

GROWTH OPPORTUNITIES AND DIVIDEND POLICY: SOME EVIDENCE ON THE ROLE OF ETHNICITY IN AN EMERGING ECONOMY'

Ravichandran K. Subramaniam*, Mohammed Shaiban**, Susela Devi K. Suppiah***

Abstract

This paper examines the association between growth opportunities and dividend payouts and moderates the relationship between growth opportunities and dividend payouts. Our sample consisted of the Malaysian top 300 public listed companies (in terms of market capitalization) for a period from 2004 to 2011. Based on a specified selection process, the sample contained 1330 firm-year observations, after excluding firms with missing data. This paper finds that growth opportunities is associated with less dividends payouts and that this relationship is weaker for Bumiputera ethnic controlled firms. Furthermore, the results show that this negative association exists only for non-Government Linked Controlled firms.

Keywords: Growth Opportunities, Dividend Payout, Ethnicity, Free Cash Flow Theory

* School of Business, Monash University Malaysia, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor Darul Ehsan, Malaysia.

Contacted for correspondence: 603-55145684

Fax 603-55146001

Email: ravichandran.subramaniam@monash.edu

** School of Business, Monash University Malaysia, Malaysia

Contact: 603-55144906; Fax 603-55146001

Email: mohammed.shaiban@monash.edu

*** Faculty of Business and Information Technology, UNITAR International University, Malaysia

Contact: 603-76277200; Fax 603-76277472

Email: susela@um.edu.my

1. Introduction

The issues of dividends and dividend policy have always been a subject of much debate and research in extant literature. A number of prior studies have visited the dividend puzzle and concluded that there were many questions still to be answered (i.e., Lintner, 1956; Miller and Modigliani 1961; Al-Twajry, 2007; Aivazain et al., 2003; Adjaoud and Ben-Amar, 2010). Recent consensus also argues that there are many ways of an explanation towards a dividend policy (i.e., Denis and Osobov, 2008; Rashid, 2008 and McKnight and Weir, 2009). Thus, setting corporate dividend policy is very subjective and controversial. This paper investigates whether ethnicity has a role in dividend payout.

In Malaysia the three distinct ethnic groups, the Malays/Bumiputeras, Chinese and Indians, have maintained separate identities, preserved separate cultures as evidenced in the languages they speak, codes of dress, customs, value systems, and all the outer manifestations of the differences in background and tradition (Sendut et al. 1990) as cited in Jamil and Abdul Razak, 2010). Each

Malaysian belongs to an ethnic group with his or her own culture, belief and value system. Through the process of socialisation, these culture, belief and values are reinforced within the family, religious bodies, social institution and workplace. Over the years, each ethnic group has adopted these ethnic identities as part of its cultural markers (Jamil and Abdul Razak, 2010). However, in the economic/business sphere, the Malay-Chinese (hereafter Bumiputera-non-Bumiputera) culture has been shown to be aligned (Storz, 1999).

Whilst, Malaysia shares a broad range of accounting and regulatory practices with developed countries, the post British colonialism social structure is still marked by ethnic pluralism and economic activities are segmented along ethnic lines. Since independence in 1957, the indigenous Malays/Bumiputeras continued to be marginalised in an economy dominated by Europeans (mainly British) and, to a lesser extent, the large Chinese migrants (Jesudason, 1989).

Nevertheless, the effects of cultural differences and business practices (in terms of ethnicity) have been seen to influence business,

organisational structures, accounting disclosures, accounting conservatism and audit practices (Haniffa and Cooke, 2002; Yatim et al., 2006; Rahimah et al., 2012; Nazri et al., 2012). One main factor that has shaped Malaysia's capital market is the close identification between ethnicity and economic functions (Gomez and Jomo, 1997). Demographically, Malaysia's population consists of 66% Bumiputera (comprising 54.5% Malays and 11.8% Indigenous), 25% Chinese, 8% Indians and 1% others. Prior to 1970, the Bumiputera were economically disadvantaged compared to the non-Bumiputeras and there was dissatisfaction among the population and this resulted in racial riots in 1969 (Jesudason, 1989). Thereafter, the Malaysian government launched the New Economic Policy (NEP), with one of its objectives being to restructure society by increasing the participation of the Bumiputera in the economy. The target was for the Bumiputera to hold at least a 30 per cent share of ownership equity in businesses. Various agencies have been established since the 1970s to provide training and help to develop Bumiputera entrepreneurs, both in the establishment of government linked companies (GLCs), and also to increase Bumiputera business ownership. Various ties are frequently and informally established between business people of various ethnicities, and key Bumiputera state and political leaders (Chan, 2012). These personal ties among business groups, also known as social networks, are commonly perceived as a mechanism for big business to achieve growth. In fact, personal ties in big business organisations in the 1990s generally led to some state intervention in big business and economic development, especially between the 1970s and the mid-1990s (Chan, 2012).

Furthermore, there are no precise rules governing dividend payouts in Malaysia (Chan and Devi, 2009), and companies are generally free to decide on the distribution of dividends. While the Companies Act 1965 (section 365) only stipulates that dividends should be distributed from profits, it does not indicate whether distributions should be made from current profits or accumulated profits. This has led to the inconsistent administration of dividend policies (Ling et al., 2008). The situation provides an opportunity to examine whether dividend payouts occur when they are less strictly linked to current year profits and therefore, performance and cash flows. Hence, the question arises whether Jensen's Free Cash Flow (FCF) hypothesis applies in this setting i.e ethnicity in terms of Bumiputera controlled versus non Bumiputera controlled boards. This provides a unique setting to examine whether investment opportunity, as a proxy for growth opportunities, is associated with dividend payouts, and whether this relationship is moderated by board ethnicity.

Prior literature offers copious studies, primarily on developed countries, that examined the relationship between growth opportunities, debt, performance and dividend policy decisions (i.e., Smith and Watts, 1992; Gaver and Gaver, 1993; Gul and Kealey, 1999; D' Souza and Saxena, 1999; Mitton, 2004 and Amidu and Abor, 2006). Studies on the situation in developing countries, however, have been limited to China, Korea and Ghana. Three prior studies (Smith and Watts, 1992; Gaver and Gaver, 1993 and Gul and Kealey, 1999) were of particular interest, as these studies focused more on the contracting and free cash flow relationship between (i) growth opportunities, (ii) debt and (iii) dividend policy decisions. Nevertheless, over 100 proxies have been used in the literature to measure growth opportunities. This proliferation may explain why evidence of the role of growth opportunities (also known as the investment opportunity set, or IOS) has varied from one study to another (Burton, 2003).

Ethnicity in Malaysia has, to a considerable extent, shaped how the country and its businesses are managed externally (through political intervention), and internally (via cultural values) (Haniffa and Hudaib, 2006; Yatim, 2006). Throughout the 1970s and until the 1980s, the state directly intervened in business by being actively involved in business development through public corporations. To meet the NEP's objectives, the state has retained some shareholdings in the corporate sector and in key public enterprises such as the National Equity Corporation, the National Unit Trust Scheme and the Bumiputera Trust Scheme (Gomez and Jomo, 1997). Nonetheless, there is limited evidence as to whether board of directors' ethnicity affects the relationship between investment opportunity set (IOS) and dividend payouts.

Agency and contracting theories offer a platform to explain variations in corporate policy decisions (Jensen and Meckling, 1976; Smith and Watts, 1992; Skinner, 1993 and Gul, 1999). The theoretical aspects of dividend policy, agency and contracting theory, informational asymmetry, signalling models and free cash flow are well established in the extant literature. However, evidence offered by different theories to support the relationship between IOS and dividend policy are mixed. Additionally, while there are many studies that support the contracting explanation based on the Jensen's FCF hypothesis, these studies have generally been conducted in developed markets and there is limited evidence to support the applicability of Jensen's FCF hypothesis in the institutional context of emerging markets. The existence of ethnicity concerns provides an opportunity to evidence the applicability of Jensen's FCF hypothesis that posits that there is a negative relationship between growth opportunities and

dividend payouts. There are primarily two strands of research with respect to dividend payouts. One focuses on external drivers and the other on internal drivers. This paper focuses on the second strand and, specifically, on the association between growth opportunities and dividend payouts. Further, it addresses the question as to whether firms controlled by Malaysia's two main ethnic groups, the Malay/Bumiputera and Chinese (non-Bumiputera), moderate the relationship between growth opportunities and dividend payouts.

Using a panel sample of 1330 firm-year observations of Malaysian firms during the period 2004-2011, we show that firstly, Jensen's FCF hypothesis applies in the Malaysian context. That is, high growth firms pay lower dividend and vice versa. However, this finding applies only to non-Bumiputera firms. Secondly, we find that the negative relationship between dividend payouts and firm growth, as stipulated by Jensen's FCF hypothesis, is weaker for Bumiputera-dominant boards, where majority of the directors are Bumiputera.

This study contributes to the existing literature in three ways. First, while most prior studies have focused on dividend payout policies in developed countries (i.e., Smith and Watts, 1992; Gul and Kealey, 1999; D'Souza and Saxena, 1999; Amidu and Abor, 2006), this study provides evidence from an emerging market context. Second, it shows that Jensen's FCF hypothesis' applicability in an emerging market context needs to be considered with caution. Ethnicity has a role in determining dividend payouts, suggesting the socio economic environment influences corporate dividend decisions as well. Thirdly, this study provides insights for capital market regulators and policymakers on the importance of understanding prevalent board ethnicity when predicting the effects of corporate governance reforms.

The remainder of this paper is organised as follows. Section 2 discusses the extant dividend payout literature and sets the stage for hypotheses development. Section 3 describes the research methodology and the empirical results are presented and discussed in Section 4, while Section 5 summarises the findings and the implications, addresses the limitations and provides suggestions for future research.

2. Study Background and Hypothesis Development

Growth, dividend policy and ethnicity

Smith and Watts (1992) documented a negative relationship between investment growth opportunities and dividend payouts using industry level data. They argued that firms with growth opportunities tend to have high debt and low

dividend payouts to signal that they have better earnings prospects. Further, they argued that under the contracting theory, firms with more growth or a higher IOS are likely to issue more debt or pay lower dividends. Gaver and Gaver (1993) affirmed the results of Smith and Watts (1992) using a more rigorous firm level study methodology, and found that growth firms have lower debt/equity ratios and significantly lower dividend yields than non-growth firms. Subsequently, Gul (1999), examined investment opportunity set and corporate policy choices in China, and showed that consistent with prior studies, IOS was negatively associated with debt financing and dividend payouts. However, Kumar (2006) posit that past investment opportunities exert a positive impact in dividends.

Similarly, in another Asian context, Gul and Kealey (1999) evidenced that growth options were negatively associated with dividends in Korea. D'Souza and Saxena (1999), and Fama and French (2001), documented that newly listed firms with high growth opportunities refrained from making dividend payments. Jensen (1986) also made a similar point by suggesting that low growth firms pay out dividends in order to overcome some free cash flow problems (Lang et al., 1989). Although evidence on the relationship between high growth firms and dividend payouts exists, it is unclear to what extent it is applicable in an emerging market context. We expect that Jensen's FCF hypothesis may be applicable in the Malaysian context. Thus, we expect that high growth firms will pay lower dividends, and vice versa. Therefore, the first hypothesis is stated in its alternative form:

H1. Firms with lower level of growth opportunities pay higher dividends, ceteris paribus.

Ethnicity and dividend policy

Both Haniffa and Hudaib (2006) and Yatim (2006) argued that ethnicity in Malaysia has, to a considerable extent, shaped how the country and businesses are managed externally through political intervention, and internally via cultural values. The issue of ethnicity in Malaysia can be traced back to 1957 and is deemed to be unique in nature with respect to its effect on government public policy adoption. The New Economy Policy (NEP) established in 1970 uses Malaysia's institutional investors as a tool to reduce equity ownership imbalances between the various ethnic groups by increasing Bumiputera equity ownership in the capital market (Tan, 2004). The Malaysian capital market offers clearly identifiable capital segments segregated along ethnic lines (Jesudason, 1989). However, it is unclear whether board ethnicity affects corporate decisions, including dividend policies. Deegan and Rankin (1996) demonstrate that firm operations and financial reporting are influenced by the social values prevailing. In the

Malaysian context, it has been evidenced, that Malaysian managers are influenced by ethnicity, education and type of organisation (Chuah, 1995).

We draw from the social capital theory, to argue that the directors' career networks and personal connections with other resources form their social capital (Burt, 1992). Further, the board of directors constitutes a mechanism that the organisation can use to draw on external resources for survival and growth (through non-executive directors), in addition to the internal resources provided by those in the executive director posts (Pfeffer and Salancik (1978). Further, the political economy of Malaysia where critical government support of government linked companies in Malaysia has fostered the emergence of a new class of indigenous capitalists whose position in society is in tension with structures of class and ethnicity (Larson and Zalanga, 2004). However, ethnicity of board of directors was found to be negatively insignificantly correlated to dividend payout in a

Malaysian study (Bolbol, 2012). The study has limited sample size.

Given the social embeddedness of Bumiputera firms, we expect the negative relationship between growth firms and dividend payouts to be weaker for Bumiputera firms compared to non-Bumiputera dominated firms. Thus, the second hypothesis is postulated as follows:

H2. The relationship between high growth firms and dividend payout is weaker for Bumiputera firms, ceteris paribus.

3. Methodology

Our sample consisted of the Malaysian top 300 public listed companies (in terms of market capitalisation) for a period of 8 years (i.e., from 2004 to 2011). A summary of the selection process is provided in Table 1. The sample contained 1330 firm-year observations, after excluding firms with missing data.

Table 1. Sample descriptions of Malaysian firms for the years 2004 to 2011

Original sample size	2390
Less: observations with missing information including sample firms without dividend payout	1060
Final sample size used for analysis	1330

Gaver and Gaver (1993) and Gul and Tsui (1998) used the dividend payout ratio to measure the dividend policy. The Dividend Payout Ratio was measured as cash dividend paid divided by net income (profit after tax). Similarly, other studies (e.g., Smith and Watts, 1992; Gaver and Gaver, 1993; Gul, 1999; Adam and Goyal, 2008; Abor and Bokpin, 2010) also used this measure. The Market to Book Equity (MBE) ratio was chosen as the proxy for IOS (growth opportunities), as it allows an assessment to be made on the robustness and sensitivity of the analysis (Adam and Goyal, 2008). MBE is measured using the formula [(shares outstanding x share closing price)/total common equity]. MBE measures the present value of all future cash flows to equity holders from both assets in place, and future investment opportunities. Further, it does not require information on the market value of debt and the estimation of replacement values. This measure has also been used extensively in prior studies (i.e., Anderson et al., 1993; Gaver and Gaver, 1993; Gul, 1999; Hossain et al., 2000; and Skinner, 1993).

The experimental variable of interest in this study is ethnicity (ETHNIC). A dummy variable was used to measure the two ethnic shareholder groups in Malaysia: Bumiputera (Malays) and Non-Bumiputera (Chinese, Indians, other citizens and foreigners). Firms were scored "1" if Bumiputera-owned, and "0" otherwise. Several variables were controlled for in the regression models used in the

current study. The most common of these variables were: firm size, ownership structure, corporate governance constructs (such as board size, board composition and duality), return on assets as a proxy for profitability, family control and leverage. Firm size was included as a control variable, as prior studies found it to be associated with firm characteristics. According to Smith and Watts (1992), firm size was positively associated to various types of corporate governance variables, such as debt covenants, dividend policy and management compensation. Market capitalisation (was used as a proxy for firm size, since high growth firms are expected to be large with a high market capitalisation).

Under ownership structure, government linked companies (GLCs) are defined as companies whose major ownership and control are held by a main shareholder that is either a government agency (such as Khazanah, Ministry of Finance (MOF) Incorporated, Bank Negara Malaysia, Kumpulan Wang Amanah Pencen (KWAP), or by a government related agency in which the government has an interest by virtue of a financial or legal exposure (contingent or otherwise). Control is defined as the ability to appoint members to the board of directors, or senior management who make major decisions (contract decisions, strategic decisions on restructuring, investment and divestments, and financing). A dummy variable was used to measure this construct, and companies were

scored “1” if they were considered GLCs under the above definition and “0” otherwise. High growth GLCs are expected to pay higher dividends, with the inverse being true of low growth GLCs.

ROA is measured as the ratio of earnings before interest and taxes, over total assets (Wang et al. 1993; Ling et al., 2008 and Imm Song et al., 2008). It is a profitability proxy used to measure how efficiently company assets are used to generate returns and earnings for the firm and its shareholders. Leverage is defined as the debt to assets ratio, and is operationalised as a ratio of the book value of long term debt divided by the book value of total assets. It measures the extent to which the firm finances its assets by taking on liabilities. Leverage assumes a double and active role. First, it helps to create value by disciplining managers in companies with no or very scarce growth opportunities. Second, it has a negative effect on firms with the best opportunities due to the propensity to forgo profitable projects (Alonso et al., 2005; How et al., 2008; McKnight and Weir, 2009). Based on prior studies, there is a positive association between leverage and GLCs.

Board composition refers to the proportion of non-executive directors (NEDs) on the board of directors. The ratio gives an indication of the board’s independence, and the extent to which the board is represented by insiders or outsiders. Prior studies (i.e., Conyon and Peck, 1998; Weir, 1997; Nordin et al., 2005; Ponnun, 2008; Guest, 2008) identified external board members as non-executive

directors. Board size refers to the total number of executive and non-executive directors on the board, and is deemed to have an effect on the quantum of dividend payouts (Ajay, 2007; Yermack, 1986; Huther, 1997; Conyon and Peck, 1998; Postma et al., 2003; Loderer and Peyer 2002; Nordin et al., 2005; Guest, 2008). CEO duality has been extensively argued in the literature and has been widely operationalised as a dummy variable (Daily and Dalton, 1997; Abdullah, 2007; Ponnun, 2008). Duality is defined as a board structure control mechanism that comprises a chief operating officer (CEO) who serves as chairman of the board at the same time. This construct is a dummy variable in the current study, with firms scoring “1” if their board chairman was also the CEO and “0” otherwise. Data was Winsorised to the 1st and 99th percentiles to mitigate any outlier effects. All the t-tests reported in this study are White’s (1980) corrected t-tests. All tests performed in this study were controlled for industry and year.

Regression model

The regression model used to test the hypotheses is presented as follows (definitions of all the variables are shown in Figure 1):

$$DPP = \beta_0 + \beta_1 MBE + \beta_2 ETHNIC + \beta_3 BSIZE + \beta_4 BCOM + \beta_5 DUAL + \beta_6 GLC + \beta_7 LOGMKTC + \beta_8 LEV + \beta_9 ROA + \beta_{10} YR + \beta_{11} SECTOR \text{ dummies} + \alpha$$

Figure 1. The definitions of all the variables including the experimental and control variables follow

<i>DPP</i>	dividend payout ratio is the Cash dividend paid divided by the Net income (Profit after tax).
<i>MBE</i>	market to book value of equity at the end of year t [Shares outstanding x shares closing price] / total common equity
<i>ETHNIC</i>	dichotomous with 1 if BUMI and 0 other wise
<i>BSIZE</i>	total number of directors on the board of the company
<i>BCOM</i>	the proportion of non-executive directors (NEDs) to total number of directors on the board of the company
<i>DUAL</i>	dichotomous with 1 if the chairman is also the chief executive officer (CEO) of the company and 0 other wise
<i>GLC</i>	shares held by the 10 largest shareholders as a measure of ownership concentration 1 – GLCs; 0 – Otherwise
<i>LOGMKTC</i>	natural logarithm of Market capitalization of the companies
<i>LEV</i>	book value of long term debt divided by the book value of total assets
<i>ROA</i>	earnings before interest and tax divided by total assets

4. Findings

Descriptive statistics

Table 2 shows the breakdown of the sample firms by industry type. The descriptive statistics for both the dependent and independent variables are provided in Table 3 for both the BUMI and non-BUMI firms. The mean dividend payout ratio for BUMI firms was 10.961 while the ratio for non-

BUMI firms was 11.407. This indicates that non-BUMI firms are, on average, paying higher dividends. Interestingly, the mean MBE of 6.047 for BUMI firms was also relatively lower compared to the mean of 7.461 recorded for non-BUMI firms. Thus, the non-BUMI sample firms appeared to have higher growth opportunities. Further, BUMI firms were considered to have higher risk, as they had a higher mean leverage of 0.342 as compared to non-BUMI firms with a mean leverage of 0.304. In

terms of board size, the boards of both BUMI and non-BUMI firms had an average of 10 directors. The percentage of independent directors on the boards of BUMI firms was 38.1 percent, as compared to non-BUMI firms where independent

directors made up 39.1 percent of total board members. BUMI firms had a return on assets of 6.3 percent, as compared to 9.6 per cent for non-BUMI firms.

Table 2. Number of observations by industry for the years 2004 to 2011

Industry	Bumi-firms	Non-Bumi firms	Total
Consumer products	96	128	224
Industrial products	120	384	504
Properties	88	312	400
Construction	48	104	152
Plantations & Mining	96	160	256
Trading	371	483	854
Total	819	1571	2390

Table 3. Descriptive statistics of BUMI and non-BUMI firms for the years 2004 to 2011

Variable	BUMI (N=819)			Non-BUMI (N=1571)			t-test
	Mean	Std Dev	Median	Mean	Std Dev	Median	
DPP	10.961	20.210	0.601	11.407	18.925	0.610	0.433
BCOM	0.381	0.160	0.375	0.391	0.156	0.364	1.379
BSIZE	9.97	2.186	10	9.72	2.116	10	2.682***
LOGMKTC	6.934	1.726	6.680	6.647	1.544	6.370	3.799***
LEV	0.342	0.603	0.233	0.304	0.476	0.185	1.430
ROA	0.063	0.325	0.063	0.096	0.097	0.080	2.686***
MBE	6.047	13.895	2.734	7.461	12.138	3.171	2.110**

Variable definitions: DPP (dividend payout ratio) is dividend per share; BCOM is the proportion of non-executive directors (NEDs) to total number of directors on the board of the company; BSIZE is total number of directors on the board of the company; LOGMKTC is natural logarithm of Market capitalization of the companies; LEV is Book value of long term debt divided by the book value of total assets; ROA is Earnings before interest and tax divided by total assets; MBE is market to book value of equity at the end of year t [Shares outstanding x shares closing price] / total common equity];

Correlations

Table 4 reports the bivariate statistical correlations for both BUMI and non-BUMI firms. Leverage was positively correlated with dividend payouts for both BUMI and non-BUMI firms, pointing to the fact that both types of firms had a narrow range of leverage associated to dividend payouts. Return on assets was negatively correlated with dividend payouts for non-BUMI firms only, indicating that the non-BUMI growth firms seemed to produce a higher return on assets. Board size (BSIZE) and duality for both BUMI and non-BUMI subsample firms showed a negative correlation, indicating that the larger the size of the board the lower the presence of CEO duality. Overall, there was no serious multicollinearity, as the correlation coefficients for all variables scored under 0.70.

Regression

Table 5 Column A reports the multiple regression results for the first hypothesis. The coefficient of MBE (the proxy for growth opportunities) was negative and significant (-0.093, $p < 0.01$, 2 tailed),

supporting the first hypothesis (H1) that higher growth firms pay lower dividends. The results support the contracting theory based on Jensen's Free Cash Flow (FCF) hypothesis suggesting that high growth firms pay lower dividends due to their heavy investments and shareholder expectations of a better return in the near future. These findings are also consistent with prior studies in developed countries and emerging markets (e.g., Amidu and Abor, 2006; Mitton, 2004; La Porta et al. 2000). Several other studies in the developed countries posited similar results (i.e., Smith and Watts, 1992; Gaver and Gaver, 1993; Gul and Kealey, 1999; D'Souza and Saxena, 1999 and Jensen, 1986).

Furthermore, Table 5 Column B illustrates the association between dividend payouts and the interaction between ethnicity (i.e., BUMI and non-BUMI) and growth opportunities (MBE). The coefficient of the interaction between BUMI*MBE was positive and significant (0.092, $p < 0.05$, 2 tailed). Interestingly, this supports the second hypothesis (H2) that the negative relationship between high growth firms and dividend payout is weaker for BUMI firms. Dividend payout was also significantly and negatively associated with return

on assets and board size. In terms of industry dummies, consumer products were positively and significantly related to dividend payout. Generally, these results point to the fact that firms with smaller boards and lower returns on assets tend to pay lower dividends. In terms of industry segments, the consumer products industry segment seemed to be

paying comparatively higher dividends than other industry segments. The adjusted R2 for the regression analyses ranged from 72.5 percent to 72.6 percent. The variance inflation factor (VIF) was used to test for multicollinearity, and the VIF values were generally less than 5.

Table 4. Correlations among dividend payout, MBE and control variables

Variable	DPP	BCOM	BSIZE	DUAL	LEV	LOGMKTC	ROA	MBE	GLC
BUMI firms (N = 819)									
DPP	1.000								
BCOM	-0.028	1.000							
BSIZE	-0.041	-0.029	1.000						
DUAL	0.037	0.090***	-0.139**	1.000					
LEV	0.301**	-0.004	0.002	-0.018	1.000				
LOGMKTC	-0.024	0.124**	0.042	0.230**	-0.02	1.000			
ROA	-0.018	0.001	0.037	0.042	-0.069*	0.111**	1.000		
MBE	0.211**	-0.035	0.039	0.062	0.092*	0.120**	0.052	1.000	
GLC	0.107**	0.114**	-0.121**	0.196**	-0.008	0.344**	0.044	0.030	1.000
Non-BUMI firms (N = 1571)									
DPP	1.000								
BCOM	-0.023	1.000							
BSIZE	-0.057*	-0.022	1.000						
DUAL	0.011	0.033	-0.108**	1.000					
LEV	0.402**	0.018	-0.007	0.050*	1.000				
LOGMKTC	-0.114**	0.058*	0.001	-0.028	-0.044	1.000			
ROA	-0.112**	0.031	-0.013	0.014	-0.044	0.230**	1.000		
MBE	0.258**	0.009	0.017	-0.022	0.168**	0.119**	0.296**	1.000	
GLC	-0.061*	0.030	-0.034	0.009	-0.030	0.230**	0.062*	0.011	1.000

Variable definitions: DPP (dividend payout ratio) is dividend per share; BCOM is the proportion of non-executive directors (NEDs) to total number of directors on the board of the company; BSIZE is total number of directors on the board of the company; DUAL is dichotomous with 1 if the chairman is also the chief executive officer (CEO) of the company and 0 otherwise; LEV is Book value of long term debt divided by the book value of total assets; LOGMKTC is natural logarithm of Market capitalization of the companies; ROA is Earnings before interest and tax divided by total assets; MBE is market to book value of equity at the end of year t [Shares outstanding x shares closing price] / total common equity; GLC is shares held by the 10 largest shareholders as a measure of ownership concentration 1 – GLCs; 0 – Otherwise;

*Significance at 0.10; ** Significance at 0.05; ***Significance at 0.01

Table 5. OLS Regression analysis of Malaysian Firms for the years 2004 to 2011 with interaction (N=1330)

	Column A		Column B	
	Coefficient	t-Values	Coefficient	t-Values
Intercept	39.623	14.428	39.945	14.502
<i>Control variables</i>				
GLC	-0.508	-0.355	-0.573	-0.399
LOGMKTC	0.406	1.494	0.392	1.444
LEV	0.932	1.588	0.911	1.554
ROA	-10.359	-2.799***	-9.292	-2.482***
BSIZE	-0.349	-1.979**	-0.345	-1.950**
BCOM	-3.819	-1.554	-3.621	-1.470
DUAL	-0.799	-0.893	-0.853	-0.951
<i>Sector effects</i>				
Consumer	3.481	2.394***	3.599	2.469***
Construction	-1.112	-0.708	-1.103	-0.701
Industrial	-1.109	-0.983	-1.139	-1.025
Plantation	1.682	1.290	1.619	1.239
Properties	-0.015	-0.013	-0.107	-0.095
<i>EXPERIMENTAL VARIABLES</i>				
MBE	-0.093	-3.537***	-0.137	-3.930***
ETHNIC	-0.084	-0.091	-0.664	-0.681
MBE*ETHNIC			0.092	1.913*
Adj.R2		0.725		0.726

Variable definitions: DPP (dividend payout ratio) is dividend per share; GLC is shares held by the 10 largest shareholders as a measure of ownership concentration 1 – GLCs; 0 – Otherwise; LOGMKTC is natural logarithm of Market capitalization of the companies; LEV is Book value of long term debt divided by the book value of total assets; ROA is Earnings before interest and tax divided by total assets; BSIZE is total number of directors on the board of the company; BCOM is the proportion of non-executive directors (NEDs) to total number of directors on the board of the company; DUAL is dichotomous with 1 if the chairman is also the chief executive officer (CEO) of the company and 0 otherwise; Sector effects: Cons – Consumer products; Indus – Industrial products; Plant – Plantation products; Prop – Properties; MBE is market to book value of equity at the end of year t [Shares outstanding \times shares closing price] / total common equity; ETHNIC is 1 for Bumiputera and 0 for otherwise; MBE*ETHNIC is the interaction between MBE and ethnicity; *Significance at 0.10; ** Significance at 0.05; *** Significance at 0.01.

Further analysis

Table 6 reports further analysis conducted for the full sample by segregating the firms into GLC and non-GLC categories. The purpose of the analysis was to determine whether MBE affects dividend payout differently for GLCs and non-GLCs. MBE was found to be negatively and significantly associated with dividend payout for non-GLCs. One reason for the non-significance of the GLC results might be the influence of the ethnicity

dimension, since these firms are dominated by Bumiputera. Finally and interestingly, the results also point to the fact that non-GLCs with smaller boards and lower returns on assets tended to pay lower dividends. This result is consistent with prior studies (i.e., Nordin et al., 2005; Guest, 2008). Table 7 and Diagram 1 present additional robustness checks for the difference in dividend policies between GLCs and non-GLCs.

Table 6. OLS Regression analysis of Malaysian firms for the years 2004 to 2011 (N = 1330)

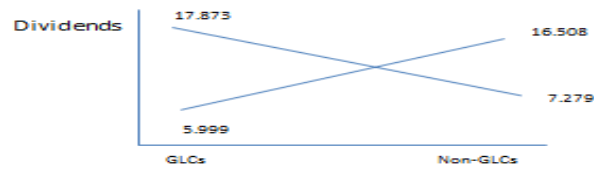
	GLCs (N = 135)		Non-GLCs (N= 1195)	
	Coefficient	t-Values	Coefficient	t-Values
Intercept	35.938	4.585***	40.404	13.895***
<i>Control variables</i>				
LOGMKTC	0.690	0.948	0.362	1.247
LEV	-3.668	-1511	1.244	2.046*
ROA	-3.781	-0.237	-9.467	-2.488***
BSIZE	0.427	0.901	-0.429	-2.319**
BCOM	-5.634	-0.846	-3.545	-1.356
DUAL	-2.836	-1.122	-0.698	-0.738
<i>Sector effects</i>				
Consumer	5.460	1.208	3.148	2.042**
Construction	-3.090	-0.832	0.028	0.016
Industrial	3.863	1.293	-1.478	-1.256
Plantation	2.065	0.594	1.528	1.099
Properties			-0.148	-0.123
<i>EXPERIMENTAL VARIABLES</i>				
MBE	-0.091	-0.686	-0.093	-3.452***
ETHNIC			-0.479	-0.501
Adj R ²		0.708		0.725

Please see Table 5 for variable definitions. *Significance at 0.10; ** Significance at 0.05; *** Significance at 0.01

Table 7. Mean Dividend Payout average of the Top 30 percent of the MBE

Dividend Payout (DPP)	Non-GLCs	GLCs
High Market to Book Equity	7.279	17.873
Low Market to Book Equity	16.508	5.999
t-test (Differences between high and low)	7.606	3.759***

Figure 1. Diagram from of the Mean Dividend Payout average of the Top 30 percent of the MBE



Endogeneity

In order to rule out factors which might have biased the study’s conclusions, two sets of supplementary tests were conducted, namely, endogeneity and an alternative measure for dividend payouts. The potential endogeneity problem between dividend payouts and the investment opportunity set was the primary concern. As the causality effect could run from dividend payouts to the investment opportunity set (i.e., ignored firm characteristics could also jointly determine dividend payouts and the investment opportunity set). Hence, both approaches were followed to mitigate concerns with endogeneity, similar to Ferreira and Laux (2007) and Yu (2008).

We first tested whether the change in firm investment opportunity set (IOS) taken from last year leads to a change in the dividend measure, controlling for other firm characteristics. The overall results in Table 8, column A, corroborate previous findings. For example, the coefficient of change IOS was -0.079 and was statistically significant at the 5% level (t-value = -2.580). Secondly, we also assumed that dividends held (announced) in year one (1) due to investment opportunities were incorporated in the growth for the following year and therefore we used IOS lead-lag1 and obtained similar results. The results in Table 8, column B, show that the coefficient of Lag IOS was -0.119 and statistically significant at any conventional level (t-value = -3.860).

Table 8. Diagnostic Test

	Column A		Column B		Column C		Column D		Column E	
	Coef	t-Values	Coef	t-Values	Coef	t-Values	Coef	t-Values	Coef	t-Values
Intercept	-0.251	-0.11	36.939	12.990***	37.502	13.510***	-1.119	-0.790	4.910	11.730***
<i>Control variables</i>										
GLC	0.425	0.390	-0.290	-0.200	-0.262	-0.190	-0.834	-1.115	1.406	5.810***
RTA	-0.029	-0.400	0.088	1.100	0.096	1.180	-	-	0.007	1.570
CR	-0.236	-1.680*	0.386	2.260**	0.392	2.32***	0.357	9.600***	0.007	1.120
ROCE	0.015	0.630	-0.026	-0.950	-0.026	-0.970	0.253	46.73***	0.000	-0.330
LEV	-0.100	-0.110	-1.792	-2.400***	-1.953	-2.610***	-0.175	-0.580	0.035	0.730
BFSIZE	0.038	0.260	-0.103	-0.520	-0.127	-0.670	0.047	0.500	0.041	1.270
BCOM	2.023	0.980	-1.523	-0.550	-1.529	-0.570	1.418	1.080	1.174	2.590***
DUAL	0.078	0.010	-1.233	-1.200	-1.300	-1.340	1.090	2.34***	0.260	1.620
<i>Sector effects</i>										
Consumer	-1.117	1.195	4.693	2.870***	4.551	2.920***	1.789	2.29***	0.702	2.660***
Construction	0.810	1.318	0.541	0.030	0.929	0.540	-0.348	-0.041	-0.198	-0.660
Trading	-0.150	0.918	1.324	1.090	1.436	1.240	0.613	1.090	0.244	1.260
Plantation	-1.022	1.107	2.795	1.840**	3.096	2.120**	2.021	2.770***	0.065	0.250
Properties	0.186	0.190	2.120	1.620	2.141	1.710*	-0.389	-0.630	0.152	0.700
<i>EXPERIMENTAL VARIABLES</i>										
MBE	-0.079	-2.580***	-0.119	-3.860***	-0.095	-2.830***	0.023	2.310***	0.003	1.660*
ETHNIC	0.528	0.760	-0.688	-0.730	0.041	0.040	0.479	1.080	-0.242	-1.590
Year Control		YES		YES		YES		YES		YES
R ²		0.626		0.310		0.709		0.701		7.000
N		951		1784		1148		1387		1387

Finally, an instrumental variable was used to test for the endogeneity problem. It was argued that if dividends were held and alternatively invested in a firm's projects with positive net present values (NPV), the market would react and share prices would increase reflecting higher firm value. This argument is supported by prior empirical evidence (Friend and Puckett, 1964; Diamond, 1967; Barker et al., 2002; Litzenberger and Ramaswamy, 1979). It is also consistent with the dividend policy and firm growth hypothesis introduced by Miller and Modigliani (1961) which posited that dividends, if not paid, could be reflected in the capital gain. Table 8, column C, uses market capitalisation (MKTC lead lag-1) for the second year as an instrumental variable. Results show a coefficient of -0.095 significant at a 5% level (t-value = -2.830). Further results show that leverage has a negative relationship with dividend payout. This is consistent with the Jensen's FCF hypothesis that suggests that firms pay dividends when they have less growth opportunities. Similarly they will require less external financing which decreases their leverage.

Alternative measures of dividend payouts

Two additional measures of dividend payouts were used namely: return on total assets (ROA), and market capitalisation (LOGMKTC). Miller and Rock (1985) argued that managers, unlike investors, are aware of the deviation of current period earnings from the expected value. Miller and Rock (1985) stated that the announcement of the net dividend perfectly reveals earnings because it is assumed that the market has complete knowledge of the firm's production opportunities and is thus able to perfectly forecast investment. Therefore, ROA was used as an alternative measure. Table 8, column D, show, the coefficient for MBE 0.023 is significant at the 5% level (t-value = 2.310). Another measure used was LOGMKTC and we expected to see a positive relationship between share market capitalisation (share prices) and growth opportunities. Results from Table 8, column E, results show that the coefficient for MBE significant at the 10% level (t-value = 1.660).

Conclusions

The objectives of this paper were to investigate the validity of Jensen's FCF theory in explaining the association between growth opportunities (also known as the investment opportunity set) and dividend policy, and to examine whether the ethnicity of firms moderated the relationship between market to book equity (used as a proxy for growth opportunities) and dividend policy in the Malaysian context. This study was driven by a gap

in the extant literature suggesting that board ethnicity does have an effect on firm dividend policies, especially in emerging economies.

Given the different institutional setting, the application of contracting theory based on Jensen's FCF theory ought to be perceived within an emerging economy perspective. This study has broadened the extant dividend policy literature by providing evidence from an emerging economy with an institutional structure different from that of a developed economy. Importantly, this study has documented that the negative relationship between high growth firms and dividend payout is weaker for Bumiputera firms. The rationale for this is twofold: first, Bumiputera firms are interconnected with the government's New Economy Policy (NEP), and hence tend to pay dividends irrespective of their growth and performance. Second, Bumiputera firms are highly leveraged and politically interconnected and tend to pay dividends irrespective of their performance.

As for this study's limitations, the study was based on the top 300 highest capitalised Malaysian public listed companies, meaning that the study's conclusions might only be valid and applicable to large companies. The research was situated in the positivist paradigm and relied mainly on a quantitative research approach. Future research might consider a follow up study using an interpretative or critical perspective to delve into issues such as concrete measurement of the investment opportunity set and dividend payout.

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