



# Demographic Diversity in Top Level Management and Its Implications on Firm Financial Performance: An Empirical Discussion

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## Abstract

This paper explores how demographic diversity in top level management affects firm financial performance. Top level management refers to both top management team and board of directors. Thus, the purpose of this paper is to empirically examine the effect of demographic diversity on top management team and boards of directors with regard to firm financial performance. This paper uses both financial and non-financial data from top 100 non-financial listed companies over the period 2000 to 2006, using the non-probability sampling approach. Demographic diversity comprises of ethnic and gender diversity and performance is measured by Return on Equity (ROE). A Pooled Least Square (PLS) regression method is used and hierarchical regression analyses are presented accordingly. The results indicate that demographic diversity has some significant impact on boards of directors with regard to firm financial performance. However, demographic diversity in TMTs does not create any significant impact on firm financial performance.

**Keywords:** Gender and ethnic diversity, TMTs, BODs, Performance

## 1. Introduction

The effectiveness of the top management level and its impact on firm performance has always been a central focus in most research work in strategic management. Conceptually, the top management level could be viewed in two perspectives; top management team and board of directors. It is of great interest for many researchers to continue investigating the characteristics of the top management teams (TMTs) and board of directors (BODs) and their impact on firm performance (Kakabadse and Kakabadse, 2006; Kakabadse et.al., 2006; Cadbury, 1992; Dahya and Travlos, 2000; Kroll, Walters and Le, 2007; Auden, 2006). Women's and multi-ethnic groups' involvement in the top level management has become increasingly important in the business world. Significant changes in terms of their readiness in holding high-ranking positions have attracted many researchers to continue exploring in these areas (Holton, 1995; Burke, 1997; Burke and Nelson, 2002; Carter, Simkins and Simpson, 2003; and Klenke, 2003). Though, much of the previous work connected to discriminatory policy, however, the corporate world remains unclear over whether gender and ethnicity in TMTs and BODs diversity could create significant impact on firm performance in general, and financial performance in particular.

## 2. Top Management Teams (TMTs) and Board of Directors (BODs)

Firm performance is a reflection of the characteristics and actions of the team of managers central to the firm, which is conceptualized as top management team, (TMT) (Hambrick and Mason, 1984). Several studies have made attempts in examining the characteristics and behaviors of the top management team, such as interaction and demography, and exploring the impact on success of the firm (Amason, 1996; Amason and Sapienza, 1997). Top management team and their importance as a potential determinant of firm performance continue to be a focus of strategic management

researchers (Goll, Sambharya and Tucci, 2001). The ultimate objectives of top management team's efforts are to create a competitive advantage and ensure strong organizational performance. As the top management takes important corporate decisions and sets strategic directions, it is therefore recognized as a key component affecting a firm's performance. On the other hand, the crucial point in this research that can not be ignored is that the roles of the board of directors (BODs) and their contributions on financial performance. The board of directors has the final authority and responsibility for the corporation's conduct and performance, although the day to day operations are to be handled by professional managers (Fischel and Bradley, 1986).

The primary theories concerning the roles of the board of directors include stewardship theory and the agency theory. The stewardship theory argues that managers are inherently trustworthy and not prone to misappropriate corporate resources (Donaldson, 1990; Donaldson and Davis 1991, 1994). This view suggests that there is little need for the oversight and governance role of the board of directors. Agency theory, which characterizes modern corporations, is built on the notion of separating ownership from control as the managers could potentially take actions that are rooted in their self interests (Jensen and Meckling, 1976; Eisenhardt, 1989). Clearly, the board of directors plays a very significant role in maximizing shareholders' wealth via exercising control over top management (Kose and Senbet, 1998). As a corporate governance mechanism, the board members are also to ensure adequate returns for shareholders (Vafeas, 1999; Weir and McKnight, 2001; Coles et al., 2001). The general principles in the Malaysian Code of Corporate Governance in 2000 cover the aspects of board structure, board size and independent board of directors. This in turn, motivated the Bursa Malaysia to take some steps to further enhance the commitment of the board members of the Malaysian corporations (e.g. restriction on the number of directorship of a person in impose restriction on the number of directorship of a person) starting from year 2002.

### **3. Focus of the Study**

This paper focuses on two different aspects of top level management; top management teams (TMTs) and board of directors (BODs). Many studies were carried out in this area over the past two decades, Hambrick and Mason (1984). Research on TMT characteristics has been widely carried out on various aspects for theoritizing purposes (Lamm and Myers, 1978; McGrath, 1984; Gladstein and Reily, 1985; Murray, 1989; Michael and Hambrick, 1992; Fiol, 1995). The demographic characteristics on TMT includes age, functional background, education, tenure, (Hambrick and Mason, 1984), who paved a way to deal with diversity within top management and its impact on firm performance that is better known as the Upper Echelon Theory. They argued that top management's characteristics (e.g. demographic) influence the decisions that they make and therefore the actions adopted by the organizations that they lead. It occurs because demographic characteristics are associated with many cognitive bases, values and perceptions that influence the decision making of top management. This discussion was later expanded to the 'six specific influence processes' that allow shaping the strategic direction and performance of the organization (Navahandi, 2006).

In view of this, top management members could with greater demographic diversity, influence decision making process in the top management and positively contribute to firm performance. The basic foundation of this theory could be rooted to the earlier concepts on the characteristics at the top management and competitive behaviours (Cyert and March, 1963). Thus, firm performance could be positively impacted by the competitive behaviours at top level of an organization. Admittedly, in the case of BODs to a large extent (as discussed above), diversity enhances greater creativity, innovativeness and quality decision making, thus this study expects the similar outcome at strategic level particularly involving the boards of directors (Zahra and Pearce, 1989) since boards are the most influential actors, boards are also to carry out the monitoring role representing shareholders (Hambrick, 1996).

Significantly, some research shows that increasing diversity on boards of directors would be beneficial to organization in terms of gaining critical resources (Pfeffer and Salancik, 1978) and where corporate governance is concerned, benefits at strategic level are positively related to diverse top management (Eisendardt and Bougeois, 1988). Occupational diversity among board members is also positively related to performance in the context of social obligation (Siciliano, 1996). Zander (1993), stresses that efforts must also be taken to make fullest use of the talents of board members. The presence of the demographic heterogeneity at top management level is expected to increase firm performance, hence, heterogeneity is suitable for complex, ambiguous business operations and the decision making processes are structured in nature whereas, homogeneity in top management is more effective especially when faced with unstructured decision making processes (Hambrick and Mason, 1984).

This paper has its 'unique contribution' on the scope of diversity, the upper echelon theory and the implications on firm performance. As most studies focus on the demographic diversity involving the individuals of the top management teams (TMTs), we however, have a different view of testing the demographic effect in TMTs with regard to firm performance. Rather than focusing on age, functional background, educational background and tenure of the individual manager, this study incorporates the proportion of demographic diversity based on gender and ethnicity in TMTs and BODs and its implications on firm performance. Understandably, diversity can be viewed in two perspectives; demographic and cognitive. Demographic diversity includes gender, age, race and ethnicity and cognitive diversity includes knowledge, education, values, perception, affection and personality characteristics (Maznevski, 1994; Milliken

and Martins, 1996; Pelled, 1996; Boeker, 1997; Watson et al., 1998; Peterson, 2000; Timmerman, 2000). There have been many contemporary studies on demographic diversity and its effect on performance (Lee and Far, 2004; Evans and Carson, 2005; Bergen and Massey, 2005). Some researchers even studied specifically on the impact of demographic diversity on top management team or boards of directors and its implications on firm performance (Roberson and Park, 2007; Erhardt, et al., 2003; Certo et al., 2006; Carson, et al., 2004;). However, very few studies found on gender and ethnic diversity in top management teams (e.g. Roberson and Park, 2007) and boards of directors (Burke, 1995) simultaneously.

It should be pointed out that this study does not investigate the characteristics or discrimination within the top management teams (TMTs) and boards of directors (BODs) rather this work is specially designed to investigate the impact of diversity (demography) within top management team and boards of directors on firm financial performance. Hence, the purpose of this study is to empirically examine the relationship between gender and ethnic diversity on top management teams and boards of directors with firm financial performance (Certo et al., 2006; Kroll, Walters and Le, 2007; Auden, 2006)

#### **4. Definition**

Initially (before 20th century) ethnic groups were defined as ‘people of other countries (Yin, 1973) but however, ethnic groups do not necessarily share a country of origin but instead share a sense of common political or cultural origin (Capehart, 2003). In essence, diversity affiliations include gender, race, national origin, religion, age cohort and work specialization, among others (Cox, 2001). As the terms multi-ethnic and multi-culturalism are inter-changeably used, Kabilan and Hassan (2005) ... prefer the use of the term ‘multi-ethnic’ to ‘multi-culturalism’...multi-culturalism is a misled concept or a misnomer, when applied to Malaysia. Hasan, Samian and Silong (2005) ...managing diversity is very much based on tolerance and respect ...to preserve inter-ethnic harmony. Hence, ethnic would be the right term to address racial composition in Malaysia. Hence, ethnicity involves Malays, Chinese, Indians and others and gender refers to either male or female groups.

#### **5. Homogeneity versus Heterogeneity and Performance**

The current literature reveals the fact that the relationship between diversity and organizational or group performance can be either positively correlated or negatively correlated or even some studies show that there is no relationship (somewhat mixed findings) between diversity and performance. Perceived diversity within the senior management ranks was evidenced in higher perceived levels of overall performance, profitability and return on equity (Allen, Dawson, Wheatly and White, 2008). Some empirical findings indicate that diversity results in greater knowledge, creativity and innovation and thus, organizations tend to become more competitive (Watson et al., 1993). Besides that, the diversity able to attract and retain the best talent available; reduced costs due to lower turnover and fewer lawsuits, enhanced market understanding and marketing ability, better problem solving, greater organizational flexibility and better overall performance (Coz and Blake, 1991; Griscombe and Mattis, 2002) via improvement in decision making at strategic level (Bantel, 1993). Siciliano (1996) found that board diversity paves a way for positive results in performance. Also supported by Eisenhardt et al., (1998), Smith et al., (1994), Carpenter (2002) and Greening and Johnson (1996). Cultural heterogeneity results in issue-based conflict which in turn enhances greater organizational performance. Heterogeneity is positively linked to better problem solving and offering creating solutions (Michael and Hambrick, 1992). Hence, diversity is positively related to performance. However, there could be no relationship between diversity (cultural heterogeneity and member diversity) and group cohesion. Murray (1989) suggested that the infusion of homogeneous groups would result in better performance.

However, advantages associated with homogeneous top management can not be ignored. In fact some argue having homogeneous management team would be more beneficial with regard to firm performance (Williams and O’Reilly, 1998). Evidence shows that heterogeneity leads to conflicts and negatively affects the effectiveness of communication in top management (Pelled et al., 1999; Amason, 1996; Carpenter, 2002). Besides this, racial and gender diversity can have negative effects on individual and group outcomes in certain instances (Miliken and Martins, 1996). For example, group members who differ from the majority tend to have lower levels of psychological commitment and higher levels of turnover intent and absenteeism. However, advantages associated with homogeneous top management can not be ignored. In fact some argue having homogeneous management team would be more beneficial with regard to firm performance (Williams and O’Reilly, 1998). It should be noted that the upper echelon diversity is associated with the demographic diversity of the workforce, with the evidence of homo-social reproduction taking place in organizations, particularly with regard to gender and race (Nishii, Gotte and Raver, 2007)

#### **6. Hypotheses Development**

The Upper Echelon Theory by Hambrick and Mason (1984) becomes an important input in relating heterogeneity in top management team (TMT) to firm performance. In view of this, a closer look at the model and its components would be of great help to expand our knowledge on diversity not only in Top management teams (TMTs) but also in boards of directors (BODs) that can be viewed in the same context as TMT (Hofman, Lheureux and Lamond, 1997) and it should

be noted that it is not organizational performance rather financial performance that is being investigated here and demographic diversity is represented by gender and ethnic diversity (Roberson and Park, 2007; Conyon and mallin, 1997; Daily et al., 1999; Zander, 1979; Costa and Kahn, 2003; Kang and Cnaan, 1995; Rutledge, 1994; Widmer, 1987; Martin and Midgley, 1999; Carson, Mosley and Boyar, 2004). Therefore, these arguments allow us to develop a set of directional hypotheses that explain the impact of the demographic diversity in TMTs and BODs on firm financial performance, thus the following hypotheses are proposed:

Hypotheses:

General;

Demographic diversity in TMTs has a significant impact on firm financial performance.

Demographic diversity in BODs has a significant impact on firm financial performance.

Specifically;

H1: Firm financial performance is positively impacted by gender diversity among TMT members.

H2: Firm financial performance is positively impacted by ethnic diversity among TMT members.

H3: Firm financial performance is positively impacted by gender diversity among Board members.

H4: Firm financial performance is positively impacted by ethnic diversity among Board members.

## 7. Methods and Measures

Data for the study were gathered from top 100 non-financial listed companies in Malaysia based on their average market capitalization over the period 2000 to 2006 (Appendix 1). A judgmental sampling method was adopted to suit the requirements for this study. These 100 companies accounted for almost two-thirds the total market capitalization on the main board. Besides their (non-financial companies) substantial contribution in the economy, the selection of non-financial companies is also important to control the heterogeneous characteristics of the companies selected.

The main focus was to detect the effect of gender and ethnic diversity on both top management teams (TMTs) and Board of Directors (BODs) with regard to firm financial performance from year 2000 to 2006. This period reflects the beginning of the post-crisis and the enhancement of the corporate governance in Malaysia (The Malaysian Code on Corporate governance, 2000). The dependent variable was financial performance, independent variables were gender and ethnic diversity and the control variables were TMT size, board size, firm size and firm age. The dependent variable, ROE; Return on Equity (Net Income divided by Total Equity- returns from shareholders' perspective) was a measure used to measure firm financial performance (Thomas and Ramaswamy, 1994), the independent variables, gender diversity and ethnic diversity on both TMTs and BODs were measured using a ratio scale. As for TMTs, gender and ethnic diversity were determined by female managers and non-Malay managers divided by total managers. Whereas, gender and ethnic diversity on BODs were determined by female directors and non-Malay directors divided by total board directors. The control variables; board size was determined by the number of directors sitting on the board, TMT size refers to total TMT members, firm total asset was a measure for firm size and firm age refers to number of years of business operations (Roberson and Park, 2007; Jehn and Bezrukova, 2004; Cohen and Cohen, 1975; Rosenthal and Rosnow, 1984).

## 8. Results

The main objectives of this study are first, to examine the effect of demographic diversity in top management team (TMT) on firm financial performance, secondly, to examine the effect of demographic diversity in boards of directors (BODs) on firm financial performance. The correlation results are displayed in Table 1 and as for the purpose of combining cross sectional and time series data, panel/pooled data analysis method was considered in view of obtaining reliable empirical results. Hence, Pooled Least Squares regression analyses were performed to explain the effect of demographic diversity (gender and ethnic diversity) on firm financial performance in the presence of the control variables in two different perspectives (TMT and BOD) as shown in Table 2 and Table 3. The regression results are presented in a hierarchical form.

Table 1 displays the mean, standard deviations and correlation details. Regarding correlations involving the demographic diversity and performance in both TMTs and BODs, in the case TMTs, the diversity variables (gender and ethnicity) are not significantly correlated with performance. However, TMT size has a significant negative correlation with the diversity factors at 0.01 (-0.139 and -0.093). On the other hand, in the of BODs, ethnic diversity is significantly (positively) correlated with performance at 0.05 (0.097). However, as for TMT, gender diversity is positively correlated with firm age at 0.01 (0.103) but negatively correlated with firm age at 0.01 (0.189) with regard to BODs. Meantime, a diagnostic testing on multi-collinearity effect was also done (using the pooled method) to ensure the independent variables remain reliable in explaining the variation in the dependent variable, and it was verified that the VIFs (Variance-inflating factor) for both control and independent variables were between 1.0 and 1.2

Before we discuss further, let us view some insightful information about the demographic diversity effect within TMTs and BODs using scatter plot matrix approach. Interestingly, the graphical expression of the bivariate relationship among gender diversity, ethnic diversity and TMT size and gender diversity, ethnic diversity and Board size seems to be quite unique as illustrated in Figure 1 and 2. Figure 1 reveals that there is a linear relationship between gender diversity (GDIVMGT) and TMT size. However, the relationship between ethnic diversity (EDIVMGT) and TMT size is curvi-linear and the relationship between gender diversity and ethnic diversity among TMT members is well spread, there is no clear pattern.

Similarly, Figure 2 illustrates that there is a linear relationship between gender diversity (GDIVBOD) and Board size. However, the relationship between ethnic diversity (EDIVBOD) and board size is curvi-linear, this is consistent (but statistically insignificant) with the earlier discussion involving TMT. Nonetheless, the relationship between gender diversity and ethnic diversity among board members is concentrated in the centre; again, there is no clear pattern.

Table 2 shows that based on findings, in general, demographic diversity in TMTs had no impact on firm financial performance. Clearly, though gender and ethnic diversity were positively correlated with financial performance, however, the correlation of the two with financial performance was insignificant. Thus, the first two hypotheses are not supported.

Table 3 shows that based on findings, in general, demographic diversity in BOD had a partial impact on firm financial performance. It seemed that gender effect did not contribute significantly toward firm financial performance though it registered a positive correlation with financial performance. Hence, hypothesis 3 is also not supported. However, ethnic diversity was significantly, positively and consistently correlated with financial performance at 0.001 to 0.05. Hence, hypothesis 4 is fully supported. Firm performance was significantly impacted by ethnic diversity in BOD over a period 2000 to 2006 ( $t = 2.438; 23.888$ ), however, the first two models were significant at 0.05 and 0.1 ( $F\text{-test} = 3.028, 2.034$ ). The following two models were marginally significant at 0.10.

## **9. Discussions and Conclusions**

Our discussions are divided into two perspectives; TMTs and BODs. In the case of TMTs, our results revealed that diverse groups in top management particularly among the TMT members did not have any significant impact on firm financial performance. It seemed, though women's involvement at corporate level (TMT) in large firms remained intact (34.9 per cent), however, they were unable to create impact on their firms' financial performance. In addition, it could refer to the fact that probably, women's participation was limited to certain areas at strategic level (not actively involved in decision makings) as shareholders remained skeptical about women's ability to handle crisis (Shockley-Zalabak, 1981) as compared to men who could manage using competitive styles (Miller, 1989). But the emergence of women leaders globally can not be denied; in fact they are equally capable to handle global businesses (Warner and Joynt, 2002). Similarly, even ethnic diversity also did not have any significant impact on firm financial performance. This could be regarded as unique findings as many firms were to some extent controlled by either family members or race-based political parties. This could be a contributory factor as to why ethnicity in TMT failed to show its relevance to firm financial performance. Nonetheless, in view of our findings, we can not deny the advantages of homogeneity in our discussion (Williams and O'Reilly, 1998). It should be remembered that homogeneity may only be applicable for a short run as many Malaysian companies were still in the growth stage. However, in the long run companies need to be prepared to increase diversity in TMT in order to compete and sustain in the international and global market (Auden, Shackman and Onken, 2006; Goll, Johnson and Rasheed, 2007) as heterogeneity paves ways for greater creativity, innovativeness and firm performance (Michael and Hambrick, 1992; Griscombe and Mattis, 2002).

In the case of board of directors (BODs), demographic diversity partially influenced firm financial performance. Again, gender effect among the board members did not seem to be significant with regard to financial performance. However, ethnicity among the board members created a significant impact on firm financial performance. Hence, ethnic diversity could be used to rectify poor corporate governance among the listed companies especially when the economy is faced with financial crisis (Mitto, 2002). Thus, we need heterogeneity particularly on ethnicity as members on the boards are directly involved in issuing, restructuring, takeover exercises, introducing measures to enhance regulatory, transparency, accountability and independence. Though women's role was not felt in boards of directors, again it could be argued that the effect was only for a short run but in the long run, companies should increase gender diversity to enhance their international competitiveness.

This study supports both homogeneity and heterogeneity in TMTs and BODs and both have advantages and disadvantages. However, shareholders need to be concerned with the dangerous practice known as 'groupthink' especially when homogeneity exists in BODs. Undoubtedly, in the presence of women and ethnicity in the workforce, companies should consider heterogeneity in their teams at strategic level for greater performance via creativity, innovativeness and quality decision making.

## 10. Limitations

Some limitations or potential weaknesses in this study must be addressed. First, the sample involves non-financial sector which comprises of various industries thus, it is quite difficult to maintain homogeneous characteristics within the companies chosen as different industries tend to face different types of challenges. Second, this study is constrained by the selection of variables where, only two independent variables (gender and ethnic diversity) were used to measure TMT and BOD diversity and the operational definition of ethnic diversity (non-Malay ratio) is to some extent becomes arguable as there are possibilities where all the TMT and board members are non-Malays but of the same ethnic group which statistically gives a high score for diversity and this could be misleading and this data were solely based on the companies' annual reports. The dependent variable (performance measure) ROE may not be the best recommended measure as there are others measures such as ROA, Tobin's Q, etc. Third, the regression model in this study assumes there is a linear relationship between demographic diversity in TMTs and BODs and performance. There could be a curvilinear relationship between them. This means diversity may result in adverse results for a certain period, followed by indifferent results, then positive relationship with regard to performance.

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Table 1. Mean, standard deviation and correlation results

	Mean	Std D	1	2	3	4	5	6	7	8	9
1.Performance	7.147	47.617	1								
2.Gender in TMT	0.349	0.284	.008	1							
3.Ethnic in TMT	0.662	0.327	.057	<b>-.163**</b>	1						
4.TMT size	4.00	4.00	-.014	<b>-.139**</b>	<b>-.093*</b>	1					
5.Gender in BOD	0.131	0.068	.012	.052	-.067	<b>-.124**</b>	1				
6.Ethnic in BOD	0.521	0.253	<b>.097*</b>	-.068	<b>.521**</b>	-.060	.038	1			
7.Board size	8.44	2.400	0.010	<b>-.090*</b>	-.014	<b>.237**</b>	-.057	.040	1		
8.Firm size <sup>a</sup>	4.090	9.864	.012	<b>.093*</b>	-.015	.037	.036	<b>-.090*</b>	<b>.139**</b>	1	
9.Firm age <sup>b</sup>	27.520	15.798	<b>.103**</b>	<b>.103**</b>	<b>-.094*</b>	.058	<b>-.189**</b>	-.020	<b>-.108**</b>	.067	.1

a In billions, b In years, \* p < 0.05, \*\* p < 0.01

Table 1 displays the mean, standard deviations and correlation details involving demographic diversity and performance in both TMTs and BODs.

Table 2. PLS Regression Results of Financial Performance on Demographic Diversity in Top Management Team (TMT)

Independent Variables	Model 1	Model 2	Model 3	Model 4
Constant	-1.872	-0.765	-1.010	4.175
Gender	4.413	3.915	3.733	4.874
Ethnic	9.785	9.430	9.488	8.834
TMT size		-0.212	-0.225	-0.180
Firm size			0.081	0.099
Firm age				-0.198
R- Square (%)	0.3	0.4	0.4	0.7
F-test	0.889	0.637	0.493	0.714

**Dependent Variable: Performance, \*p < 0.10, \*\*p < 0.050, \*\*\*p < 0.001**

Table 1 describes the effect of gender and ethnic diversity in top management team (TMT)

Table 3. PLS Regression Results of Financial Performance on Demographic Diversity in Board of Directors (BODs)

Independent Variables	Model 1	Model 2	Model 3	Model 4
Constant	-7.959	-10.045	-10.124	-2.244
Gender	13.838	14.373	13.233	2.816
Ethnic	<b>23.447***</b>	<b>23.259**</b>	<b>23.877**</b>	<b>23.888**</b>
Board size		0.252	0.175	0.026
Firm size			0.1444	0.181
Firm age				-0.200
R- Square (%)	1.20	1.21	1.3	1.57
F-test	<b>3.028**</b>	<b>2.034*</b>	1.587	1.578

**Dependent Variable: Performance, \*p < 0.10, \*\*p < 0.050, \*\*\*p < 0.001**

Table 2 describes the effect of gender and ethnic diversity in board of directors (BODs)

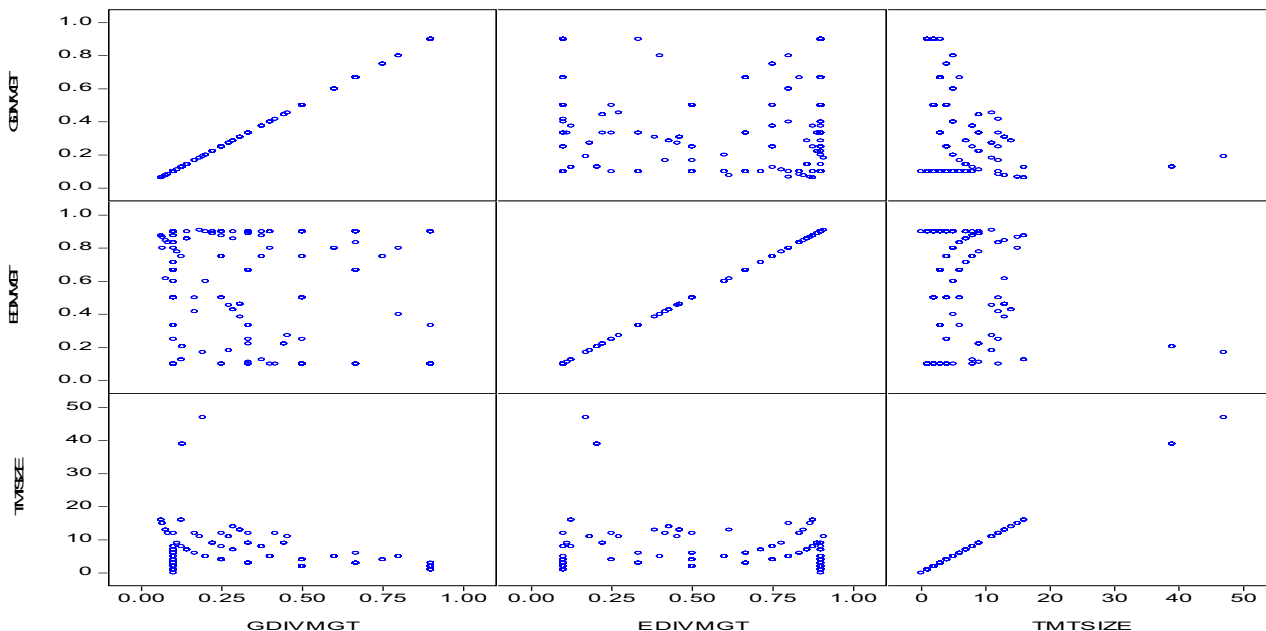


Figure 1. Scatter Plot Matrix of Demographic Diversity and TMT Size

Figure 1 reveals the graphical expression in a bivariate form among gender diversity (GDIVMGT), ethnic diversity (EDIVMGT) and TMT size.

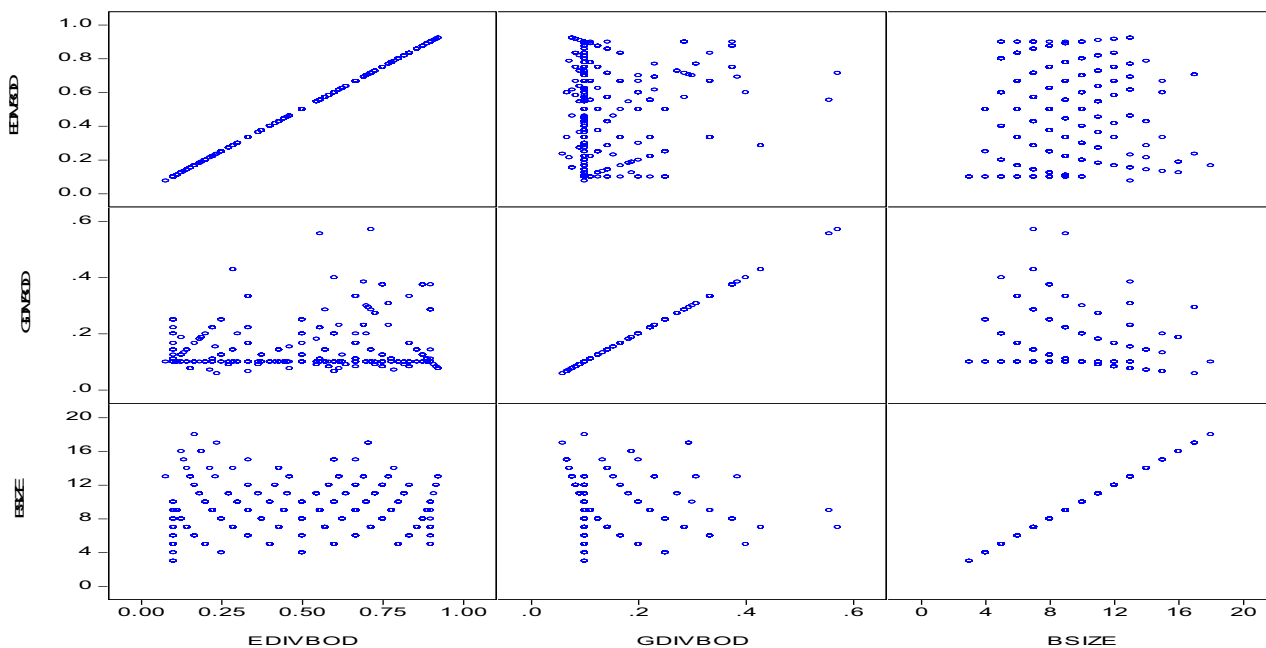


Figure 2. Scatter Plot Matrix of Demographic Diversity and Board Size

Figure 2 reveals the graphical expression in a bivariate form among gender diversity (GDIVBOD), ethnic diversity (EDIVBOD) and Board size (BSIZE)

**Appendix 1: Top 100 non-financial companies**

No	Company	No	Company
1	AKN Technology Bhd	51	Malayan United Industries Bhd
2	Batu Kawan Bhd	52	Malaysian Airline System Bhd
3	Amway (Malaysia) Hldgs Bhd	53	Malaysian Mosaics Bhd
4	APM Automotive Holdings Bhd	54	Malaysian Oxygen Bhd
5	Asiatic Development Bhd	55	Malaysian Pacific Ind Bhd
6	Bandaraya Developments Bhd	56	Marco Holdings Bhd
7	Berjaya Land Bhd	57	MISC Bhd
8	Berjaya Sports Toto Bhd	58	MMC Corporation Bhd
9	Bintulu Port Holdings Bhd	59	Mulpha International Bhd
10	Boustead Heavy Industries Corp Bhd	60	NCB Holdings Bhd
11	Boustead Holdings Bhd	61	Nestle (Malaysia) Bhd
12	British American Tobacco (M)	62	Oriental Holdings Bhd
13	Cahaya Mata Sarawak Bhd	63	Pan Malaysia Corporation Bhd
14	Camerlin Group Bhd	64	Pan Malaysian Industries Bhd
15	Carlsberg Brewery Malaysia Bhd	65	Panasonic Manufacturing Malaysia Bhd
16	Chemical Co of Malaysia Bhd	66	Petaling Tin Bhd
17	Country Heights Holdings Bhd	67	Petronas Dagangan Bhd
18	Dialog Group Bhd	68	Petronas Gas Bhd
19	DIGI.Com Bhd	69	PPB Group Bhd
20	DRB-Hicom Bhd	70	PPB Oil Palms Bhd
21	Esso Malaysia Bhd	71	PSC Industries Bhd
22	Fraser & Neave Holdings Bhd	72	Puncak Niaga Holdings Bhd
23	Gamuda Bhd	73	Ramatex Bhd
24	Genting Bhd	74	RB Land Holdings Bhd
25	Globetronics Technology Bhd	75	Resorts World Bhd
26	Golden Hope Plantations Bhd	76	Road Builder (M) Hldgs Bhd
27	Guinness Anchor Bhd	77	Shell Refining Co (FOM) Bhd
28	Hap Seng Consolidated Bhd	78	Sime UEP Properties Bhd
29	Hume Industries (Malaysia) Bhd	79	Star Publications
30	IGB Corporation Bhd	80	Sunway Holdings Incorp Bhd
31	IJM Corporation Bhd	81	TA Ann Holdings Bhd
32	KFC Holdings (Malaysia) Bhd	82	TA Enterprise Bhd
33	Kian Joo Can Factory Bhd	83	Talam Corporation Bhd
34	KSL Holdings Bhd	84	Tan Chong Motor Holdings Bhd
35	Kuala Lumpur Kepong Bhd	85	Tanjong Public Limited Company
36	KUB Malaysia Bhd	86	TH Group Bhd
37	Kulim (Malaysia) Bhd	87	Tradewinds (M) BHD
38	Kumpulan Guthrie Bhd	88	Time Dot Com Berhad
39	IOI Corporation Bhd	89	Time Engineering Bhd
40	IOI Properties Bhd	90	Top Glove Corporation Bhd
41	Island & Peninsular Bhd	91	Transmile Group Bhd

42	Jaya Tiasa Holdings Bhd	92	UBG Bhd
43	JT International Bhd	93	Uchi Technologies Bhd
44	K & N Kenanga Holdings Bhd	94	UMW Holdings Bhd
45	Kwantas Corporation Bhd	95	Unisem (M) Bhd
46	Lingkaran Transkota Hldgs Bhd	96	WCT Engineering Bhd
47	Lingui Developments Bhd	97	WTK Holidings Berhad
48	Lion Corporation Bhd	98	YTL Cement Bhd
49	Magnum Corporation Bhd	99	YTL Corporation Bhd
50	Malakoff Bhd	100	YTL Power International Bhd