# Physical Characteristics of the Chief Executive Officer and Firm Accounting and Market-Based Performance

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ABSTRACT

*Despite the key role of the Chief Executive Officer (CEO), extant literature pays little attention to the physical characteristics of the CEO. Therefore, this paper investigates certain physical characteristics - such as age, gender, ethnicity and nationality of the CEO in relation to accounting (ROE) and market-based (market value) firm performance. The paper applies OLS with robust standard errors to a panel composed of 1600 firm-year observations of non-financial Malaysian listed companies between 2010 and 2014. The results reveal that the ethnicity (Chinese) and nationality (foreign) of a CEO have a significant positive association with both proxies of firm performance, while the age of the CEO has no significant effect. Moreover, a female CEO has an insignificant and significant positive relation with ROE and firm market value, respectively. Alongside contributing to the limited literature that exists in relation to the subject, the paper provides important insights for regulators, shareholders, investors, banks, corporate boards and financial institutions in regards to the evaluation of firms and the allocation of economic resources.*

*Keywords: CEO Physical Characteristics; Firm Accounting and Market-based Performance; Non-financial Malaysian Listed Companies*

## INTRODUCTION

Individuals that run firms decide their ultimate fate (i.e., success or failure). The most powerful and influential among these individuals is known as Chief Executive Officer (CEO). Being the captain of the ship, the CEO is commended for the improved performance of the firm and blamed if performance diminishes (Butt, Horton, & Millo 2012; Peni 2012). A CEO plays a vital strategic role in a firm, (Hambrick & Mason 1984; Lin 2014) particularly in deciding whether a firm stays in a current target market or switches to other target market(s) (Joyce, Nohria & Roberson 2004). In addition to monitoring daily operations and overall direction, a CEO also formulates and implements various strategies of the firm (Daily, Certo & Dalton 2000; Lin 2014; Zhang & Rajagopalan 2009). Therefore, the 'swimming' or 'sinking' of firms greatly depends on CEOs (Westerberg, Singh & Hackner 1997). Thus, it is logical and rationale to focus upon CEOs as a topic of research (Butt et al. 2012; Peni 2012).

Accordingly, many empirical studies investigate certain characteristics of CEOs (Adams, Gupta, Haughton & Leeth 2007; Bhagat, Bolton & Subramanian 2010; Jalbert, Chan, Jalbert & Landry 2007; Zhang & Rajagopalan 2009). However, most studies are conducted in developed countries; and focus on a single characteristic of the CEO, such as origin (Zhang & Rajagopalan 2009); age (Ewart 2014; Serfling 2013); gender (Adams et al. 2007; Ewart 2014; Serfling 2013); education (Bhagat et al. 2010); experience (Cline & Yore 2016); salary (Ewart 2014); ethnicity (Mycroft 2012); and nationality (Jalbert et al.

2007). With the exception of Butt et al. (2012); Ewart (2014); and Cline & Yore (2016), such studies investigate the impact of CEO characteristics on firms' accounting performance as an outcome variable.

Aside from Amran, Yusof, Ishak and Aripin (2014), who focus on accounting-based performance of government-linked companies, and Wah (2015) who investigates CEO nationality in Malaysia, there is a paucity of research concerning the physical characteristics of CEOs in the context of developing countries. Therefore, the present paper simultaneously investigates certain physical characteristics of a CEO, such as age, gender, ethnicity and nationality, in relation to both the accounting (ROE) and market-based performance (market value) of non-financial listed companies of Malaysia, a developing country, between 2010 and 2014. The simultaneous use of certain physical characteristics of a CEO, two proxies of firm performance and in the context of a developing country in a single study enriches extant literature, which either focuses on accounting (Bhagat et al. 2010; Zhang & Rajagopalan 2009) or market-based performance in developed countries (Butt et al. 2012; Cline & Yore 2016; Ewart 2014).

The remainder of this paper is organised as follows. The next sections synthesise extant literature and research design. The aforementioned sections are followed by a description and discussion of the findings of the study. The final section outlines recommendations, the limitations of the present study and directions for future research in the area.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The CEO is an integral part of the Top Management Team (TMT). The upper echelons theory posits that the personal characteristics of the TMT determine their actions, which have a direct association with firms' strategic management and performance (Bertrand & Schoar 2003; Carpenter, Sanders & Gregersen 2000; Hambrick & Mason 1984; Michel & Hambrick 1992; Zhang & Rajagopalan 2009). The measurement procedure categorises these characteristics into quantifiable and non-quantifiable. The former, which is also known as physical, visible or factual characteristics, include age, gender, experience, education, race/ethnicity and nationality. As the name implies, these characteristics are comparatively easy to measure and, hence, preferred to be used in research. The latter accounts for leadership style, interpersonal communication, and team-building skills, which are imprecise, subjective, complex and difficult to measure (Bhagat et al. 2010). Accordingly, this paper selects certain quantifiable or physical characteristics of a CEO in relation to firm performance.

CEO AGE AND FIRM PERFORMANCE

Despite eligibility for reappointment, the Companies Act, 1965 mandates the retirement of CEOs of the Malaysian listed companies after every three years (Amran et al. 2014). The upper echelon theory also supports the appointment of young CEOs due to the quick adaptability of young CEOs, which is beneficial for firms when faced with non-routine and quick decisions (Hambrick & Mason 1984). Many studies find that senior CEOs prefer investments that could yield benefits before their retirement. Therefore, senior CEOs focus on the short-term, rather than long-term, objectives of the firm. Also, senior CEOs are found to be unskilled in regards to estimations; corrective measures; decisive actions; and critical decisions (Cline & Yore 2016; Jalbert, Rao & Jalbert 2002). Accordingly, the death of a senior CEO results in high-value gains (Jenter, Matveyev & Roth 2015). Many empirical studies also find that senior CEOs have a significant negative association with firm market value (Cline & Yore 2016; Jalbert et al. 2002) and the ROA of government-linked companies (Amran et al. 2014). Unlike senior CEOs, young CEOs are adept in regards to creativity and acquainted with emerging technologies and trends. Such attributes facilitate firms in making wise, effective and disciplined decisions (Ante & Lublin 2012; Jenter et al. 2015). Accordingly, Jenter et al. (2015) find that the sudden death of a young CEO results in huge losses to the firms.

In contrast, it is argued that age of the CEO represents his/her experience in business operations, market and strategic management (Ewart 2014). Also, it is argued that a senior CEO will reduce a firm's risk by investing in less vulnerable projects (Serfling 2013). Moreover, senior CEOs have a competitive edge over their younger counterparts who primarily focus on short-term goals for improving their reputation (Hirshleifer 1993; Peni 2012). Despite weak physical stamina, senior CEOs are still considered safe hands and sufficiently competent to manage firms better than their younger counterparts (Evans 2005)[1]. Empirical studies find that CEO age has a significant positive association with abnormal returns (Ewart 2014) and a significant negative relation with the volatility of stock return (Serfling 2013).

Due to inconclusive extant literature that primarily focuses on developed countries, this paper further investigates the relationship between CEO age and firm performance in the context of the developing country of Malaysia. The study establishes the following hypothesis for investigation:

$H_1$: CEO age has a negative association with firm performance.

CEO GENDER AND FIRM PERFORMANCE

Despite equal legal and moral status, men and women are two extremes of the same continuum. Men and women differ from each other in their thoughts, struggles, commitments and handlings of risk and stress, among others (Butt et al. 2012). Such gender-based differences obviously affect the success of individuals at work (Peni 2012) which complicates the relationship between CEO gender and firm performance (Khan & Vieito 2013; Strelcova 2004). The complication of the relationship is further evident as some researchers favour men (Betz, O'Connell & Shepard 1989; Powell & Ansic 1997), while others support women at the top of organisations (Khan & Vieito 2013; Schubert 2006).

Proponents argue that a woman becoming CEO in a male dominated corporate arena signifies the endorsement of her extraordinary talents and superior skills, which improve firm performance (Khan & Vieito 2013; Strelcova 2004). Additionally, proponents also argue that since women are more conservative and risk averse, firms with female CEOs face fewer risks. The conservatism of female CEOs not only avoids losses, but also improves the performance of the firms (Khan & Vieito 2013; Schubert 2006).

Moreover, the co-operative style of female executives is more productive than the competitive style of their male counterparts (Adams et al. 2007; Eagly & Carli 2003). Accordingly, the former has become a widespread phenomenon that attracted considerable public attention in recent years (Strelcova 2004). By supporting demographic heterogeneity at the top of the organisation, upper echelon theory also supports female CEOs (Hambrick & Mason 1984).

Empirically, many studies find that female CEOs have a significant positive association with ROA (Khan & Vieito 2013; Peni 2012), market value and the overall success of firms (Peni 2012). Despite only attaining 5% representation in Fortune 1,000, female CEOs account for 7% of the total revenue of Fortune 1,000 firms in 2013. Also, female CEOs

accounted for an average return of 103.4%, which was higher than the 69.5% average of Fortune 1,000[2].

In contrast, opponents argue that female CEOs are good in helping people, but not in improving governance or cash management of the firms (Betz et al. 1989; Powell & Ansic 1997). Therefore, female CEOs invest only one-third of the available economic resources of the firms. Also, female CEOs lack industry-specific knowledge, which leads to firm investments in less profitable or vulnerable projects (Loscocco, Robinson, Hall & Allen 1991; Navarro & Gallo 2014). Moreover, it is also argued that the higher compensation of male CEOs indicates their worth and superiority over their female counterparts (Adams et al. 2007). Many studies find that female CEOs have a significant negative association with firm performance (Loscocco et al. 1991; Navarro & Gallo 2014). Additionally, it is found that investors negatively react to the appointment of a female CEO (Lee & James 2007).

Due to incongruent extant literature that primarily concentrates on developed countries, this paper investigates the relationship between CEO gender and firm performance in the context of the developing country of Malaysia. The study establishes the following hypothesis for investigation on the basis that upper echelon theory supports heterogeneity at the top of the organisation:

$H_2$: CEO gender (female) has a positive association with firm performance.

CEO ETHNICITY AND FIRM PERFORMANCE

Minorities account for one-third of U.S. society and are expected to become a majority by 2050 (U.S Census Bureau 2011). However, corporate America does not reflect their substantial presence in the society. The disparity becomes more visible at the top where less than 4% of the CEOs are ethnic minorities in the Fortune 500 (Diversity Inc. 2011).

However, such a scenario differs significantly from the multi-ethnic society of Malaysia, which hosts three major ethnicities (i.e., Malay, Chinese and Indians, among others). In the case of Malaysia, CEOs in public firms are typically ethnic Malays, while the CEOs of private corporations are typically ethnic Chinese. Besides playing a substantial role in the legal and medical professions in Malaysia, ethnic Indians have no noticeable representation at the top of Malaysian corporations. Based on cultural characteristics, ethnic Malays are characterised by low individualism, high uncertainty avoidance and transparency, among others. Ethnic Chinese, on the other hand, are individualistic and willing to take risks by accepting new challenges (Amran et al. 2014; Haniffa & Cooke 2002; Hofstede 1991; Nguyen, Hagendorff & Eshraghi 2015).

The cultural background of a CEO has an obvious impact on firm performance. The impact of the cultural background of the CEO on firm performance can easily be seen in the differences in compensation of CEOs representing different cultures of the world (Adams

et al. 2007; Jalbert et al. 2007). Upper echelon theory postulates that heterogeneity at the top augments the quality of strategic decisions. The cultural background of a CEO not only affects a firm's internal environment, but also influences a firm's response to exogenous shocks (Hambrick & Mason 1984; Nguyen et al. 2015). The ethnicity of a CEO contributes unique insights by providing varied perspectives that facilitate complex decision-making by firms (Nguyen et al. 2015).

It is argued that an individual representative of an ethnic minority becoming a CEO serves as evidence of the extraordinary talents and skills of the individual, which improves firm performance (Adams et al. 2007; Jalbert et al. 2007; Nguyen et al. 2015). Amran et al. (2014) find that ethnic Malay CEOs have a significant positive relation with the performance of the government-linked companies in Malaysia. Hwang and Kim (2009) offered a unique explanation that CEO ethnicity augments monitoring due to his/her low social ties with individuals from other races or ethnicities in the organisation.

On the contrary, it is also argued that the cultural background of a CEO has no relation with firm performance. A study comparing minority and non-minority led companies among Fortune 500 companies finds no significant difference in their performance (Mycroft 2012). More specifically, the findings of the study indicate that ethnic minority CEOs neither improve nor diminish firm performance measured by return on assets; return on equity; and earnings per share. The results may lack uniformity due to differences in the samples or contexts of such studies.

To sum up, despite a vital role in strategic management, extant empirical studies pay less attention to the relationship between the race or ethnicity of a CEO and firm performance. Moreover, the findings of such scarce literature also lack uniformity. The present paper further investigates the association of CEO ethnicity with firm performance. On the basis of accepting new challenges, willingness for taking risks and upper echelon theory, the following hypothesis is developed:

$H_3$: CEO ethnicity (Chinese) has a positive association with firm performance.

CEO NATIONALITY AND FIRM PERFORMANCE

The international experience of a CEO assists firms in creating global competitiveness through international diversification. Such experience grooms executives for coping with unexpected issues and new challenges. Also, such experience equips executives with skills that cannot be acquired indigenously. Therefore, international experience has become a pre-requisite for the post of a CEO (Bass 1985; Black, Gregersen, Mendenhall & Stroh 1999; Carpenter et al. 2000; Daily et al. 2000).

Accordingly, firms consistently demand and reward CEOs with international experience, particularly in today's age of globalisation (Sanda, Garba & Mikailu 2008; Wah

2015). In this regard, firms simply strive to attract foreign executives that could contribute managerial talents and technical skills (Sanda, Garba & Mikailu 2008). Upper echelon theory also encourages the presence of foreign CEOs to improve the operational efficiency and monitoring capabilities of an organisation (Hambrick & Mason 1984). Accordingly, the number of foreign CEOs has doubled in the USA during the last decade (Black et al. 1999; Carpenter et al. 2000). The statistics evidence that approximately 40% of S & P 500 CEOs had international experience (Spencer Stuart 2006). The international experience (Daily et al. 2000) or foreign nationality of the CEO is found to have a significant positive relation with profitability (Sanda et al. 2008) and financial performance of the firms (Wah 2015). Also, a study finds that CEOs from Central and South America, Australia and New Zealand earn a higher return on assets than others (Jalbert et al. 2007).

However, in contrast, it is also argued that foreign executives have low attendance and, thus, play a weak monitoring role due to their residence abroad. Moreover, language barriers and unfamiliarity with or superficial knowledge of the local culture, market and economy also reduce their efficiency (Arioglu & Borak 2015). Accordingly, foreign CEOs are found to have no significant impact on the stock market (Arioglu & Borak 2015) and firm market value (Vania & Supatmi 2014) in emerging economies, such as Turkey and Indonesia.

Because of the incongruent and scarce literature that primarily focuses on developed countries, this paper further investigates the relationship between CEO nationality and firm performance in the developing country of Malaysia. For further investigation, the study establishes the following hypothesis on the basis of upper echelon theory, which favours the foreign nationality of a CEO:

$H_4$: CEO nationality (foreign) has a positive association with firm performance.

### RESEARCH DESIGN

The population of the present study is composed of 960 companies listed into 12 different sectors on Bursa Malaysia as of 31 December 2009 (Economic Planning Unit 2011). However, the paper did not include finance, hotels and mining sectors the sample. The finance sector is excluded due to its unique structure, while the hotel and mining sectors are not considered due to the small number of companies. By virtue of the previously identified stratum (sectors), the paper employs stratified random sampling. The sampling method is selected because it truly represents the population by providing a fair chance of selection to every unit (Saunders, Lewis & Thornhill 2009). The Rao-soft size calculator determined the minimum sample size of 271 companies. However, following previous literature, the present study selects a sample of 320 listed companies, which is larger than the minimum required as reported in Table 1 (Greene 2012; Gujarati 1995).

Following previous literature in the area, data concerning the age, gender, ethnicity and nationality of CEOs are collected from the annual reports of the sample companies from 2010 to 2014 (Amran et al. 2014; Butt et al. 2012; Wah 2015). Data concerning the age and nationality of CEOs are easily collected since they are clearly stated in the annual reports (Amran et al. 2014). However, following Darmadi (2013), data concerning the gender and ethnicity of CEOs is determined through the visible difference in names and physical appearance (photos) provided in annual reports. Data for control variables (i.e., age; size; leverage of the firms; government credit to the private sector; and proxies of ROE and market value) are extracted from Thomson Reuters DataStream in a fashion similar to Amran et al. (2014). Due to the repeated nature of observations over time, the paper employs a panel approach for overcoming the specific issues of pure cross-sectional or time series data (Greene 2012; Gujarati 1995).

### CONTROL VARIABLES

Based on the significant positive and negative association of the age (Pástor & Veronesi 2003; Sulong & Nor 2010), size (Cheung, Thomas, Limpaphayom & Zhou 2007; Durnev & Kim 2005) and leverage of a firm (Hatfield, Cheng & Davidson III 1994; Mule & Mukras 2015), the present study controls for their effects. Also, the study controls for the possible positive (Nicolò, Laeven & Ueda 2008) or negative (Fafchamps & Schundeln 2011; Zhang & Rajagopalan 2009) effects of government credit to private sector. Following Peni (2012), the effects for industry and time are also controlled for by including dummy variables for nine sectors (Table 1) and a study period of five years (2010-2014), respectively.

### ECONOMETRIC MODEL AND MEASUREMENT OF VARIABLES

The following equations are the two econometric models employed in the present study. Table 2 explains the operationalisation of all the variables used in the study.

$$FP\ (ROE)_{it} = \beta_0 + \beta_1 CAGE_{it} + \beta_2 CGEN_{it} + \beta_3 CETH_{it} + \beta_4 CNAT_{it} + \beta_5 FAGE_{it} + \beta_6 FSIZ_{it} + \beta_7 FLEVG_{it} + \beta_8 CREDITt_{it} + \beta_9 ID_{it} + \beta_{10} TD_{it} + \varepsilon_{it}$$

.................................. Model 1

$$FP\ (MV)_{it} = \beta_0 + \beta_1 CAGE_{it} + \beta_2 CGEN_{it} + \beta_3 CETH_{it} + \beta_4 CNAT_{it} + \beta_5 FAGE_{it} + \beta_6 FSIZ_{it} + \beta_7 FLEVG_{it} + \beta_8 CREDIT_{it} + \beta_9 ID_{it} + \beta_{10} TD_{it} + \varepsilon_{it}$$

.................................. Model 2

TABLE 1. Population and sample

| S.No | Sectors | No. of Comps | % | Sample | % |
|------|---------|-------------|---|--------|---|
| 1 | Consumer Products | 187 | 19.4 | 61 | 20.33 |
| 2 | Industrial Products | 210 | 21.9 | 67 | 22.33 |
| 3 | Construction | 65 | 6.79 | 23 | 7.66 |
| 4 | Trading Service | 234 | 24.5 | 74 | 24.66 |
| 5 | Finance | 39 | 4.08 | Exc. | Exc. |
| 6 | Infrastructure | 8 | 0.84 | 03 | 1.00 |
| 7 | Hotels | 4 | 0.42 | Exc. | Exc. |
| 8 | Properties | 110 | 11.5 | 35 | 11.66 |
| 9 | Plantation | 43 | 4.49 | 14 | 4.66 |
| 10 | Mining | 1 | 0.1 | Exc. | Exc. |
| 11 | Technology | 42 | 4.28 | 13 | 4.33 |
| 12 | Real Estate | 17 | 1.67 | 05 | 1.66 |
| | Total | 960 | 100 | 320 | 100 |

TABLE 2. Operationalisation/measurement of variables

| S.No | Variables | Measurement | References |
|------|-----------|-------------|------------|
| 1. | CEO Age | Age of CEO | (Amran et al. 2014) |
| 2. | CEO Gender | 1 if CEO is male and 0 if otherwise | (Amran et al. 2014) |
| 3. | CEO Ethnicity | 1 if CEO is ethnic Chinese and 0 if otherwise | (Amran et al. 2014) |
| 4. | CEO Nationality | 1 if CEO is a foreigner and 0 if otherwise | (Wah 2015) |
| 5. | Firm Age | Number of years since the firm is listed | (Amran et al. 2014) |
| 7. | Firm Size | Log of total assets | (Wahab, How & Verhoeven 2007) |
| 8 | Firm Leverage | Total assets/Total equity | (Wahab et al. 2007) |
| 9. | Govt. Credit to Private Sector | Log of Government credit to private sector | (Fafchamps & Schundeln 2011) |
| 8. | ROE | Net Income/shareholders' equity | (Darmadi 2013) |
| 9. | Firm Market Value | Outstanding shares multiplied by market price | (Butt et al. 2012) |

Where

$FP_{it}$ = Financial performance measured by ROE and market value of the *ith* firm at time *t*

$\beta$ = Beta

$CAGE_{it}$ = CEO age of the *ith* firm at time *t*

$CGEN_{it}$ = CEO gender of the *ith* firm at time *t*

$CETH_{it}$ = CEO ethnicity of the *ith* firm at time *t*

$CNAT_{it}$ = CEO nationality of the *ith* firm at time *t*

$FAGE_{it}$ = Age of the ith firm at time *t*

$FSIZ_{it}$ = Size of the *ith* firm at time *t*

$FLEVG_{it}$ = Leverage of the *ith* firm at time *t*

$CREDIT_{it}$ = The effect of credit given by the government to private sector on *ith* firm at time *t*

ID = Dummy variables for controlling sector-wise effect of the nine sectors on *ith* firm at time *t*

$TD_{it}$ = Dummy variables for controlling time effect of five years of the study on *ith* firm at time *t*

$\varepsilon_{it}$ = Error term of the *ith* firm at time *t*

FINDINGS AND DISCUSSION

Table 3 reports the descriptive statistics which explain the mean, minimum and maximum limits for all the variables of continuous nature.

Additionally, Table 3 provides information concerning the frequency distribution of the dichotomous or dummy variables applied in the study.

Table 3 shows that the ROE and log of firm market value (MV) have an average of 0.07 and 2.35, respectively. The statistics show that Malaysian CEOs have an average age of 56.26 years. Also, the findings evidence that female CEOs (CGEN) lead only 15 of the sample firms. Moreover, the statistics indicate that 66.13% of the sample firms have ethnic Chinese CEOs (CETH). In the remaining firms, 11.44% are foreigners (CNAT) and 22.43% are ethnic Malay. The control variables of firm age (FAGE) and firm size (FSIZ) have an average of 15.99 and 5.59, respectively. Similarly, firm leverage (FLEVG) and government credit to private sector (CREDIT) show an average of 46.26% and 2.06, respectively.

Due to the mixed nature of the variables (i.e., continuous and dichotomous), this study employs both the Pearson and the Spearman correlation matrixes below and above the diagonal line as reported in Table 4. The findings evidence a weak correlation among all variables. The statistics of both the correlation matrixes show that none of the physical characteristics of a CEO has a significant positive association with ROE, with the exception of nationality (CNAT). Consistent with Wah (2015) the findings indicate that foreign CEOs have good vision and understanding of strategic management that increases return on shareholders' equity in Malaysia. Among the control variables, firm age (FAGE) is found to be insignificant, while firm size (FSIZ) has a significant

<div align="center">TABLE 3. Descriptive statistics</div>

| Variables | Obs. | Mean | Min. | Max | Std. Deviation | Frequency | Valid/Cum. Percent |
|---|---|---|---|---|---|---|---|
| MV | 1600 | 2.35 | 0.89 | 4.73 | 0.71 | - | - |
| ROE | 1600 | 0.07 | -1.85 | 3.70 | 0.22 | - | - |
| CAGE | 1600 | 56.26 | 50.00 | 89.00 | 8.26 | - | - |
| CGEN | 1600 | - | - | - | - | 15 | 0.9 |
| Male | - | - | - | - | - | 1585 | 99.1 |
| CETH | 1600 | - | - | - | - | 1058 | 66.13 |
| Others | - | - | - | - | - | 542 | 33.9 |
| CNAT | 1600 | - | - | - | - | 183 | 11.4 |
| Others | - | - | - | - | - | 1417 | 88.6 |
| FAGE | 1600 | 15.99 | 1.00 | 42.00 | 7.25 | - | - |
| FSIZ | 1600 | 5.59 | 4.07 | 7.36 | 0.59 | - | - |
| FLEVG | 1600 | 46.26 | -376.63 | 546.49 | 68.75 | - | - |
| CREDIT | 1600 | 2.06 | 2.03 | 2.08 | 0.02 | - | - |

MV = Firm market value, ROE = Return on Equity, CAGE = CEO age, CGEN = CEO gender (Female), CETH = CEO ethnicity (Chinese), CNAT = CEO nationality (Foreign), FAGE = Firm age, FSIZ = Firm size, FLEVG = Firm leverage, CREDIT = Government credit to private sector.

positive association with ROE. Firm leverage (FLEVG) and government credit to private sector (CREDIT) have significant negative relations with ROE.

Table 4 also reports the correlation of CEO physical characteristics with firm market value (MV). The findings of both the correlation matrixes show that the age (CAGE) and ethnicity (CETH) of a CEO have significant positive correlations with firm market value (MV). The findings indicate that shareholders express more confidence in senior CEOs. Consistent with Serfling (2013), senior CEOs reduce risks by avoiding investment in vulnerable projects. Accordingly, stock markets assign a higher value to firms with senior CEOs.

The statistics reported in Table 4 also show that the market expresses confidence in firms with ethnic Chinese CEOs. The findings are interesting as shareholders place value on senior CEOs who are considered safe hands, but also express confidence in ethnic Chinese CEOs that take risks by accepting new challenges. As a plausible explanation, the findings imply that ethnic Chinese firms are old and, thus, benefit from their previously established business networks and contacts in the domestic and international market (Yeung 1999). The findings are consistent with Jalbert et al. (2007), who find that CEO ethnicity has a significant positive role in improving firm performance.

The insignificant positive association of the gender (CGEN) and nationality (CNAT) of a CEO with firm market value implies that investors have no significant trust in women and foreign CEOs in the Malaysian context. The findings concerning the gender of a CEO are consistent with Adams et al. (2007). Similarly, the findings concerning the nationality of a CEO support the results of Arioglu and Borak (2015) and Vania and Supatmi (2014) who find that foreign CEOs have no significant relation to firm market value in emerging economies, such as Turkey and Indonesia.

Among the control variables, firm age (FAGE) and leverage (FLEVG) have no significant effect, while firm size (FSIZ) and government credit to private sector (CREDIT) have significant positive associations with firm market value. The findings indicate that investors do not place any value to the age and leverage of the firms. However, investors place importance on large firms and the provision of government credit or funds to the private sector.

Before employing the regression estimation, the study investigates issues associated with multicollinearity, heteroscedasticity, serial correlation and cross-sectional independence. In regards to multicollinearity, the statistics of both the correlational matrices (i.e. Pearson and Spearman) show no correlation between independent variables that are equal or higher than 0.80 as reported in Table 4. Thus, no issues relating to multicollinearity are indicated to be present in any model of the study. In regards to heteroscedasticity, the results of the Breusch-Pagan/Cook-Weisberg Test (i.e., chi2 (1) = 11.36 and Prob. > chi2 = 0.0008) for ROE (Model 1) and (chi2 (1) = 21.05 and Prob. > chi2 = 0.000) for MV (Model 2) confirm the existence of heteroscedasticity in both models of the study. Similarly the results of the Wooldridge test for autocorrelation shows F (1, 221) = 5.889, Prob. > F = 0.0160 in Model 1 (ROE) and F (1, 319) = 356.432, Prob. > F = 0.0000 in Model 2 (MV). The statistics confirm serial correlation in both models of the study (Greene, 2012; Gujarati, 1995). The results of the Pesaran test (-0.040, Pr. = 1.0321) for ROE (Model 1) and (5.986, Pr. = 0.0000) for MV (Model 2) only indicate cross-sectional dependence in Model 2 of the study. In light of the findings, the study employs a Pooled OLS with robust standard errors for estimating both models (Model 1 and Model 2) of the study as recommended by Hoechle (2007).

Table 5 shows the regression results for the relationships between the physical characteristics of the CEO and firm performance measured by ROE and market value. The

TABLE 4. Pearson's and spearman correlation matrixes

| Variables | ROE | MV | CAGE | CGEN | CETH | CNAT | FAGE | FSIZ | FLEVG | CREDIT |
|---|---|---|---|---|---|---|---|---|---|---|
| ROE | 1 | 0.079** | 0.015 | -0.016 | 0.011 | 0.043*** | -0.020 | 0.272** | -0.101** | -0.070** |
| MV | 0.108** | 1 | 0.053* | 0.026 | 0.062* | 0.051* | 0.040 | 0.208** | 0.101** | 0.053* |
| CAGE | 0.019 | 0.060* | 1 | -0.017 | -0.029 | 0.100** | 0.082** | 0.121** | -0.048*** | 0.159** |
| CGEN | -0.017 | 0.023 | -0.020 | 1 | -0.026 | -0.035 | -0.018 | -0.076** | -0.014 | 0.000 |
| CETH | 0.001 | 0.061* | -0.041*** | -.0026 | 1 | -0.481** | -0.049*** | -0.058* | -0.021 | 0.003 |
| CNAT | 0.057* | 0.037 | 0.106** | -0.035 | -0.481** | 1 | 0.037 | 0.125** | -0.052* | -0.004 |
| FAGE | 0.001 | 0.032 | 0.072** | -0.019 | -0.059* | 0.044*** | 1 | 0.274** | -0.088** | 0.202** |
| FSIZ | 0.290** | 0.248** | 0.107** | -0.079** | -0.044*** | 0.126** | 0.309** | 1 | 0.258** | 0.058* |
| FLEVG | -0.105** | 0.031 | -0.018 | -0.026 | -0.027 | -0.035 | -0.065** | 0.242** | 1 | -0.005 |
| CREDIT | -0.061* | 0.050* | 0.151** | 0.000 | 0.002 | -0.004 | 0.192** | 0.056* | 0.026 | 1 |

Note: * denotes significance at the 1% level; ** denotes significance at the 5% level; and *** denotes significance at the 10 % level. Sample = 320, T=5, N (320*5) = 1600. MV= Firm market value, ROE= Return on Equity, CAGE= CEO age, CGEN = CEO gender (Female), CETH= CEO ethnicity (Chinese), CNAT= CEO nationality (Foreign), FAGE= Firm age, FSIZ=Firm size, FLEVG = Firm leverage, CREDIT= Government credit to private sector.

findings show that CEO age (CAGE) has an insignificant negative and positive relation with firm performance measured by ROE and market value, respectively. The results indicate that an increase in the age of a CEO has no significant negative or positive impact on firm accounting and market-based performance. The finding may be due to the weak physical stamina of senior CEOs that are unable to ensure the efficient utilisation of a firm's resources (Cline & Yore 2016; Jalbert et al. 2002). The findings are consistent with those of Soriano & Castrogiovanni, (2012), but inconsistent with Amran et al. (2014) who find a significant negative relation between CEO age and the performance of the government-linked companies in Malaysia. The inconsistency may be due to the differences in sample or timing of the study. Overall, the findings reject $H_1$ for both Model 1 (ROE) and Model 2 (firm market value) of the study.

Table 5 shows that female CEOs (CGEN) have an insignificant negative association with ROE. Consistent with previous literature, the finding has a plausible explanation that, being highly risk averse, female CEOs undercapitalise firms' economic resources, which negatively affects return on equity. Moreover, being less experienced, female CEOs primarily invest in highly risky or vulnerable projects that do not increase return on equity (Loscocco et al. 1991; Navarro & Gallo 2014). The findings are consistent with Martin, Nishikawa and Williams (2009), but are inconsistent with Khan and Vieito (2013) in the context of the USA. The inconsistency may be due to the different context of the studies, among other distinctions.

In contrast, a female CEO (CGEN) has a significant positive association with firm market value. Consistent with extant literature, since female CEOs are typically more conservative and highly risk averse; therefore, firms led by female CEOs face fewer risks and losses. Therefore, markets and shareholders express high trust and confidence in female CEOs. The findings are also logical as female CEOs in the male dominated corporate arena reflect their extraordinary talent, which improves firm performance (Adams et al. 2007; Eagly & Carli 2003; Khan & Vieito 2013; Schubert 2006). The findings are consistent with Peni (2012), but inconsistent with Lee and James (2007). The inconsistency may be a result of differences in context, sample or methodology of the studies. Overall, the findings partially support $H_2$ of the study by showing an insignificant negative relation with ROE (Model 1) and a significant positive relation with firm market value (Model 2).

Table 5 reports that CEO ethnicity (CETH) has a weak significant and positive relation with both ROE and firm market value. The findings can be explained by the fact that most of the ethnic Chinese-owned firms are relatively old and have more experienced CEOs than ethnic Malay owned firms, which possibly improves the performance of the sample of Malaysian firms in the present study. Consistent with Yeung (1999), the findings can also be attributed to the fact that ethnic Chinese CEOs follow Western management practices and establish effective personal and business contacts with ethnic Chinese

within and outside their country of origin. Such practices, in turn, facilitate firms to develop a competitive edge, which improves their performance. The findings are also supported by extant literature indicating that ethnic Chinese CEOs typically characterised as engaging in risk taking and accepting new challenges (Amran et al. 2014; Haniffa & Cooke 2002). However, the findings are contradictory with Amran et al. (2014), which may be due to their sample of government-linked companies, which are principally led by ethnic Malay CEOs. Overall, the findings fully support $H_3$ for both models of the study.

Table 5 also shows that foreign CEOs (CNAT) have a significant positive association with ROE and firm market value. According to previous literature, the findings may be explained by the fact that the international experience of a CEO contributes to managerial skills and other technical talents which, in turn, ensure the efficient and professional conduct of the firms (Sanda, Garba & Mikailu 2008), which improves their accounting and market-based performance (Black et al. 1999; Carpenter et al. 2000; Daily et al. 2000). The findings fully support $H_4$ for both models of the study and are also consistent with Wah (2015) in the Malaysian context. However, the findings are inconsistent with Arioglu and Borak (2015) and Vania and Supatmi (2014). The inconsistency may be due to contextual differences as the studies are conducted in Turkey and Indonesia, respectively.

The findings for the control variables reported in Table 5 show that firm age (FAGE) has a significant negative relation with ROE and firm market value. The findings indicate that Malaysian firms cannot adapt to emerging challenges and new developments around the world. Subsequently, most Malaysian firms lost their substantial share in the market by obtaining close substitutes for their products. The findings are consistent with Pástor and Veronesi (2003) who find that firm performance declines with an increase in age.

The control variable of firm size shows a significant positive association with ROE and firm market value. The findings indicate that the large size of a firm not only improves return on equity, but also increases its market value. Size is important because large firms are in better position to improve their performance by ensuring efficient utilisation of their substantial assets (Cheung et al. 2007). Therefore, investors prefer large firms that increase their market value (Durnev & Kim 2005).

The findings reported in Table 5 show that firm leverage has a significant negative relation with ROE. Extant literature explains that an increase in leverage increases interest expense, which leads to a decline of firm's profitability (Mule & Mukras 2015). However, the relationship between leverage and firm market value is insignificant negative. The findings endorse Hatfield, Cheng & Davidson III, (1994) who find that investors believe in a firm's ability to know the level or limit of leverage that suits them.

The provision of government credit to the private sector (CREDIT) has an insignificant negative relation with

ROE. According to Fafchamps and Schundeln (2011), the findings are logical since an increase in debt increases transactional costs and debt servicing, which decrease shareholder return. Thus, an insignificant negative relationship exists between government credit to private sector and ROE. The relationship of government credit is also insignificant, but positive, with firm market value. Overall, the provision of government credit to the private sector has no significant negative or positive association with the accounting or market-based performance of firms. The findings are inconsistent with Nicolò et al., (2008) which may be due to differences in the allocated amount, accessing procedure or context of these studies.

To sum up, the predictors representing CEO physical characteristics caused a total change of 14.53% (R-Squared, 0.1453) in the ROE (Model 1). The F-value is 87.52 with a probability of 0.0003 for the model. Similarly, CEO physical characteristics affected 10.06% (R-Squared, 0.1006) of the market value of the sample firms (Model 2). The model has an F-value of 37.12 with a probability of 0.0001.The overall findings suggest that the physical characteristics of a CEO have a significant role in association with both the accounting and the market-based performance of non-financial listed companies in Malaysia.

### RECOMMENDATIONS, LIMITATIONS AND FUTURE DIRECTIONS

Based on the insignificant positive relation of CEO age with ROE and firm market value (Table 5), this paper recommends that Malaysian firms consider the appointment of younger CEOs in the future. The recommendation is consistent with practices among US corporations that hire young CEOs despite the remarkable and successful corporate stories of Steve Jobs (Apple Inc.) and Bill Gates (IBM, Corporation)

in the recent years. Also, the recommendation is compatible with statistics showing that most promising CEOs are below 35 years of age in the USA today[3].

The statistics evidence a low representation of women at the top of the organisation. In Thailand, forty-nine percent of CEOs are female, which is the highest in the world[4]. After considering the insignificant negative and significant positive association with ROE and firm market value, respectively (Table 5), this paper recommends that Malaysian firms should also consider the appointment of competent and qualified female CEOs in the future.

Based on the significant positive association of ethnic Chinese and foreign CEOs with ROE and market value respectively (Table 5), the paper supports their presence at the top of non-financial Malaysian listed companies. Based on the significant positive association with firm performance (accounting and market) and the low representation of foreign CEOs in Malaysia (i.e., 11.4%), this study also recommends a further increase in the number of foreign CEOs in Malaysia. Moreover, on the basis of findings regarding foreign CEOs, this paper recommends that Malaysian firms should provide opportunities for ethnic Malay CEOs by assigning them international tasks and assignments.

Overall, this study contributes to the existing limited and inconclusive literature, particularly in the context of developing countries such as Malaysia. Also, the findings of the study provide important insights for regulators and policy makers to update corporate strategies in the country in the future. Moreover, the findings can be applied by shareholders, creditors, insurance companies, banks and financial institutions in relation to the evaluation of firms by considering the physical characteristics of a CEO.

Future studies should consider other characteristics of CEOs, such as professional education; relevant industry

TABLE 5. Ordinary Least Squares (OLS) regression with robust standard errors

| Models | ROE – Model 1 | | | | MV – Model 2 | | | |
|---|---|---|---|---|---|---|---|---|
| Variables | Coefficients | Drisc/Kraay | t | P | Coefficients | Disc/Kraay | t | P |
| CAGE | -0.00032 | 0 .00031 | -1.06 | 0.351 | 0.00172 | 0.00182 | 0.94 | 0.400 |
| CGEN | -0.02340 | 0.01183 | -1.98 | 0.119 | 0.36840 | 0.10308 | 3.57 | 0.023 |
| CETH | 0.01405 | 0.00569 | 2.47 | 0.069 | 0.09269 | 0.04292 | 2.16 | 0.097 |
| CNAT | 0.02765 | 0. 00700 | 3.95 | 0.017 | 0.17279 | 0.07128 | 2.42 | 0.072 |
| FAGE | -0.00298 | 0.000745 | -4.00 | 0.016 | -0.00488 | 0.00185 | -2.63 | 0.058 |
| FSIZ | 0.12254 | 0.01106 | 11.08 | 0.000 | 0.31928 | 0.01658 | 19.25 | 0.000 |
| FLEVG | -0.00027 | 0.00008 | -3.45 | 0.026 | -0.00016 | 0.00015 | -1.08 | 0.341 |
| CREDIT | -0.04291 | 0.04302 | -1.89 | 0.131 | 0.25301 | 0.12085 | 2.09 | 0.104 |
| Constant | 0.44360 | 0.13080 | 3.39 | 0.001 | 0.06370 | 0.02260 | 2.82 | 0.005 |
| Year Dummies (YD) | Included | | | | Included | | | |
| Industry Dummies (ID) | Included | | | | Included | | | |
| Observations | 1600 | | | | 1600 | | | |
| R-squared | 0.1453 | | | | 0.1006 | | | |
| F-value | 87.52 | | | | 37.12 | | | |
| Prob. | 0.0003 | | | | 0.0001 | | | |

*Note*: * denotes significance at the 10% level; ** denotes significance at the 5% level; and *** denotes significant at the 1 %level: sample = 320, T= 5, N (320*5) = 1600. MV= Firm market value, ROE= Return on Equity, CAGE= CEO age, CGEN = CEO gender (Female), CETH= CEO ethnicity (Chinese), CNAT= CEO nationality (Foreign), FAGE= Firm age, FSIZ=Firm size, FLEVG = Firm leverage, CREDIT= Government credit to private sector.

experience; quality of decisions; leadership style; and personality traits. Besides extending the period of the study and the domain of firm performance, studies in the future may also consider the response of Malaysian CEOs through questionnaires or interviews for further accuracy and generalisation of the derived conclusions of this study.

## NOTES

1. Evans, Mark, 2005, Abolish mandatory retirement, 90% say, *Financial Post*, October 24.
2. Fortune: Female-led businesses beat the stock market, but their numbers remain low by Andrea Newell on Wednesday, Jul 16th, 2014 available at http://www.triplepundit.com/2014/07/female-ceo-led-businesses-consistently-post-solid-financial-returns/#
3. The Richest available at http://www.therichest.com/rich-list/most-influential/10-of-the-youngest-ceos-today/
4. Thailand has highest number of female CEOs globally available at http://investvine.com/thailanmd-has-most-female-ceos/

## REFERENCES

Adams, S., Gupta, A., Haughton, D. & Leeth, J. (2007). Gender differences in CEO compensation: Evidence from the USA. *Women in Management Review* 22(3): 208-209.

Amran, N.A., Yusof, M.A.M., Ishak, R. & Aripin, N. (2014). Do characteristics of CEO and chairman influence government-linked companies performance? *Procedia - Social and Behavioral Sciences* 109: 799-803. Retrieved from http://www.sciencedirect.com/science/article/pii/S1877042813051859

Ante, S.E. & Lublin, J.S. 2012. Young CEOs: Are they up to the job? *The Wall Street Journal* Available at:http://www.wsj.com/articles/SB1000142.

Arioglu, E. & Borak, M. 2015. Does the market price demographic diversity on the Boardroom? Evidence from an emerging market. *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2592537*.

Bass, B.M. 1985. *Leadership and Performance Beyond Expectation*. New York: Free Press.

Bertrand, M. & Schoar, A. 2003. Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics* 118(4): 1169-1208.

Betz, M., O'Connell, L. & Shepard, J. 1989. Gender differences in proclivity for unethical behavior. *Journal of Business Ethics* 8(5): 321-324.

Bhagat, S., Bolton, B. & Subramanian, A. 2010. CEO education, CEO turnover and firm performance, 1-50. Retrieved from http://www.unh.edu/news/docs/bolton_CEOEducation.pdf

Black, J.S., Gregersen, H., Mendenhall, M. & Stroh, L.1999. *Globalizing people through international assignments*. Addison-Wesley, Boston, MA.

Butt, V., Horton, J. & Millo, Y. 2012. *The impact of CEO characteristics on the value of the firm*. Unpublished, University of Exeter, UK.

Carpenter, M., Sanders, G. & Gregersen, H. 2000. International assignment experience at the top can make a bottom-line difference. *Human Resource Management* 39(1): 277-285.

Cheung, Y.L., Thomas, C.J., Limpaphayom, P. & Zhou, L. 2007. Do investors really value corporate governance? Evidence from the Hong Kong market. *Journal of International Financial Management & Accounting* 18(2): 86-122.

Cline, B.N. & Yore, A. 2016. CEOs: Age, experience and firm value (Forthcoming). *Journal of Empirical Finance*, 1-45. http://doi.org/10.1016/j.jempfin.2015.11.002

Daily, C.M., Certo, S.T. & Dalton, D.R. 2000. International experience in the executive suite: the path to prosperity?. *Strategic Management Journal* 21(1): 515-523.

Darmadi, S. 2013. Corporate governance disclosure in the annual report: An exploratory study on Indonesian Islamic banks. *Humanomics* 29(1): 4-23.

Diversity Inc. 2011. *Where's the diversity in Fortune 500 CEOs?*

Durnev, A. & Kim, E.H. 2005. To steal or not to steal: Firm attributes, legal environment and valuation. *Journal of Finance* 60(1): 1461-1493.

Eagly, A.H. & Carli, L.L. 2003. The female leadership advantage: An evaluation of the evidence. *Leadership Quarterly* 14(6): 807-834.

Economic Planning Unit. 2011. *Chapter No. 6 "Bursa Malaysia" in The Malaysian Economy in Figures 2011*, Page No. 10.

Ewart, B.H.D'. 2014. *The effect of CEO gender, age and salary on firm value. Thesis.*

Fafchamps, M. & Schundeln, M. 2011. *Local financial development and firm performance: Evidence from Morocco*. CSAE working paper WPS/2011-12.

Greene, W.H. 2012. *Econometric analysis*. 7th ed. Upper Saddle River, NJ: Prentice Hall.

Gujarati, D. 1995. *Basic econometrics McGraw-Hill, Singapore*.

Hambrick, D.C. & Mason, P.A. 1984. Upper echelons: The organization as a reflection of its top Managers. *The Academy of Management Review* 9(2): 1-15.

Haniffa, R.M. & Cooke, T.E. 2002. Culture, corporate governance and disclosure in Malaysian corporations. *Abacus* 38(3): 317-349.

Hatfield, G.B., Cheng, L.T.W. & Davidson III, W.N. 1994. The determination of optimal capital structure: The effect of firm and industry and debt ratios on market value. *Journal of Financial and Strategic Decisions* 7(3): 1-14.

Hirshleifer, D. 1993. Managerial reputation and corporate investment decisions. *Financial Management* 22(2): 145-160.

Hoechle, D. 2007. Robust standard errors for panel regressions with cross-sectional dependence. *The Stata Journal* 7(3): 281-312.

Hofstede, G.H. 1991. Management in a Multicultural Society. *Malaysian Management Review* 26(1): 3-12.

Hussin & Othman. 2012. Code of corporate governance and firm performance. *British Journal of Economics, Finance and Management Sciences* 6(2-1): 1-22.

Hwang, B.H. & Kim, S. (2009). It pays to have friends. *Journal of Financial Economics* 93(1): 138-158.

Jalbert, T., Chan, W.Y.C., Jalbert, M. & Landry, S. 2007. The effect of CEO nationality on financial management, firm performance and CEO compensation. *The Journal of Diversity Management* 2(2): 7-23.

Jalbert, T., Rao, R. & Jalbert, M. 2002. Does school matter? An empirical analysis of CEO education, compensation, and firm performance. *International Business and Economics Research Journal* 1(1): 83-98.

Jenter, D., Matveyev, E. & Roth, L. 2015. Good and bad CEOs. Available at http://en.ceibs.edu/sites/default/files/event-images/19-CEO%20mismatch-EM.pdf, 1-48.

Joyce, W., Nohria, N. & Roberson, B. 2004. *What really works*. New York, NY: HarperCollins.

Khan, W.A. & Vieito, J.P. 2013. Ceo gender and firm performance. *Journal of Economics and Business* 67(1): 55-66.

Lee, P.M. & James, E.H. 2007. She'-e-os: gender effects and investor reactions to the announcements of top executive appointments. *Strategic Management Journal* 28(3): 227-241.

Lin, T.C. (2014). CEOs and Presidents. *UC Davis Law Review*, *57*, 1351-1412. http://doi.org/Available at SSRN: http://ssrn.com/abstract=2428371

Loscocco, K.A., Robinson, J., Hall, R.H. & Allen, J.K. 1991. Gender and small business success: An inquiry into women's relative disadvantage. *Social Forces* 70(1): 65-85.

Martin, Nishikawa, T. & Williams, M.A. 2009. CEO Gender: Effects on valuation and risk. *Quarterly Journal of Finance and Accounting* 48(3): 23-40.

Michel, J.G. & Hambrick, D.C. 1992. Diversification posture and top management team characteristics. *The Academy of Management Journal* 35(1): 9-37.

Mule, R.K. & Mukras, P.M.S. 2015. Financial leverage and performance of listed firms in a frontier market : Panel evidence from Kenya. *European Scientific Journal* 11(7): 534-550.

Mycroft, D. 2012. *Minorities in leadership and financial performance of their Fortune 500 companies*.

Navarro, A.I. & Gallo, A. 2014. The female CEO in developing countries' firms Available at SSRN: http://ssrn.com/abstract=2405558 or http://dx.doi.org/10.2139/ssrn.2405558, 1-22.

Nguyen, Hagendorff, J. & Eshraghi, A. 2015. Does CEO cultural heritage affect performance under competitive pressure? Available at https://www.newyorkfed.org/medialibrary/media/research/conference/2015/econ_culture/Papers_NguyenHagendorffEshraghi.pdf, 1-67.

Nicolò, G., Laeven, L. & Ueda, K. 2008. Corporate governance quality: Trends and real effects. *Journal of Financial Intermediation 17*(2):198-228. http://doi.org/10.1016/j.jfi.2007.10.002

Pástor, L. & Veronesi, P. 2003. Stock valuation and learning about profitability. *The Journal of Finance* 58(5): 1749-1789.

Peni, E. 2012. CEO and Chairperson characteristic and firm performance. *Journal of Management and Governance* 18(1): 185-205.

Powell, M. & Ansic, D. 1997. Gender differences in risk behaviour in financial decision making: An experimental analysis. *Journal of Economic Psychology* 18(1): 605-628.

Sanda, A.U., Garba, T. & Mikailu, & A.S. 2008. Board independence and firm financial performance:Evidence from Nigeria. *Conference on Economic Development in Africa*, 16-18 March. St Catherine's College, University of Oxford, Oxford.1-31.

Saunders, M., Lewis, P. & Thornhill, A. 2009. *Research methods for business students. Research methods for business students*.

Schubert, R. 2006. Analyzing and managing risks—on the importance of gender difference in risk attitudes. *Managerial Finance* 32(9): 706-715.

Serfling, M. 2013. CEO age and the riskiness of corporate policies. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2158973. *Journal of Finance (Forthcoming)* 1-56.

Soriano, D.R. & Castrogiovanni, G.J. 2012. The impact of education, experience and inner circle advisors on SME performance: insights from a study of public development centers. *Small Business Economics* 38(1): 333-349.

Spencer Stuart. 2006. *Leading CEOs: A statistical snapshot of S&P 500 leaders. Retrieved from http://content.spencerstuart.com/sswebsite/pdf/lib/ 2005_CEO_Study_JS.pdf*.

Strelcova, J. 2004. Does gender matter?A comparative study of performance of American CEOs, 1-16.

Sulong, Z. & Nor, F.M. 2010. Corporate governance mechanisms and firm valuation in Malaysian listed firms: A panel data analysis. *Journal of Modern Accounting and Auditing* 6(1): 1-18.

U.S Census Bureau. 2011. *Overview of race and Hispanic origin: 2010*.

Vania, H. & Supatmi. 2014. The effect of board diversity towards the company value of financial institutions in Indonesia. *International Journal of Business and Management Invention* 3(4): 32-41.

Wah, C.S. 2015. *The effects of foreign equity ownership and foreign directors' presence on financial performance of Malaysian listed manufacturing companies*.

Wahab, E.A.A., How, J.C.Y. & Verhoeven, P. 2007. The impact of the Malaysian Code on Corporate Governance: Compliance, institutional investors and stock performance. *Journal of Contemporary Accounting & Economics* 3(2): 1-35.

Westerberg, M., Singh, J. & Hackner. 1997. Does the CEO matter? An empirical study of small Swedish firms operating in turbulent environments. *Scandinavian Journal of Management* 13(3): 251-270.

Yeung, H. W.-C. 1999. The internationalization of ethnic Chinese business firms from Southeast Asia: strategies, processes and competitive advantage. *International Journal of Urban and Regional Research* 23(1): 88-102.

Zhang, Y. & Rajagopalan, N. 2009. Once an outsider, always an outsider? CEO origin, strategic change, and firm performance. *Strategic Management Journal* 31(3): 334-346. http://doi.org/doi: 10.1002/smj.812

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