THE INFLUENCE OF SENIOR MANAGEMENT CHARACTERISTICS ON FIRMS’ DIVERSIFICATION ACTIVITIES: EVIDENCE FROM A DEVELOPING COUNTRY

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ABSTRACT

This study investigates the relationship between top management team characteristics and activities of firm’s Outward Foreign Direct Investment using 83 of the 100 largest Malaysian MNCs listed on Bursa Malaysia. Malaysian OFDI has increased which raises concerns about the effect of managerial characteristics on firms’ international diversification using upper echelons theory and the Uppsala internationalization process model. We use the entropy method by Qian (1996) as the proxy for level of international diversification. Age, international experience, educational level and functional background are used to reflect the TMT cognitive abilities and competencies. The empirical results show that age and functional background are positively associated with a higher level of international diversification. In addition, result showed there is a reasonable link between upper echelons theory and Uppsala internationalization process model.

INTRODUCTION

In the past few decades the global business environment has changed remarkably. Market liberalization and economic and industry globalization have been the impetus for MNC to invest overseas. Firms are competing to pursue overseas business and investment opportunities that would enhance the value of the firm. This strategy is known as international diversification or Outward Foreign Direct Investment (OFDI).

The Uppsala internationalization process model of Johanson and Vahlne (1977) stressed that experiential knowledge is crucial in expansion and management of international operations. This model is based on the assumptions of uncertainty and bounded rationality. First, experience of operations and current activities and understanding foreign market lead to change. Second, firms change through decision commitment that can strengthen their position in foreign markets. Recently, Johanson and Vahlne (2009) indicate the importance of insider rapport for successful internationalization. This relationship can enhance the learning curve in a way to build trust and commitment that comes with the prior experience of management.

Upper Echelons Theory (UET) by Hambrick and Mason (1984) suggested that the composition of the TMT creates the foundation for managerial decisions and eventually for firm’s behavior on strategic decisions. UET argues that the emphasis of macro-
organizational research should focus on the dominant coalition of the organization, particularly the top management and their cognitive orientation, values, and knowledge base. The competition among firms in international markets has created interest in management team characteristics such as the set of skills needed to function more effectively under the new and more complex international business environment (Tihanyi et al. 2000).

This study will focus on the top management team (TMT) characteristics of the firm and determine the influence of the TMT characteristics on the level of international diversification for Malaysian based multinational firms. The intensity level of firms involved in international diversification has increased particularly for Malaysian firm. BERNAMA (Jan 29, 2010) reported Malaysian MNCs are the largest investors in East Kalimantan, Indonesia amounting to RM8.2 billion. Firms such as IJM Plantation, IOI Corporation, Sime Darby Group, United Plantations Bhd and Asiatic Development Bhd are among the firms that invested.

Arif and Lopez (2007) show that the major factors promoting outward foreign direct investment (OFDI) in the case for Malaysian are associated with the increase in wealth of both individuals and corporations, high domestic savings, increased labor costs in Malaysia compared to neighboring ASEAN countries, limitations of domestic demand, liberalization of strategic sectors such as health, education, telecommunication and utilities and government efforts to promote OFDI. Capital abundance due to high domestic savings during the high growth period prior to the 1997 economic crisis provided resources that allowed Malaysian corporations to invest abroad (Tajul and Amirul, 2010). Arif and Lopez, (2007) noted that government efforts to promote Malaysian OFDI was introduced with the New Economic Policy (NEP) where outward-oriented corporations are given incentives such as tax exemption to invest overseas.

Syed (2008) and Syed and Kitchen (2008) showed that technological skills, knowledge capabilities, and various government efforts to promote OFDI have enhanced Malaysian firms’ global competitive advantage. This has proven to be true when recently Malaysian MNC, TL Offshore Sdn Bhd, (a subsidiary of Sapura Crest Petroleum Berhad) have been awarded oil and gas concessions worth USD1.4 billion in Brazil (The Edge, Nov 7, 2011).

There are numerous studies that focus on top management team (TMT) characteristics and their influence on a firm’s international diversification strategy. The Jaw and Lin (2009) study of Taiwanese high-tech firms mentioned that TMT educational background is not statistically significant, the Herrmann and Datta (2005) study US-based manufacturing firm and show that educational background is statistically significant, and the Wally and Becerra (2001) study on US MNCs in European community found educational level is not statistically significant to international diversification strategy. The conflicting findings from these studies may be due to the countries or continents being studied related differences.

This study contributes to the literatures in the following ways. First, according to Nielsen (2010a) so far there have been many studies of the importance of firm level of experience, but the other aspect that remain unexplored is the impact of managerial level of knowledge and expertise on OFDI, i.e. management team characteristics as theorized by Hambrick and Mason (1984). Therefore, this study will analyze the relationship between top management team characteristics and international diversification for Malaysian multinational corporations. This study shows that the managerial team’s attributes (age, educational level, functional background and international experience) impact Malaysian MNCs level of
international diversification in accordance with Upper Echelons Theory combines with the Uppsala internationalization process model.

This study contributes to the understanding of the impact of executive leadership and Malaysian internationalization literature through systematic assessment of the relationship between top management team’s characteristics and firms’ international diversification strategy among the largest listed MNC in Malaysia. It has been well recognized in the UET perspective that firm performance is the reflection of the top management team. This study provides insight about OFDI to the government policy maker.

Finally from local perspective, it is noted that most of the research on international diversification in the Malaysian context discussed the diverse facets of internationalization, such as mode of entry, mode of ownership, collaboration, competition, cultural differences and organizational implications. However, the study of the top management team impact on firm behavior towards strategic change particularly international diversification is notably absent.

DEVELOPMENT OF MALAYSIAN MULTINATIONAL CORPORATIONS

The presence of FDI in Malaysia can be seen during the British colonial era especially in the mining and plantation sectors of the economy. However, in early days, Malaysian FDI was mostly inward FDI. The influx of FDI in Malaysia began during period of 1980s and 1990s. This was due to various strategic policies introduced by former Malaysian premier Tun Dr. Mahathir Mohamad to help Malaysia to become an industry based rather than a commodity based economy, such as the Heavy Industries Policy which was designed to accelerate industrial growth, the National Development Program which was designed to eradicate poverty, and the National Economic Recovery Plan which served as blue print for better management of the economy in the wake of the 1998 financial crisis.

OFDI from Malaysia is new compared to more developed nations such as the US. According to Ariff and Lopez (2007), foreign investment by Malaysian firms started during the mid-1970s. Malaysia’s decision to progress towards an industrialized export-oriented economy has been the contributing factor to the significant change in the nation’s export structure during the period of the 1970s and the 1980s, Syed (2008). The formation of the ASEAN Free Trade Area in 1992 was one of the additional factors leading to the evolution of Malaysian economic landscape that prompted the OFDI strategy, Ariff and Lopez (2007). Since then, OFDI has been regarded as one of the main drivers for Malaysia to achieve sustainable high growth and economic development.

Syed and Fariza (2007) posit that among the factors which motivate Malaysian MNCs to go abroad are fast-changing technology, economic integration, changes in consumer tastes and increased global competition. The introduction of tariff-related incentives and financial and non-financial incentives were part of various policies and strategies by the government to encourage the internationalization activities of Malaysian firms and so Malaysian MNCs have increased OFDI, Syed (2008). The establishment of the Export-Import Bank of Malaysia (The Exim Bank) is one of the examples of the government’s commitment to encourage Malaysian firms to invest abroad.

In promoting internationalization among Malaysian firms, government-linked corporations (GLC) were the initial target, Tajul and Amirul (2010), such as Petroliam Nasional Berhad.
(Petronas), Telekom Malaysia Berhad (TM), Sime Darby Berhad and FELDA to take lead in OFDI. Initial foreign market door-opening was done through government to government good diplomatic relationships. According to Mahathir Mohamad (2011), it is important to have friendly relations with foreign countries because good relations can create business opportunities and knowledge transfers for Malaysian MNCs. The Look East Policy was one of the measures mentioned to help gain competitive skills and knowledge as well as work ethics that could assist Malaysia in a move to becoming an industrial nation. This would enable Malaysian firms to acquire niche knowledge and skills to compete globally better.

Strategies and policies implemented by the government have certainly benefited Malaysian firms. According to Syed (2008), Malaysia has become one of the successful Newly Industrialized Countries with comparatively high income and fast economic growth due to technological skills, know-how and a positive government role in facilitating the firms’ expansion, Syed (2008) and Ahmad and Kitchen (2008). Malaysia was called an ‘Unstoppable Tiger’ in Clairmont (1994).

Syed and Fariza (2007) noted that Malaysia’s participation in outward FDI is notable and significant in the global market. UNCTAD (2006) reported that Malaysia was ranked at 32nd position among 128 economies worldwide for the period of 2003-2005. It was also noted that overseas investment are mainly in the oil and gas and services sectors followed by the manufacturing, agriculture and construction sectors.

THEORETICAL PERSPECTIVE AND HYPOSTHESIS DEVELOPMENT

Top Management Team (TMT)

The definitions of Top Management Team (TMT) have been argued in previous literature. Conceptually, in most research studies, the theoretical construct of the TMT definition is based on Cyert and March (1963) and is called the “dominant coalition,” Carpenter et al. (2004). Carpenter et.al (2004) stated that individuals at higher levels of management are expected to have greater influence on decisions that are strategic in nature. Thus, the identification of the TMT construct and the TMT membership are associated with the measurement heuristic (by title or position) of senior management characteristics. An analysis of UET studies was conducted to refine the definition of TMT and affirmed that early work of UET perspective were using the “dominant coalition” as the central construct on the identification of TMT. Hambrick and Mason (1984) argued on the UET perspective that the group of senior executives should be the interest, because this group and its members provide a crossing point between the firm and the environment.

Finkelstein and Hambrick (1996) introduced the concept of “supra-TMT” which included members of the TMT and the board of directors into one singular unit. However, this concept was theoretically and empirically challenged. Fama (1980) stated that the board of directors and the TMT are not the same as the two groups assume distinct roles in the firm. However, Jensen and Zac (2004) highlighted that the “supra-TMT” should be rejected since there was inconsistent evidence which concluded that the TMT and the board of directors should be distinguished as subgroups of the same governance process. Thus, the TMT as a unit of analysis does not include the board of directors of the firm.

Upper Echelons Theory by Hambrick and Mason (1984) suggested that the composition of the top management team creates the basis for managerial decisions and ultimately firm
behavior. Studies belonging to this body of research stated that managers’ observable experiences are valid proxies for their cognitive orientation, their values, and their knowledge base and subsequently impact the strategic choices made within the firm. The psychological factors (beliefs, knowledge, assumptions, and values) are of central significance to Upper Echelons Theory. UET argues that the emphasis of macro-organizational research is an emphasis on the dominant coalition of the organization, the top management team.

**Top Management Team Characteristics and International Diversification**

Tihanyi et.al (2000) mentioned that earlier dominant coalition studies focused on the organizational leadership of the individual (CEO) rather than on the entire team of top managers. However, since then, organizational studies focused on observable demographic characteristics such as age, tenure, and experience to explain the relationship between CEO demographic characteristics and organizational performance. According to Herrmann and Datta (2005) most upper echelons theory studies have focused on CEO characteristics with an implied assumption that absolute decision making power is vested in the CEO. But later studies have started to focus on the correlation between the top management team characteristics and organizational outcomes.

As discussed earlier, the challenges associated with international diversification strategies are require certain cognitive abilities, orientation, and competencies from managers. Thus, firm’s choices and behavior are strongly influenced by the background characteristics and previous experience of the top management team. Therefore, the characteristics of the top management team can provide insight to a firm’s strategic choices and behavior, Child (1972) and Hambrick and Mason (1984). Both the Upper Echelons Theory and the Uppsala Internationalization Process Model consider the background and experiences of the TMT members influence the firm’s strategic choices relating to internationalization strategies.

**TMT and age**

Wiersema and Bantel (1992) mentioned that previous research had shown younger managers are correlated with more strategic change. Their empirical results indicate that older executives are less willing to adopt new ideas or behaviors, Bantel and Jackson (1989). Older executive are at a later stage of their career with increased financial security and risk-taking behavior is seen as career threat, Wiersema and Bantel (1992). According to Tihanyi et al (2000), strategic change initiatives are more attractive to younger and more energetic managers who are willing to indulge in more risk-taking behavior. As mentioned by Hambrick and Mason (1984), older executives may prefer the status quo rather taking risks and that younger managers have a tendency towards “attempting the novel, the unprecedented, taking risk”. However, the recent updated Uppsala internationalization process model theorized that the level of international diversification is positively related with knowledge and experiential learning of prior experiences of managers. Experience and knowledge are generally associated with older executives. In contrast, older executives are typically possessed with less physical and mental stamina (Child, 1974) and reduced information-processing abilities (Herrmann and Datta, 2005). Although recent research does not show a statistically significant relationship it is believed that age will influence the firms’ level of international diversification.

**H1:** A higher average age of TMT members will be negatively associated with the level of international diversification.
TMT and international experience

Adler and Bartholomew (1992) suggested that the development of managers’ cross-cultural skills lessened chauvinist attitudes and contributed to more effectual international careers through increased international experience. Sullivan (1994) indicated that there is an association between TMT international experience and international diversification. On the other hand, Sambharya (1996) found that the level of international background, i.e. the presence of international assignments of TMT was positively related to international diversification. First, overseas assignments provide the executive with first-hand awareness of the potential opportunities in foreign markets and minimize the anxiety and difficulty related to functioning with greater uncertainty. Finally, according to Tihanyi et.al (2000), international assignments may establish a manager’s with rapport or contact which will become useful in facilitating future global ventures. In addition, networks theory indicates that inter-organizational and interpersonal relationships from business and social networks shape firms’ behavior on internationalization.

H2: A higher percentage of TMT members with international experience will be positively associated with a high level of international diversification.

TMT and educational level

The educational level of managers has been associated in past research with their cognitive orientation and knowledge base (Hermann and Datta, 2005). Managers with above average educational levels are expected to have more tolerance for ambiguity which vital in seeking and evaluating multiple options for new opportunities. For instance, Datta and Rajagopalan (1998) and Wiersema and Bantel (1992) have linked educational background with greater innovation, knowledge, skills, and openness to change. Grimm and Smith (1991) pointed out that TMT’s of firm that employed strategic changes were more likely to be MBA degree holders. Therefore, managers’ socio-cognitive abilities play an important role in internationalization success (Herrman and Datta, 2005). However, Herrmann and Datta (2005) argued that a high level of education may be detrimental decision-making because of excessive emphasis on analysis.

H3: A higher average educational level of TMT members will be positively associated with a high level of international diversification.

TMT and functional background

Functional background is an indicator of the cognitive biases and type of knowledge TMT members bring to the workplace (Walsh,1988) in terms of critical job knowledge and skills that are contoured by their functional experience (Herrmann and Datta, 2005). Michael and Hambrick (1992) found that TMT core specialization influenced the nature of diversification that firms would or could undertake. In relation to team functional heterogeneity, Bantel and Jackson (1989) found that diverse functional background among TMT was associated with innovation among banking firm. Wally and Becerra (2001) empirical results supported earlier studies and found that TMT’s diverse functional expertise was positively related to changes in international diversification strategy among US MNC’s in the European Community. However, Herrman and Datta (2005) found that there was no statistically significant relationship between functional background and international diversification.
H4: A high level of diversity of functional experience among TMT members will be positively associated with international diversification.

RESEARCH METHODOLOGY

This section discusses the sample size and variables used as proxies for TMT characteristics, measuring diversification, and control variables. In addition, data processing and analysis used for this study were explained.

Sources of Data

This study uses secondary data from annual reports of the MNCs and the Capital IQ database. The demographic data such as age, international experience, education and functional background were extracted solely from content analysis of TMT biographic information in firms’ annual reports and the Capital IQ database.

The target sample consists of listed Malaysian Multinational Corporations (MNCs) that have invested abroad extensively over the past five years. In addition, the target sample must be listed consecutively and ranked the largest hundred firms for the five years prior to the sample period to qualify for the target population. Based on these requirements the final sample is 83 MNCs.

Variables Selection and Analysis

In this study, there are five measures of the dependent variable namely Entropy as measured of multi-nationality or diversification level and age, international experience, education level, and functional background as Independent Variables. Other variables, market capitalization and return on equity (ROE) were also used as Control Variables.

The diversification strategy undertaken by a firm as indicated by the multi-nationality level is attained via the entropy measure. This measure was used by Qian (1996) who indicated that certain researchers have debated that a multidimensional indicator is needed for signifying multi-nationality (Sullivan, 1994). Thus, the entropy characterized multi-dimensional measure takes into consideration both the spread and the amount of international expansion. Hitt, Hoskisson and Kim (1997) mentioned that entropy measure considers both the number of global market regions in which a firm operates and the importance of each global market region relative to total assets. Using Qian’s (1996) approach, the entropy measurement involves calculation of the number of subsidiaries in any one country relative to the total foreign holdings held by the firm. The Entropy formula as follows:

\[
D = - \sum_{i=1}^{n} S_i \log_e \left( \frac{1}{S_{total}} \right) (1)
\]

Where,
D = Index of multinational diversification computed at the end of the observed period.
S_i = Number of subsidiaries in country i or region i to the total number of foreign subsidiaries.
S_{total} = Total number of subsidiaries for the MNC.
TMT age will be computed as the average age of each executive in the TMT as adopted by Hermann and Datta (2005). Biographical information was inspected to determine the age of all members of the top management team using TMT biographical background in annual report and Capital IQ database. Then data of age of the TMT was aggregated to calculate the mean to find average age at firm level.

According to Sambharya (1996), TMT international experience was measured as the percentage of TMT members with international experience obtained in an international division and an overseas’ assignment. Data on international experience was from the annual report and/or Capital IQ database and according to Tihanyi et.al (2000) each executive was coded one and zero as indicator on the presence of such experience and no international experience, respectively. The score was aggregated and a simple percentage calculation was done to determine the proportion of TMT with international experience of each firm.

Datta and Rajagopalan (1998) adopted a seven-point scale on the highest degree earned (1=high school, 2=some college, 3=undergraduate degree, 4=some graduate school, 5=master’s degree, 6=attended doctoral program, and 7=doctorate) as measures of educational level. Wally and Becerra (2001) adopted a three-point scale (1=Bachelor degree or less, 2=Master’s degree, and 3=PhD). In this study, the scale was modified to a five-point scale maintaining the scale concept used by Datta and Rajagopalan (1998) as educational measures (1=Diploma and lower, 2=Bachelor degree, 3=Professional qualification, 4=Master degree, and 5=Doctorate). TMT educational level was measured as the average educational level of the TMT from the assigned score of each individual member. The score of TMT educational level was aggregated to calculate the mean to find the average educational level for each firm.

Functional background of TMT members was classified based on functional experience prior to the current function and comparison was made against the Bursa Malaysia core industry classification in which firms operate. This classification is similar to the method used by Wally and Becerra (2001), where the current and past functional titles were used to make classification as proxies of TMT diversity. Individual TMT member were coded one and zero to indicate if the manager is a member of a non-core function or a member of a core function. Core function refers to a TMT member with an operational background directly related to the industry classification. While non-core function refers to a TMT member in a function that is not directly related to the MNC’s operational area. The score for each firm was assigned based on current and past title position which was then aggregated and a simple percentage calculation was done to determine the proportion of TMT with non-core functional experience.

This study controlled for firm size using the natural logarithm of firm market capitalization and firm ROE using the average return on equity for the last five years. Both variables have been associated with higher levels of international diversification. Age and educational level values were aggregated separately and the mean of each variable was calculated to determine firm level average. A simple calculation of percentages was conducted on individually coded TMT’s international experiences and functional backgrounds in order to measure TMT’s diversity. Multiple regressions were used to determine the relationship between the dependent variable (Entropy) and the independent variables (age, international experience, education level, and functional background also with the presence of control variables (market capitalization and return on equity).
EMPIRICAL RESULTS AND DISCUSSION

Table 1 presents the descriptive statistics and correlation coefficients matrix of the variables used in the regression analysis. The correlation coefficients indicated that none of the correlation coefficient among independent variables large enough to suggest the existence of multicollinearity in the regression equation.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std Dev</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Entropy</td>
<td>0.35</td>
<td>0.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 TMT average age</td>
<td>51.56</td>
<td>2.62</td>
<td>0.095*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 TMT international experience</td>
<td>0.10</td>
<td>0.12</td>
<td>-0.024</td>
<td>-0.033</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 TMT educational level</td>
<td>2.64</td>
<td>0.81</td>
<td>0.007</td>
<td>-0.087</td>
<td>-0.036</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 TMT functional background</td>
<td>0.47</td>
<td>11.32</td>
<td>0.230*</td>
<td>0.155</td>
<td>0.123</td>
<td>-0.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Market capitalisation</td>
<td>0.23</td>
<td>2.48</td>
<td>0.276</td>
<td>-0.102</td>
<td>0.063</td>
<td>-0.071</td>
<td>0.038</td>
<td></td>
</tr>
<tr>
<td>7 Return on equity</td>
<td>3.37</td>
<td>2.34</td>
<td>-0.093</td>
<td>0.185</td>
<td>0.106</td>
<td>-0.124</td>
<td>0.143</td>
<td>0.336**</td>
</tr>
</tbody>
</table>

*, Correlation is significant at the 0.05 level (2-tailed).
**, Correlation is significant at the 0.01 level (2-tailed)

Table 2 shows the empirical results for the two regressions. Model I is the OLS regression between the dependent variable, the index of multinational diversification and the two control variables, market capitalization and return on equity. Model II is the regression between the two control variables and the four treatment variables: TMT average age, TMT international experience, TMT educational level, and TMT functional background diversity. TMT average age is the average age of the TMT. TMT international experience is the proportion of the TMT with international experience. TMT educational level is the average level of education of the TMT on a five point scale from diploma and lower to doctorate. TMT functional background measures the proportion of the TMT with non-core experience. The dependent variable is the Qian (1996) entropy index which is the index of multinational diversification. The empirical results indicate that the control variables are statistically significant in both models. When the treatment variables are added to the second regression, the control variables continued to be statistically significant and two of the treatment variables, TMT average age and TMT functional background, were statistically significant.

To test H1 to H4, two sets of Ordinary Least Squares (OLS) regression model were run. Model I only includes the control variables. Model II tests the hypothesized effect of TMT characteristics (age, educational level, international experience and functional background) which were included in the regression equation. The empirical results are shown in Table 2 and the empirical results indicate that the incremental R^2 between Model II and Model I, R^2 of 0.277 versus 0.079, indicates that TMT characteristics jointly explain a portion of the
dependent variable, i.e. international diversification. The empirical results confirmed previous results that size and past performance of the firm are associated with international diversification.

### Table 2

**Result of OLS regression**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model I (Control Variables)</th>
<th>Model II (Full Model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMT average age</td>
<td>0.013***</td>
<td>0.013***</td>
</tr>
<tr>
<td>TMT international experience</td>
<td>-0.077</td>
<td>-0.077 (0.704)</td>
</tr>
<tr>
<td>TMT educational level</td>
<td>0.033 (0.707)</td>
<td>0.033 (0.707)</td>
</tr>
<tr>
<td>TMT functional background</td>
<td>0.576** (0.002)</td>
<td>0.576** (0.002)</td>
</tr>
<tr>
<td>Market capitalization</td>
<td>0.153*** (0.000)</td>
<td>0.153*** (0.000)</td>
</tr>
<tr>
<td>Return on equity</td>
<td>-0.014*** (0.000)</td>
<td>-0.005*** (0.000)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.079</td>
<td>0.277</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.064</td>
<td>0.202</td>
</tr>
<tr>
<td>N</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>$F$</td>
<td>4.342***</td>
<td>9.645***</td>
</tr>
</tbody>
</table>

The $P$ values in parentheses

**Significant at the 0.05 level (2-tailed).**

**Significant at the 0.01 level (2-tailed).**

In regards to Hypothesis 1, the empirical results indicated that the empirical results contradicted earlier studies which found that higher age was negatively associated with international diversification. The current empirical results were statistically significant which indicated that higher age is positively associated with international diversification. Gu, J. (2008) in study on Chinese firms found that the TMT average age has a statistically significant positive relationship with the quality of strategic decisions suggesting a relationship between firm performance and experience and knowledge. This empirical result supports the Uppsala internationalization process model of Johanson and Vahlne (2009) that prior experience is a valuable source of knowledge that may influence a firm’s strategic decision to engage in international diversification. Therefore, the higher the age of the TMT the more experience of the TMT especially networking that the TMT can bring to their respective jobs and strategic decision making. In earlier model of Johanson and Vahlne (1977) hypothesized that international expansion is an incremental process that increases with increased knowledge of the firm TMT. Thus, it can be assumed higher age is related to the increased knowledge and experience of the TMT.

As hypothesized in H2 and H3, the empirical results of not support the hypotheses that international experience and educational level are statistically significantly related to levels of international diversification. This is contrasted with the findings by Herrmann and Datta (2005) who found that the educational level and international experience of TMT were
statistically significantly associated with international diversification. However, the empirical results of the current study supported the findings of Wally and Becerra (2001) in the context of U.S multinational in the European Community that educational level and international experience were not significantly associated with strategic change in international diversification. Although there is a conflict between the empirical findings, it is believed that TMT international experience does contribute to firms’ behavior towards international diversification strategy.

Hypothesis (H4) hypothesizes that the more diversity in functional background among TMT will be positively associated with international diversification. Our empirical results indicated that there is statistically significant association between TMT functional background diversity and international diversification. The empirical results supported the earlier study by Wally and Becerra (2001). The current empirical results supported Jaw and Lin’s (2009) findings of corporate elite characteristics and a firm’s internationalization for Taiwanese firms operating in technology industries that diverse TMT increases cognitive heterogeneity and enables managers to overcome ‘group-think’ within the firm. Therefore, the heterogeneous ability within the TMT construct can create synergistic assistance in solving problems experienced in foreign markets.

The current study was inspired by the recent phenomenon of the increasing trend among Malaysian firms going abroad. As mentioned earlier, most of the literature on internationalization in a Malaysian context discussed various facets of firms’ internationalization strategy, but study of management characteristics that drove the firm towards internationalization was notably absent. The higher $R^2$ when TMT characteristics are included in the regression model show that TMT characteristics have an influence on firms’ international diversification strategy.

**SUMMARY AND CONCLUSIONS**

Internationalization has increased significantly and has become a trend among Malaysian MNCs. Economic and market liberalization have been among the factors that have prompted international diversification. Advances in technology, communications, transportation, and information technology have changed the business landscape of the borderless world. Globalization allows products to be sold anywhere around the world. Mohammadreza, et. al. (2010) noted that MNCs’ behavior as well as expansion strategies affected the globalization of the business environment. For instance, China which had a closed economy policy found it necessary to liberalize trade policy to take advantage of opportunities presented in the era of globalization.

In this respect, Malaysian MNCs have realized the significance of looking for investment opportunities abroad. Although international diversification strategy is relatively new in Malaysia compared to more developed nations, it is impossible to ignore globalization strategy because of the opportunities presented to take advantage of new markets. According to Upper Echelons Theory, firms’ behavior towards any strategic decisions reflects the TMT managerial skills and cognitive abilities. The Uppsala Internationalization Process Model stressed the importance of experiential learning and networking that build commitment and movement toward international diversification investment. The Uppsala Model is based on the assumption of ‘uncertainty and bounded rationality’ that drives firms toward international diversification.
The current study discusses an important issue in international diversification which have been absent in research about Malaysian MNC. The sample was taken from the largest 83 listed MNCs in Malaysia as measured by total assets across various sectors of the economy. This study shows the relationship between TMT characteristics and international diversification for Malaysian MNCs. It is believed that observable demographic characteristics such as age, educational background, international experience and functional background are the valid proxies for the underlying values, cognitive abilities, and expertise that would influence the decision-making and behavior.

Discussions of various facets of internationalization by Malaysian scholars were found in Tajul and Amirul (2010), Arif and Lopez (2007) and Mohammadreza et.al (2010). These scholars discussed the aspect of environmental ‘push factors’ that contributed to Malaysian firms that participated in international diversification, Malaysian MNC behavior has not been discussed in terms of internationalization based on the perspective of the Upper Echelons Theory coupled with the Uppsala Internationalization Process Model.

The current study found that there is a linkage between Upper Echelons Theory and the Uppsala Internationalization Process Model. As anticipated earlier, diverse functional background of TMT is positively associated with international diversification. It was found that a more diverse TMT background is statistically significantly associated with international diversification. Diversity of functional background indicates the levels of experience and skills which supports both the Upper Echelons Theory and the Uppsala Internationalization Process Model that international diversification increases with increases in the level of experiential knowledge.

However, it was found that the Uppsala Model was supported by the empirical results with respect to the average age of the TMT while the Upper Echelons Model was not. Logically the older TMT would have more experience and knowledge than a younger TMT. These empirical results supported the Uppsala Model hypothesis about the experiential knowledge influence on international diversification.

On the other hand, educational level and international experience did not have statistically significant influence on international diversification. Although the measures used were consistent with earlier studies, the results analyzed contradict some earlier research results. But surprisingly, the result of this study were similar to the Wally and Becerra (2001) study empirical results which indicated that educational level and international background were not statistically significantly associated with international diversification. The lack of statistical significance of educational level confirmed Herrmann and Datta’s (2005) argument that TMT characterized by high educational level sometime leads to excessive analysis which can be detriment to the decision making. Though international experience was not found to be statistically significant, we believe that the empirical results provide some support for the added value of educational level and international experience to decision making.

The empirical results of the current study suggest that certain TMT characteristics have a relatively strong association with international diversification. The high level of ambiguity and uncertainty in the international business environment require certain characteristics that help firms to thrive in the international competitive environment. In addition, the Uppsala Internationalization Process Model stressed the importance of prior managerial knowledge which served as a valuable contributor on the aspect networking experience to better facilitate firms’ international diversification strategy that links to the upper echelons perspective.
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