



**FIRM PERFORMANCE AND DIVIDEND-RELATED FACTORS:
THE CASE OF MALAYSIA**

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Abstract

The theory of dividend and its effect on the value of the firm is perhaps one of the most important yet puzzling theories in finance. The main objective of this study is to examine dividend related factors that can be relied upon when determining the value of the firm. We investigate the relationship between individual stock returns with dividend yield, dividend stability and changes in dividend yield from 1992 to 2000 in the Malaysian Trading/Services and Plantation firms. The statistical result from annually cross-sectional regression show weak evidence to support the significant role of dividend yield and dividend stability in explaining firm stock returns. Changes in dividend yield, on the other hand, have negative and significant coefficients in explaining stock returns in Trading/Services firms throughout 1993-1996 and the average crisis period. For Plantation firms, it is negatively significant only in 1994 and 1997.

JEL Classifications: G10; G35

Keywords: Dividend Yield; Dividend Stability; Stock Returns

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1. Introduction

The most widely accepted objective of a firm is to maximize the value of the firm and to maximize shareholder wealth. In general, there are three types of financial decisions which might influence the value of a firm: investment decisions, financial decisions and dividend decisions. These three decisions are interdependent in a number of ways. The investments made by a firm determine the future earnings and future potential dividends; and dividend policy influences the amount of equity capital in a firm's capital structure and further influences the cost of capital. In making these interrelated decisions, the goal is to maximize shareholder wealth.

Dividends are decided upon and declared by board of directors. A firm's profits after-tax can either be used for dividends payment or retained in the firm to increase shareholders' fund. This may involve comparing the cost of paying dividend with the cost of retaining earnings. Generally, whichever component has a lower cost that is where the profit after-tax will flow. However, there is a need to strike for a balance because it is a zero sum decision.¹ Although firms do not have obligations to declare dividends on common stock, they are normally reluctant to change their dividend rate policy every year as the firms strive to meet stockholders' expectation, build a good image among investors and to signal that the firm has stable earnings to the public.

The theory of dividend and its effect on the value of the firm is perhaps one of the most important yet puzzling theories in the field of finance. Academics have developed many theoretical models describing the factors that managers should consider when making dividend policy decisions. By dividend policy, we mean the payout policy that managers follow in deciding the size and pattern of cash distributions to shareholders over time. In a seminar paper, Miller and Modigliani (1961) argue that given perfect capital markets, the dividend decision does not affect firm's value and is, therefore, irrelevant. However, most financial practitioners and many academicians believe otherwise. They offered many theories about how dividends affect firm's value and how managers should make dividend policy decisions. Over time, the number of factors identified in the literature as being important to consider in making dividend decisions increased substantially. There are plenty of potential determinants for the dividend decisions. The more prominent determinants include protection against liquidity, after-tax earnings of the firm, liquidity and cash flow consideration,

¹ When a stock pays higher dividend, the lesser the profit after-tax is being retained for firm's growth, thus affecting the expansion activities of the firms' operations. On the other hand, if all of the profit after-tax is retained, this will cause dissatisfaction among investors and in a way encouraging them to invest in other stocks.

stockholders' expectation/preference, future earnings, past dividend practices, return on investment, industry norms, legal constraints, growth prospects, inflation and interest rate.²

Yet, in the context of Malaysia, studies on dividend were limited. To the best of our knowledge, Annuar and Shamsheer (1993) and Mansor (1993) remain two early studies in this regard.³ In Malaysia, firms have to pay corporate tax on pre-tax profits that are retained. As such, it can be a very expensive cost for a Malaysian firm to retain earnings. Therefore, in such tax environment, firms should pay high dividends to benefit from the full imputation of tax system. Nevertheless, high dividend is not a typical characteristic of Malaysian firms. There are several possible reasons to this. First, as Mokhtar, *et al.* (2006) highlighted, there were existence of rational speculative bubbles in Malaysian stock market in before and after the 1997 financial crisis. When majority of investors are short term (speculative), they are not interested in dividend. Second, the capital market in Malaysia may be imposing various constraints for firms such that issuing new equity or debt is very costly. Finally, long-term investors, particularly institutional investors are ignorant of the tax advantage of dividend as opposed to retained earnings. Therefore, majority of the firms are paying only token dividend to their shareholders.

The objectives of this study are to fill the research gap. We examine the relationship between stock returns with dividend yield, dividend stability and changes in dividend yield. The study is organized as follows: section 2 provides a review on the literature relevant to dividend policy, section 3 presents the methodology of the study, section 4 reports and discusses the results and in section 5, we conclude.

2. Literature Review

The hallmark paper by Miller and Modigliani (1961) has demonstrated that in perfect capital markets the value of the firm is independent of the way the firm chooses to finance its investment. It is based on the proposition that given a firm's investment policy, its dividend policy was

² For example, a firm may compare the costs of paying dividend and the costs of retaining earnings. If the cost of paying dividend is higher, firms should retain earnings. However, if stockholders prefer dividend income, firms should take into consideration this factor too to strive for a balance. Another example, firms that practice zero dividend policy, regardless of their profitability, is perhaps either not interested in retaining their shareholders, or perceives their shareholders as speculators, who are interested in capital gains alone. Long-term investors normally do not prefer this type of firms, but it may probably be favored by speculators.

³ Two other studies, Annuar, *et al.* (1992) and Mansor and Subramaniam (1992) examine the effects of dividend and earnings announcement on Malaysian firms.

irrelevant to its current market valuation. However, several assumptions were made, including: no personal or corporate income taxes; no stock flotation or transaction costs; financial leverage has no effect on the cost of capital; investors and managers have symmetry information about the firm's future prospect; and distribution of income between dividends and retained earnings has no effect on the firm's cost of equity. The main conclusion of this paper is that firm's capital budgeting policy is independent of its dividend policy. MM's proposition was strongly supported by Friend and Puckett (1964) and Black and Scholes (1974). Nevertheless, on bank holding company stocks, Graddy and Karna (1986) found that the representative investor in bank holding company prefers dividend payout to prospective capital gains return. This shows that there are investors who do not consider dividend payout and capital gains as perfectly substitutable units. Using variance test and Duncan multiple comparison tests on dividend policy and q ratio, Jose and Steven (1989) concluded that market valuation premiums are associated with stable and positive dividends per share trends, irrespective of the payout ratio level.

There is much evidence to prove that investors' response to the dividend changes as newsworthy. Study by Fama and Babiak (1968) has proven that there is significant positive relationship between the change of a firm's dividend payment and change in its stock price. Fama and Babiak (1968) find a time series relation between annual dividends and earnings that is consistent with the view that dividend paying firms increase their dividend only when management is relatively confident that their higher payment can be maintained. Their view is supported by Capstaff, *et al.* (2004), who found that stock market reaction is more pronounced for large, positive dividend announcements that are followed by permanent cash flow increases.

Meanwhile, Litzenberger and Ramaswamy (1979) indicate that there is a strong positive relationship between dividend yield and expected return for New York Stock Exchange (NYSE). They used monthly data for individual securities rather than portfolios and found that the risk-adjusted returns are greater for higher dividend yield securities than for low dividend yield financial assets. Higher dividend payouts are desirable and hence, higher returns must be promised to attract investors to such stocks.

For the stability and determinants of dividend policy, the classic work on dividend by Lintner (1956) is the pioneer study. On 15 variables that have a bearing on dividend decisions, Lintner (1956) found that the primary factor precipitating a change in dividend policy was a firm's earnings. Using a compact mathematical model, he concluded that the most important determinant of the size of a company's dividend is a change in company earnings that results in a payout ratio that is "out of

line" with the firm's target payout ratio. He explained that firms tend to make periodic partial adjustments in the payout ratio in the direction of the target payout ratio, rather than making dramatic changes in the cash dividend paid. Managers do this because they believe that shareholders prefer a steady stream of dividends to a fluctuating dividend. Brittain (1964, 1966) and Fama and Babiak (1968) reevaluated Lintner's model. Their results supported Lintner's view that managers prefer paying a stable dividend and are reluctant to increase dividend to a level that the firm cannot sustain. Fama and Babiak (1968) found that changes in a firm's per share dividend are largely a function of the firm's target dividend payout ratio, current or lagged earnings, and the last period's dividend. They concluded that Lintner's basic model performed well relative to alternative specifications. In a comprehensive study, Benartzi, *et al.* (1997) concluded that Lintner's model of dividends remains the best description of the dividend setting process available.

Smith (1971) suggested that managers would attempt to establish a gradually increasing, or at least a non-decreasing, pattern of dividend payments over time. The motivation is the belief that such a policy increases investor's confidence in the firm and support share price. Meanwhile, Farrelly and Baker (1989) surveyed the views of institutional investors, including portfolio managers and security analysts, concerning various issues involving corporate dividend policy, found that dividend policy affects stock prices and that dividend consistency is of utmost importance. Their views are strikingly similar to those of dividend policymakers, as indicated by recent research. Policy makers pay close attention to the continuity and consistency of dividends, presumably in order to hold the confidence of stockholders. Meanwhile, Pruitt and Gitman (1991) asked the financial managers of the 1,000 largest U.S. firms to describe the interplay among the investment, financing, and dividend decisions in their firms. The results suggest that the following factors are important influences on the amount of dividends paid: current and past years' profits, the year-to-year variability of earnings, the growth rate of earnings, and prior years' dividends. These findings are consistent with Lintner's (1956) behavioral model and the survey work of Baker, *et al.* (1985), Farrelly, *et al.* (1986), and Baker and Powell (1999). Taken together, these findings suggest that firms attempt to maintain consistency in the level of their firms' dividends. In addition, Pruitt and Gitman (1991) found that managers make dividend decisions independently of the firm's investment and financing decisions. In a more recent study, Baker and Powell (1999) concluded from their 1998 survey of NYSE listed firms that little change occurred in dividend determinants between 1983 and 1998. That is, the factors described by Lintner (1956) still explain dividend behavior. Baker and Powell also observed that some industry-based differences in dividend determination declined between 1993 and 1998.

Others have questioned the efficacy of mathematical models in explaining the dividend policies of individual firms. For example, Bond and Mougoue (1991) conducted empirical tests to see if the target dividend payout rates and the speed of adjustment implied in Lintner's (1956) behavioral model accurately characterized firms' dividend policies. They concluded that the partial adjustment model does not reflect the unique dividend policies of individual firms.

Instead of building models or developing theories about dividend policy, some researchers have attempted to study this "cultural phenomenon" by surveying corporate managers. Several studies attempted to identify factors that financial managers consider to be most important in determining their firm's dividend policies. Baker, *et al.* (1985) and Farrelly, *et al.* (1986) surveyed 318 New York Stock Exchange (NYSE) firms. They concluded that the major determinants of dividend payments are the anticipated level of future earnings and the pattern of past dividends. These factors are consistent with those identified by Lintner (1956). Their results also reveal that managers believe dividend policy affects share value and that managers are highly concerned with dividend continuity. In addition, their findings suggest that managers of utility companies view the dividend decision somewhat differently than that of manufacturing and wholesale/retail firms. A study by Baker and Farrelly (1988) reported similar results for what they call dividend achievers (companies having unbroken records of at least ten consecutive years of dividend increases). Farrelly and Baker (1989) conducted a survey of institutional investors to learn what these investors consider important in a firm's dividend policy. Their findings show that these sophisticated investors believe dividend policy affects stock prices and dividend consistency is highly important. These results are also consistent with Lintner (1956). In their review of the evolution of corporate dividend policy, Frankfurter and Wood (1997) observed that firm dividend-payment patterns are a cultural phenomenon. They conclude that dividend policy couldn't be modeled mathematically and uniformly for all firms at all times. Thus, Frankfurter and Wood (1997) advised researchers to study dividend policies more carefully as a cultural phenomenon rather than expending efforts in mathematical model building. A recent study by Baker, *et al.* (2006) found distinct differences exist in the importance that managers attach to factors in influencing dividend policy of Norwegian firms and U.S. firms.

3. Methodology

Our sample is selected from firms listed on the Main Board of Bursa Malaysia (formally known as Kuala Lumpur Stock Exchange). Due to different industry structure, a common observation in Bursa Malaysia is that high dividend payers tend to be stocks that are in non-growth

sectors such as the mining and plantation sector, whereas the high-growth companies (Trading/Services, Technology sector) will require reinvesting their profit in expanding operations. This study therefore focuses on two sectors - Trading/Services and Plantation sectors, to proxy for growth firms and non-growth firms, respectively. A total of 30 and 29 continuously traded Trading/Services and Plantation firms from the entire population frame of 96 companies and 38 companies respectively were included (see Appendix A). The random selection of the sample was based on the criteria that the selected firms must be listed on Bursa Malaysia during the nine-years of sampling period for 1992 –2000 registered under a consistent firm name.

A cross-sectional regression was conducted for each of the sectors annually to test for changes in the relationship between dividend yield, changes in dividend yield, dividend stability and stock returns across years. The multiple regression model is given by:

$$R_{it} = \alpha + \beta_1 DY_{it} + \beta_2 DS_{it} + \beta_3 \Delta DY_{it} \tag{1}$$

where, R_{it} refers to the nominal rates of returns for firm i in period t . The parameter to be estimated are α and the three β that capture the impact of the dividend factors. Following Gwilym, *et al.* (2000), the dividend yields (DY_t) are calculated as in Equation (2), by summing the gross dividends for stocks, which went ex-dividend during the previous 12 months and dividing the total by the current end-of month price. The measure for dividend stability and changes in the dividend yield for each stock are calculated as in Equations (3) and (4), respectively:

$$DY_t = \frac{\sum_{T=t-12}^{t-1} DIV_T}{P_{t-1}} \tag{2}$$

$$DS_t = \sqrt{\frac{\sum_{T=t-1}^{t-5} (DY_t - DT)^2}{4}} \tag{3}$$

$$\Delta DY_t = \frac{DY_t - DY_{t-1}}{DY_{t-1}} \tag{4}$$

where, DY_t is the dividend yield in year t

DIV_T is the gross dividend which went ex-dividend in month T

P_{t-1} is the transaction price in month $t-1$

DT is the average dividend yield

Besides the annual cross sectional regression, we also estimated two averaged samples: Pre-crisis (1992 to 1996) and Crisis (1997 to 2000). For each period, the dividend yields were collected on yearly basis. Yearly basis was used on the assumption that there would not be much variation in the dividend yields for each stock. In the Equation (3) above, the dividend stability is inversely related with the standard deviation of the dividend yields. In other words, the higher the standard deviation of the dividend yields, the more volatile the dividend yields, thus the lower the dividend stability.

4. Results and Discussion

As a preliminary test, we investigated the equality of dividend payment for the two sectors by a simple paired two-sample t-test. The result is shown in Table 1:

Table 1
Paired 2-Sample Test for Means

	Trading/Services	Plantation
Mean	1.9544	2.9434
Variance	3.2727	6.9395
Ho: Dividends of the 2 sectors are the same		
t-Statistics	-5.2808	
two-tail p-value	0.0000	

Our preliminary analysis support for Smith and Watts (1992) and Gaver and Gaver (1993), that growth firms (Trading/Services sector) have significantly lower dividend yields than non-growth firms (Plantation sector). This is due to the fact that earnings not paid as dividends can be reinvested and the potential for higher future earnings and capital gains may induce investors to willing to forego dividends in favor of capital gains in the high growth sector.

The multiple regression results are tabulated in Table 2 and Table 3. For the plantation sector, the annual estimated result shows that the dividend-related variables have not significantly explain the stock returns, except for a few exceptions. The strongest case is in 1997, where both dividend yield and its changes are significance at conventional 5% level. Changes in dividend yield are statistically significant with negative coefficients in 1994 and 1997. Dividend stability only shows significance in 1995 and 1998. For the average model, dividend yield and dividend stability show significance for pre-crisis sample.

For the trading/services sector, changes in dividend yield significantly explain stock returns in Trading/Services firms throughout 1993-1996 (before crisis) with consistent negative sign in all the coefficients and also relatively higher R^2 in the model as compared to other sample periods. The R^2 value ranged from 25.8% to 57.5% from 1993 to 1996 (the highest of all). However, for the average model, the variable is significance only for the Crisis period. The other two dividend variables are not significantly priced, except for dividend stability for 1993.

Table 2
Multiple Regression Result for Plantation Sector across Years

	Intercept	Dividend Yield	Dividend Stability	Changes in Dividend	R^2	F Value
1992	0.053 (-0.802)	-0.020 (-1.228)	-0.021 (-0.383)	-0.064 (-1.250)	0.199	0.069
1993	2.485 (0.821)	-0.799 (-0.979)	1.476 (0.865)	-2.194 (-0.923)	0.226	2.432**
1994	1.845 (3.363)*	-0.300 (-1.539)	-0.427 (-1.471)	-1.495 (-4.043)*	0.613	13.189*
1995	0.188 (1.659)	0.025 (0.756)	-0.210 (-3.205)*	-0.010 (-0.192)	0.300	0.568*
1996	0.096 (0.677)	-0.040 (-0.838)	0.077 (0.869)	-0.097 (-0.539)	0.075	0.679
1997	-0.535 (-6.462)*	0.069 (1.870)**	-0.125 (-0.993)	-0.064 (-1.830)**	0.216	2.293**
1998	0.151 (1.254)	-0.068 (-1.436)	0.230 (1.801)*	-0.032 (-0.248)	0.161	1.597
1999	0.044 (0.750)	0.010 (0.559)	-0.055 (-0.977)	-0.106 (-1.290)	0.093	0.850
2000	-0.444 (-5.971)*	0.084 (3.687)*	-0.059 (-0.938)	-0.137 (-1.245)	0.477	7.586*
Pre-crisis	0.774 (1.639)	-0.340 (-1.970)**	0.716 (2.270)*	0.059 (0.077)	0.208	2.190
Crisis	-0.226 (-4.987)*	0.025 (1.466)	0.010 (0.189)	-0.050 (-0.649)	0.268	3.649*

Notes: * denote significant at 5% level; ** denote significant at 10% level; figure in the parenthesis is t -test statistic value.

In short, the results documented from annually cross-section regressions show weak evidence that the dividend yield and dividend stability have consistent and significant role in explaining firm stock returns over our sample period, both before and during the Asian financial crisis. However, changes in dividend yield show some impact on the firm stock returns with a consistent negative sign in the

coefficients. As a result, we can conclude that all the three variables under study are not able to consistently explain Malaysian firm stock returns. The only exception is changes in dividend yield but only in the tranquil period before the Asian financial crisis. Other fundamental factors might need to be considered or controlled when one need to explain the variation of Malaysian firm stock returns.

Table 3
Multiple Regression Result for Trading/Services Sector across Years

	Intercept	Dividend Yield	Dividend Stability	Changes in Dividend	R^2	F Value
1992	0.216 (1.109)	-0.065 (-1.054)	0.065 (0.600)	-0.217 (-1.010)	0.233	2.630**
1993	0.287 (1.054)	-0.080 (-0.108)	-0.189 (-1.739)**	-2.117 (-4.819)*	0.575	11.734*
1994	0.639 (2.11)*	-0.068 (-0.510)	-0.152 (-1.160)	-1.144 (-4.914)*	0.497	8.558*
1995	0.039 (0.430)**	-0.038 (-1.030)	0.023 (0.527)	-0.345 (-2.788)*	0.258	3.010*
1996	0.087 (0.734)	0.042 (0.701)	-0.094 (-1.258)	-0.582 (-3.617)*	0.343	4.521 *
1997	-0.531 (-3.481)*	-0.021 (-0.395)	0.003 (0.019)	0.036 (0.430)	0.009	0.082
1998	-0.110 (-0.884)	-0.052 (-1.032)	0.177 (1.097)	0.034 (0.435)	0.052	0.475
1999	0.479 (2.065)*	0.035 (0.398)	-0.054 (-0.188)	-0.272 (-1.226)	0.060	0.561
2000	-0.377 (-3.831)*	0.021 (0.500)	0.064 (0.575)	-0.115 (-1.201)	0.104	1.011
Pre-crisis	0.301 (4.071)*	-0.031 (-0.934)	-0.001 (-0.019)	-0.074 (-0.297)	0.055	0.502
Crisis	-0.123 (-2.34)*	-0.002 (-0.102)	-0.006 (-0.087)	0.210 (2.787)*	0.296	3.649*

Notes: * denote significant at 5% level; ** denote significant at 10% level; figure in the parenthesis is *t*-test statistic value.

5. Conclusion

Empirical studies on the impact of dividend variables on Malaysian firm stock returns are limited. As an emerging country, Malaysian firms face a relatively more expensive cost to retain earnings and thus high dividend is not a typical characteristic of Malaysian firms. The contribution of this study is to fill in the gap. The main purpose in conducting this study is to identify the role of dividend in explaining

Malaysian firm stock returns. We tested the relationship of firm stock returns with the so-called the dividend related variables, comprising dividend yield, dividend stability and changes in dividend yield.

Our preliminary analysis support for Gaver and Gaver's (1993) finding, that growth firms (Trading/Services sector) have significantly lower dividend yields than non-growth firms (Plantation sector). Although we do not obtained very strong results that the dividend related variables are the main factors explaining firm stock returns, we do find that changes in dividend play some role in explaining firm stock returns, especially of the Trading/Services firms, which are essentially representing growth firms. If this holds true across the whole Malaysia listed firms, this suggests that CEO and top management of growth firms should pay careful attention to the changes of dividend yield in their firms, which has an inverse relationship with the stock returns.

Shift in dividend policy may be a way of providing information to investors relating to the anticipated future performance of the firms (Bhattacharya, 1979, 1980). The frequent changes in firm dividend policy may be particularly useful in attempting to differentiate high-value firm from their low-value counterparts that have high dividend payout levels. The negative sign documented implies that the lower the changes in the dividend yield, the higher the stock returns. The finding is consistent with Lintner (1956), Kalay (1982), Dielman and Oppenheimer (1984), John and Williams (1985), and Gwilym *et al.* (2000). This suggests that the management should try to minimize changes in the dividend yield. Smoothing dividends payment over time can push the stock price to higher level. Another option is to maintain the level of dividend yield by adjusting the dividend payment relative to the stock price. Furthermore, announcing changes in the level of dividend payment provides important information to investors and must be carefully considered. This will eventually maximize the firm value; follow by the maximization of shareholder wealth.

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Appendix A
List of Sample Companies and Their Paid up Capital

No	Trading/ Services Sector	Paid up Capital (RM)	No	Plantation Sector	Paid up Capital (RM)
1	Telekom	3,155,887,880	1	GHope	1,030,142,499
2	MISC	1,859,913,793	2	Kump. Guthrie	1,000,303,000
3	BJGroup	1,498,161,069	3	KLK	712,516,128
4	Sarawak	1,170,273,425	4	IOICorp	443,698,682
5	Sime	1,162,980,037	5	Asiatic	370,667,500
6	MPHB	953,863,270	6	H&L	302,167,829
7	Malakoff	853,368,002	7	BKawan	291,375,000
8	MAS	770,000,000	8	JTOP	160,000,000
9	Magnum	762,824,000	9	SCBDev	153,235,464
10	Time	746,412,417	10	UtdPlt	151,509,600
11	HapSeng	622,660,000	11	AusEnt	145,410,566
12	Resorts	545,921,667	12	GRopel	127,036,071
13	Metroplex	450,927,897	13	Ksidim	124,521,383
14	Kamuntg	393,019,964	14	Gnealy	115,361,892
15	Mycom	392,682,073	15	Kretam	105,253,500
16	Genting	352,169,477	16	SOP	94,968,240
17	KKellas	237,593,400	17	Kulim	94,528,006
18	EON	229,128,823	18	IncKen	88,250,000
19	NSTP	216,082,504	19	UMcca	87,775,734
20	KEMas	208,891,969	20	Chintek	85,755,250
21	TV3	170,318,012	21	NSOP	64,179,962
22	Antah	169,814,983	22	FarEast	61,600,000
23	Uniphone	139,600,000	23	Kurnia	56,722,196
24	Bstead	136,376,323	24	Bkatil	44,100,000
25	Metroj	126,000,000	25	Rview	10,808,408
26	GTown	122,850,000	26	Kluang	2,006,385
27	Sriwani	121,214,124	27	Sungai Bagan	1,890,361
28	Leisure	100,000,000	28	Amolek	1,800,000
29	ParkMay	73,005,822	29	Mtakab	1,400,674
30	Nanyang	61,910,670			