversification is positively associated with the likelihood of having a foreign executive, whereas human capital characteristics do not explain the propensity to employ a foreigner on the top management team. Further analyses indicate that nationality diversity at the board level, as well as the international experience of the top management team, are possible predictors of the probability of having a foreigner on the top management team.

Keywords: top management teams, human capital, firm internationalization, foreigners, upper echelons, boards of directors.
INTRODUCTION

The success of international business firms depends on their ability to manage diverse cultural, institutional and competitive environments, to coordinate geographically dispersed resources, and to leverage innovations across national and regional borders (Bartlett and Ghoshal, 1989; Hitt, Hoskisson and Kim, 1997). The ongoing globalization poses significant challenges to the upper echelons of organization due to the increase in complexity of the managerial decision-making environment (Sanders and Carpenter, 1998). As a result, companies search for different ways to enhance the decision-making capacity at the firm upper echelons and internationalize their top management teams (TMT) as a source of knowledge and expertise about managing firm foreign operations.

The importance of having top managers, who know and understand the logic and dynamics of firm foreign markets has been addressed for a long time among researchers and practitioners (Bartlett and Ghoshal, 1989; Luo, 2005). Extensive experience from a particular country helps a manager to better understand the local market and institutions and to make sound managerial decisions (Kobrin, 1984). However, international assignment experience is often limited in time and regional scope and thus also limited in its impact. Instead, Perlmutter and Heenan (1974) suggest the use of foreign nationals as top managers. With the increasing globalization, foreign-born managers have become more prevalent among the ranks of business leaders (Business Week, 1998; Staples, 2007; van Veen and Marsman, 2008). A recent study explored the international market for executive labor in Europe and concluded that except for Denmark and Norway, European MNCs stepped up their hiring of foreign top executives during the period 2000-
2005 (Ruigrok and Greve, 2008). Moreover, a study by the U.S. Conference Board found that successful global companies have multinational top management (Berman, 1997).

Much of the existing literature has focused on explaining the composition of top management teams. For instance, Milliken and Martins (1996) argued that diversity in individual knowledge, skills and competences creates a broader resource and knowledge base within the team, which influences the quality of group decisions. Focusing on the team level of analysis, upper echelons theory suggests that the composition of the entire top management team, particularly in terms of heterogeneity in managers’ backgrounds, creates the basis for managerial decisions (Hambrick and Mason, 1984). In this study, however, we focus explicitly on the individual versus firm level predictors of the likelihood that a MNC will employ a foreign born national on their top management team. Rather than measuring nationality diversity as the proportion of foreigners on the top management team or the dispersion of executive nationalities, we use logistic multi-level modeling to investigate the probability of finding a foreign executive on the top management team. Our main focus is on the drivers of the choice to employ a foreigner on the top management team and the degree to which this is a function of individual level human capital characteristics versus firm level strategic considerations.

This study aims at contributing to the strategic management and international business literature by combining insights from internationalization and human capital theories in order to answer the question of why firms employ foreigners on their top management teams.
THEORY AND HYPOTHESES

Human capital theory

Studies have proved that human capital is the critical differentiator of a business’ success in a globalized economy (Ling and Jaw, 2006). In order to compete in the international arena, it is vital for a firm to possess firm-specific human capital (Schuler and Rogovsky, 1998). Human capital refers to the investment undertaken by individuals in the form of education and training in skills. This capital provides a powerful signal to potential employers about the skills and capabilities of an individual and thus provides the basis on which labor markets operate. The TMT capital (skills, experiences and knowledge of top executives) is directly related to the ability of the TMT to gain access to resources and thus be effective in strategy making. To the extent that TMT capital is a function of the human capital of the individuals serving on the executive team, firms are likely to select executives with high human capital. Human capital may be separated into two types, general and specific (Becker, 1964).

General human capital refers to qualities and experiences, such as age, educational level or professional qualifications, all of which should increase productivity. Individuals with experience and educational achievements provide a signal of possible future productivity benefits because of their proven skills and knowledge (Laing and Weir, 1999). For instance, to the extent that individuals accumulate knowledge and skills during their working life, age can be regarded an indicator of the overall level of human capital. Moreover, professional qualifications, such as level and quality of education, are likely to enhance a person’s general human capital in the labor market and thus make her more attractive to a potential employer. The value of general human capital is particularly
important for executive appointments as the impact of hiring unqualified individuals to the top management team may be costly both in terms of individual contract termination and firm strategic and financial developments. In order to minimize these risks, firms are likely to put a premium on professional qualifications and experiences when selecting executives for their top management teams.

Specific human capital refers to the accumulation of skills and knowledge necessary to perform a specific task. For instance, the number of years that an executive has held a position within the company may attest to this individual’s specific firm-related human capital (Hogan and McPheters, 1980). Other specific human characteristics that may influence the level of human capital include industry-specific experience and business education. An individual possessing experience within the same industry as the hiring firm is likely to bring industry-specific knowledge and skills, as well as network relations, which may help TMT strategic decision-making in the future. Hence, such experiences are likely to be positively associated with human capital of that individual. By the same token, having a business educational background is likely to provide additional human capital and be regarded an asset by business firms.

Foreigners are typically more difficult and expensive than nationals to include on the top management team. Therefore, when employing a foreign executive on the top management team, firms are likely to look for an individual who is deemed highly qualified in terms of both general and specific human capital. Thus:

Hypothesis 1: The likelihood of having a foreign executive on the TMT is positively associated with his or her human capital.
Matching managers to strategy

The adaptation of TMT composition as a response to corporate strategy has been extensively discussed in the upper echelons literature (Carpenter, Geletkanycz and Sanders, 2004; Finkelstein and Hambrick, 1996). At the individual level of analysis, researchers have investigated the alignment of managerial characteristics with corporate strategy (Changanti and Sambharya, 1997; Datta and Guthrie, 1994; Szilagyi and Schweiger, 1984) and the performance consequences of such fit (Gupta and Govindarajan, 1984; Thomas, Litschert and Ramaswamy, 1991). At the team level of analysis, the underlying idea is that the higher the complexity of firm operations, the higher are the information-processing demands posed on the TMT (Michel and Hambrick, 1992; Sanders and Carpenter, 1998). Similarly, the resource-dependence perspective suggests that the benefits of directors serving as boundary-spanners are contingent on the firm strategy (Hillman, Cannella and Paetzold, 2000). Diversity in TMT members backgrounds and experiences brings to the firm relational capital (network contacts) as well as human capital (e.g. expertise, knowledge and skills) (Hillman and Dalziel, 2003) that are essential for successful leadership of complex organizations. Keck and Tushman (1993) found that changes in environmental and organizational context trigger changes in the composition of the top management team.

Foreign expansion and dispersion of international operations will lead to an increase in the amount of environmental complexity that the firm is facing (Stopford and Wells, 1972). Companies may boost their ability to deal with challenges in the international environment by appointing members of the TMT with particular characteristics, skills, or
experiences that are sought after in the internationalization process (Sanders and Carpenter, 1998). The concept of matching managers to strategies (Gupta and Govindarajan, 1984) is particularly critical in the context of internationalization, as many important facets of the international strategic capabilities of a company ultimately originate from the knowledge, skills and behaviors of top managers (Murtha, Lenway and Bagozzi, 1998). Internationalization is part of an organizational capability development cycle, in which firms generate knowledge about foreign markets by gradually entering new markets, thereby incrementally increasing their commitment to foreign operations (Johanson and Vahlne, 1977). The composition of the upper echelons of a firm is therefore expected to change as the company reconfigures its international value-chain. The TMT play an important role in the handling of liability of foreignness (Zaheer, 1996) issues, as TMT members decide on the foreign market entry location and strategy, facilitate the process of knowledge absorption and transfer, and exert control over the subsidiary staffing policy.

While previous research has mostly focused on the international experience of the firm upper echelons (Athanassiou and Nigh; 2002; Carpenter and Frederickson, 2001; Carpenter et al., 2001; Sambharya, 1996), national origin is an important, yet understudied aspect of TMT international background and orientation. In the context of firm international strategy, TMT nationalities have implications not only for individual personalities and team dynamics but also for the strategic decision-making (Elron, 1997; Hambrick, Cho and Chen, 1996; Kilduff, Angelmar and Mehra, 2000). Nationality is a source of knowledge about a particular region or economy. Foreign-born TMT members posses valuable knowledge about economic and market factors and institutions as well as
about culture, behavior and norms of the country or region, from which they originate. Such knowledge may be invaluable in making decisions about a firm’s strategy in a particular country or region, as well as about international operations in general. Luo suggests that “foreign natives have natural advantages in processing information pertaining to their home countries and in finding solutions that improve information processing.” (2005: 34). Hence, firms are likely to view foreign top management team members as a valuable response to the additional challenges arising from firm internationalization:

Hypothesis 2: The likelihood of having a foreign executive on the TMT is positively associated with firm degree of internal diversification.

**Top management team and board characteristics**

The interdependence of top management teams and boards is an emergent theme in research on firm governance (Jensen and Zajac, 2004). The relationship between corporate boards and TMT composition can be explained through two main mechanisms. First, boards are assuming higher responsibilities and thus become more involved in the selection of TMT members. Recent research reports an increase in the use of board committees and provides evidence that the existence and composition of nomination committees have an impact on the heterogeneity of corporate boards (Ruigrok, Peck, Tacheva, Greve and Hu, 2006). A professional board (or nomination committee) strives to match TMT composition to the requirements of the firm environment and strategy. In this process, managers’ background characteristics and experiences will be considered as
resources to link the firm to its environment. The same holds true when selecting board members (Hillman and Dalziel, 2003; Pfeffer and Salanczik, 1978; Sanders and Carpenter, 1998). Hence, requisite variety law (Ashby, 1956) predicts that boards and TMTs are similar in their composition in that both governance bodies match the firm’s environment and strategy. Second, the attraction-selection-attrition cycles (Schenider, 1983) predict that certain types of corporate elites self-select themselves in particular settings and thus homo-social reproduction takes place not only within top management teams (Boone et al., 2004) but also between the board and the TMT. Top management teams attract executives who have similar backgrounds and cognitions to the existing TMT members. In the process of executive search, corporate boards choose managers who fit in the current profile of the top management team. At the same time, potential TMT members will feel attracted to and self-select into a management team and/or board of similar kind. Furthermore, when the newly selected executive is similar to and fits well in the existing top management team, he/she is more likely to sustain longer tenure.

Foreign nationals serving on the board are likely to be better acquainted with the potential benefits of adding foreigners to the TMT and are more likely to look favorably on nationally diverse individuals when selecting new TMT members. Moreover, following the logic of the similarity – attraction paradigm (Byrne, 1971) and attraction-selection-attrition theory (Schenider, 1983), the characteristics of the top management team can be expected to reflect the composition of the board of directors and thus to the extent that the board has a high degree of nationality diversity it is likely to influence the composition of the TMT:
Hypothesis 3a: The likelihood of having a foreign executive on the TMT is positively associated with the degree of nationality diversity of the board.

In lieu of having different nationalities represented on the board or TMT, international experience is a valuable source of knowledge and expertise about foreign markets and cultures (Carpenter, Sanders and Gregersen, 2001; Johansson and Vahlne, 1977; Reuber and Fischer, 1997; Sambharya, 1996). Similar to nationally diverse boards, TMTs characterized by high degrees of international experience are likely to value the potential benefits brought with them by executives with different national backgrounds. Such TMTs are predisposed to nationally diverse ideas and given the interdependence between boards and TMTs mentioned above, it seems plausible that they will support and look favorably upon appointment of a foreigner to the TMT.

Moreover, managers’ international experience facilitates access to international networks (Athanassiou & Nigh, 1999). These relational networks bring with them the potential knowledge of qualified top executives outside the home country. Such knowledge and access to qualified international executives may serve to reduce the inherent imperfect information and costs of liability of foreignness involved in attracting and hiring foreign nationals to the TMT.

Thus, TMTs with high degrees of international experience are likely to look favorably upon members with different national backgrounds and help facilitate the initial contact to these individuals via their international network. To the extent that homo socio reproduction and the similarity-attraction paradigm operate within the TMT (Boone et al., 2004), we hypothesize:
Hypothesis 3b: The likelihood of having a foreign executive on the TMT is positively associated with degree of international experience of the TMT.

METHOD

Sample and data

Switzerland is among the most competitive executive labor markets in Europe with the highest percentages of foreign top executives (Ruigrok and Greve, 2008), thus offering a suitable context for studying the factors influencing the choice of foreign national top executives. The initial sample of this study consists of all companies listed on the Swiss Stock Exchange (SWX) in September 2004. We excluded (1) investments trusts, (2) companies with headquarters outside Switzerland, (3) companies that did not provide detailed information on their TMTs, and (4) companies for which the composition of the TMT is governed by national and cantonal laws (such as cantonal banks and state owned energy companies). We only used company records for which we had complete data on our explanatory variables. This resulted in a sample of 135 firms. Data on executive backgrounds was obtained from companies' annual reports and websites. Firm level information was obtained from annual reports as well as the Worldscope and Datastream databases. Both individual and firm level data were collected for the year end of 2003.

Variables and measures
Foreign executive nationality was recorded as the country of origin of the top executives as stated in the annual report and coded as one if the executive was non-Swiss and zero otherwise. We used a number of measures for general and specific human capital (Laing and Weir, 1999). Executive age was measured as a continuous variable. Executive education was measured as a dummy variable that equals one if the executive has business education and zero otherwise. Educational level was coded as a categorical variable with four possible values (1) less than a bachelor degree; (2) less than a master degree; (3) less than a doctoral degree; and (4) doctoral degree. Elite education is a dummy variable equal to 1 if the executive has at least one of his/her degrees from a top school and zero otherwise. The definition of top school included University of St. Gallen, ETH Zurich and IMD as the elite Swiss management schools, the European CEMS Universities and the North American Ivey League schools. Professional experience was measured with the use of dummy variables. International experience was coded as one if the top executive had international assignment or full-time work experience from a foreign country and zero if he/she spent his/her entire career in Switzerland. Executive industry experience was coded as one if the top executive had previous work experience in the industry in which his/her current company operates and to zero otherwise.

A number of different measures were used to aggregate the data to the team level. Simple ratio (percentage members out of the total number of team members) were calculated for the dummy variables TMT international experience. The degree of board nationality diversity based was measured by applying a Blau’s (1977) index. The Blau index is a measure of group heterogeneity, which is commonly used in top management team research (Carpenter, 2002; Finkelstein and Hambrick, 1996) to aggregate data from
the individual to team level and captures the dispersion of team members across all possible categories of a certain dimension using the formula $B = [1 - \Sigma (p_i)^2]$, where $p$ is the percentage of team members in the $i$th group (i.e. nationality). The higher the value of $B$, the greater is the heterogeneity on a particular variable.

Similar to previous research (Hoskinsson, Hitt, Johnson and Moesel, 2003; Wiersema and Bantel, 1992), we used the entropy measure of firm diversification (Palepu, 1985) to measure firm international diversification. The entropy measure is calculated with the formula $\Sigma P_i \ln(1/P_i)^2$ where $P$ is the percentage of a geographic segment in sales of the total firm sales and $(1/P)$ is used as a weight to account for the importance of each geographic segment in the total sales of a company.

We controlled for a number of variables at individual, team and organizational level. We measured executive gender as a dummy variable equal to one if an executive was female and zero otherwise. Furthermore, we controlled for the possible correlation between certain executive functions and the probability of having a foreigner on the top management team. Using Hambrick’s (1981) distinction between output and throughout functions we measured executive output function as one if the executive’s responsibility were for sales and marketing or product development and zero otherwise. We further controlled for the top management team tenure of individual executives. Executive tenure was measured in months since a person became a member of the top management team. In the case were no specific month of appointment was stated in the annual report, January 1 of the indicated calendar year was assumed as a starting date. As the size of the top management team may influence the probability of having a foreign top executive, we controlled for top management team size was measured as the count number of top
executives as stated in the company annual report. *Top management team tenure* was measured as the median of the tenures of all TMT members. Median tenure is considered a better measure than the average team tenure as it is less affected by very short or very long individual tenures (Hermalin and Weisbach, 1988). As the existence of a board nomination committee may lead to more professional executive search and selection we controlled for the existence of *board nomination committee* measured as one if the company had one and with zero otherwise. We further controlled for firm size and product diversification. The entropy measure was used to calculate *firm product diversification*. *Firm size* was measured as the logarithm of firm sales similar to most previous studies in the field.

**Analytic strategy**

Unlike most previous studies that use the top management team as the level of analysis, we applied multilevel methodology which allows us to keep the measurement and analysis of the data at the level at which they are collected. The research design resulted in a nested hierarchical structure, where individuals are nested within top management teams and firms. This created a hierarchical data structure with two levels of random variation: variation between executives within firms (level 1), and variation between firms (level 2). Datasets with a nested structure that include unexplained variability at each level of nesting are usually not adequately represented by the probability model of ordinary least squares (OLS) regression analysis. Instead, a hierarchical linear model, which is an extension of multiple regression to a model that includes nested random coefficients, is recommended (Snijders and Bosker, 1999; Raudenbush and Bryk, 2002).
In multilevel analysis it is important to pay due attention to the nested structure of the data and the lack of independence among observations in order to avoid drawing wrong conclusions about observed relationships (Klein, Dansereau and Hall, 1994). In particular it is important to avoid aggregation which leads to problems related to ecological fallacy (Robinson, 1950).

To avoid these potential problems outlined above we used hierarchical linear modeling for two-level data (Raudenbush, Bryk, Cheong, Congdon and du Toit, 2004). HLM2 conducts the statistical analysis at the level of theory and measurement of variables, while at the same time allowing the researcher to model the influence of different level factors on outcomes at the lowest level. A hierarchical linear model is defined by its statistical parameters: regression parameters (fixed effects) and variance components (random effects). Hypothesis testing is based on both: fixed effect results are interpreted like regression coefficients and are tested through t-tests; random effects are estimated through variance components and are tested through F-test statistics. As our dependent variable is a dichotomous, or binary, variable (whether an executive has a foreign nationality or not) we use a multilevel logistic regression (Snijders and Bosker, 1999).

**RESULTS**

Table 1 provides means, standard deviations and correlations for all variables.

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Insert Table 1 about here
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We found no empirical support for hypothesis H1, as four of the five human capital characteristics (age, business education, elite education and industry experience) had no significant association with the probability of a top executive to be a foreign national. Furthermore, contrary to our prediction the level of executive education was negatively related to the likelihood of a top executive to be a foreigner ($b = -0.36, p < .05$). This result may be due to the fact that many Swiss born executives have doctoral degrees whereas in other parts of the world a doctoral degree is only obtained by those who intend to stay in academia. The degree of international diversification was significantly positively associated with the likelihood to have a foreign executive ($b = 0.60, p < .05$), providing support for hypothesis H2a. Furthermore, we find that both board nationality diversity ($b = 2.09, p < .01$) and TMT international experience ($b = 1.44, p < .05$) are positively and significantly related to the likelihood of foreign executive nationality.

DISCUSSION

Over the last decade, the number of foreigners serving on top management teams has increased significantly in a number of European countries (Ruigrok and Greve, 2008, van Veen and Marsman, 2008). However, it is unclear whether this trend is a result of conscious firm level efforts to match their managers to firm internationalization strategy or a random outcome of selecting the best person for an executive position (regardless of nationality). While most previous research on this phenomenon has focused on firm and
country level predictors, this study accounts for the individual level human capital characteristics of executives as well. We identify two alternative explanations for why firms employ foreigners on their top management teams and test these propositions by applying a multilevel design and analysis. First, based on human capital theory, we model the likelihood of a top management team member being a foreigner as a function of his/her background characteristics and experiences (human capital). Second, following strategic fit logic, we explain the probability of having foreign top executives as a function of firm international diversification strategy. As such, this study is an initial exploration of individual and firm level antecedents of TMT internationalization.

Our results lend support to the notion that highly international firms are more likely to have foreigners in their upper echelons (van Veen and Marsman, 2008; Staples, 2007). At the same time, we find no evidence that foreign executives possess more valuable human capital compared to domestic executives. Whereas this does not suggest that foreign born executives do not add value to top management teams, it indicated that the likelihood of an executive to be a foreigner is not determined by his/her background and experiences. Together, these findings points to the particular importance that firms place on having foreign nationals on their top management teams in times of increased international competitive pressures. It is not that foreign nationals bring higher human capital per se rather firms seem to put a premium on foreign nationality as a source of competitive advantage in a globalized world. From an executive labor market perspective, foreign nationality is perceived as a valuable add-on to relevant managerial backgrounds and experiences. That is if a firm has a choice between domestic and foreign executives with similar qualifications, it is more likely to select a foreigner if the firm has
extensive foreign operations. At the same time, the probability of having a foreigner on the TMT is not merely a function of the firm internationalization strategy but also depends on the makeup of the existing TMT and the board. Our study reveals that foreigners are more likely to be members of TMTs with high levels of international experience. Furthermore, the higher the degree of nationality diversity on the board the more likely they will appoint a foreigner to the TMT.

This study did not account for the role of compensation in the foreign executive selection process. Future research may seek to investigate whether foreign nationals are remunerated differently than domestic top executives and to what extent this has implications for the overall executive team compensation levels. Moreover, while this research focused on the individual and firm level predictors of the probability of having a foreigner on the TMT, additional costs of searching and selecting foreign nationals was not accounted for. It may be that identifying and attracting foreigners to the TMT is associated with additional costs that outweigh any potential benefits and thus foreigners are selected against based on information asymmetry.

From an individual perspective, the present study indicates that executives searching for a TMT position abroad should target highly internationalized firms. To the extent that these executives meet the qualifications and requirements of the internationalized firms, they may be in a comparatively competitive position vis-à-vis domestic candidates as their foreign nationality is perceived as an asset beyond international experience. Moreover, when searching for a TMT position abroad, foreign candidates should look closely at the composition (international experiences and nationality) of the TMT as well as the board of directors. As labor markets become
increasingly global and executive search frequently transcend national borders, top management teams will become increasingly multinational. While this study has provided at least a partial explanation for the underlying mechanisms behind the selection of foreign top management team members, future research will have to investigate to what extent such nationally diverse top management teams perform better than purely domestic top management teams, as well as to what extent this difference varies with the degree of international diversification of the firm.
REFERENCES


## TABLE 1
Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive nationality</td>
<td>0.36</td>
<td>0.48</td>
<td>1.00</td>
</tr>
<tr>
<td>Executive age</td>
<td>49.05</td>
<td>7.45</td>
<td>0.00 1.00</td>
</tr>
<tr>
<td>Executive gender</td>
<td>0.02</td>
<td>0.15</td>
<td>0.09 -0.14 1.00</td>
</tr>
<tr>
<td>Executive educational level</td>
<td>2.97</td>
<td>0.68</td>
<td>0.02 0.02 -0.09 1.00</td>
</tr>
<tr>
<td>Executive elite education</td>
<td>0.35</td>
<td>0.48</td>
<td>-0.16 -0.01 -0.04 0.29 1.00</td>
</tr>
<tr>
<td>Executive industry experience</td>
<td>0.55</td>
<td>0.5</td>
<td>-0.01 0.06 0.00 -0.01 0.04 1.00</td>
</tr>
<tr>
<td>Executive tenure</td>
<td>59.53</td>
<td>65.4</td>
<td>-0.08 0.36 0.00 -0.10 -0.01 0.03 1.00</td>
</tr>
<tr>
<td>Executive output function</td>
<td>0.11</td>
<td>0.31</td>
<td>0.04 -0.02 0.02 -0.02 -0.09 -0.03 0.01 1.00</td>
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<tr>
<td>Executive business education</td>
<td>0.48</td>
<td>0.5</td>
<td>-0.02 -0.11 0.01 -0.16 -0.02 -0.01 -0.04 -0.11 1.00</td>
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<tr>
<td>Nomination committee</td>
<td>0.5</td>
<td>0.5</td>
<td>0.04 0.15 -0.09 0.08 0.11 0.06 -0.04 0.00 0.04 1.00</td>
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<tr>
<td>Board nationality diversity</td>
<td>0.29</td>
<td>0.24</td>
<td>0.36 0.00 0.01 0.06 0.02 0.07 -0.18 0.06 0.05 0.16 1.00</td>
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<tr>
<td>Firm size</td>
<td>6.44</td>
<td>1.8</td>
<td>0.17 0.20 -0.07 0.07 0.12 0.03 -0.05 0.02 0.09 0.44 0.35 1.00</td>
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<tr>
<td>Product diversification</td>
<td>0.78</td>
<td>0.48</td>
<td>0.06 0.08 -0.09 -0.03 0.08 -0.04 -0.03 -0.04 0.04 0.21 0.14 0.41 1.00</td>
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<td>International diversification</td>
<td>0.89</td>
<td>0.55</td>
<td>0.22 0.10 -0.02 0.14 0.11 -0.03 -0.10 -0.01 -0.05 0.22 0.30 0.44 0.27 1.00</td>
</tr>
<tr>
<td>TMT size</td>
<td>6.34</td>
<td>2.6</td>
<td>0.28 0.05 0.07 0.02 0.02 0.00 -0.06 0.03 -0.05 0.11 0.18 0.36 0.16 0.26 1.00</td>
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<td>TMT international experience</td>
<td>0.24</td>
<td>0.26</td>
<td>0.14 0.05 0.02 0.06 0.05 0.09 0.06 0.04 0.06 0.17 0.12 0.26 0.14 0.24 0.04 1.00</td>
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<tr>
<td>TMT tenure</td>
<td>49.3</td>
<td>37.34</td>
<td>-0.08 0.16 -0.04 -0.05 0.01 -0.01 0.45 -0.01 -0.05 -0.09 -0.22 -0.06 -0.04 -0.10 -0.14 0.10 1.00</td>
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### TABLE 2
Results of Hierarchical Linear Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>S.E.</th>
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<tbody>
<tr>
<td>Intercept</td>
<td>-1.51</td>
<td>*** 0.27</td>
</tr>
<tr>
<td>Nomination committee</td>
<td>-0.16</td>
<td>0.33</td>
</tr>
<tr>
<td>Board nationality diversity</td>
<td>2.09</td>
<td>** 0.69</td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.06</td>
<td>0.13</td>
</tr>
<tr>
<td>Product diversification</td>
<td>-0.15</td>
<td>0.32</td>
</tr>
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<td>International diversification</td>
<td>0.60</td>
<td>* 0.26</td>
</tr>
<tr>
<td>TMT size</td>
<td>0.26</td>
<td>*** 0.06</td>
</tr>
<tr>
<td>TMT international experience</td>
<td>1.44</td>
<td>* 0.62</td>
</tr>
<tr>
<td>TMT tenure</td>
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</tr>
<tr>
<td>Executive age</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Executive gender</td>
<td>1.01</td>
<td>* 0.45</td>
</tr>
<tr>
<td>Executive educational level</td>
<td>-0.36</td>
<td>* 0.17</td>
</tr>
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<td>Executive elite education</td>
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<td>Executive industry experience</td>
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<tr>
<td>Executive tenure</td>
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</tr>
<tr>
<td>Executive output function</td>
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<td>0.37</td>
</tr>
<tr>
<td>Executive business education</td>
<td>-0.16</td>
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