

Key Determinants of Dividend Payout among Listed Companies at Nairobi Securities Exchange.

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Abstract: Dividend decisions continue to fascinate scholars and researchers all around the world. Determinants of dividend payout have been widely investigated but results are not always consistent. This paper investigated how well current after tax earnings and prior dividends influence dividend decisions at the Nairobi Securities exchange using panel data of 40 companies listed in various sectors of the stock market over a period of eleven years (2000-2010). By employing a multiple regression model, a significant positive association between prior dividends and current earnings is established. Prior dividend is noted to guide current dividends for all the nine sector firms studied while earnings govern dividend decisions of only three sectors. Panel data for the period was explained very well (78percent) by Fama and Babiak (1968) dividend model. Therefore equity investors should consider a firms most recent dividend payout when picking stocks with good dividend returns.

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I. Introduction

Dividend payments have for a long time remained popular among investors in developing and developed capital markets. It has been described as a complex matter which is among the top ten perplexing issues in finance theory. Many studies have been done on theoretical and empirical evidence of dividend policy and behaviour in both developed and developing financial markets. Results from numerous scholars have not been consistent and disagreements continue to characterize debate on this subject by different scholars. Thus dividend policy is a complex matter which is among the top ten perplexing issues as suggested by Gul, Razzaq, Faruk and Khan (2012). It continues to be a controversial subject in corporate finance since the debate on its relevance was started by Lintner in the 1950's.

Dividend irrelevance was first postulated by the famous Modigliani and Miller (M&M 1961). They posited that in a perfect market condition; where costs (taxes, transaction, agency costs) are zero and information asymmetry is nonexistent, dividend policy is irrelevant to firm value. These conditions however do not apply in the real world and as such dividends continue to influence corporate financing and investment decisions. A number of theories exist to explain why companies pay or would distribute their profits in form of cash dividends. Among the reasons given for paying dividends are; controlling information asymmetry costs, agency costs and signaling reasons. The reasons may further be influenced by investor preference, capital needs, cost of external capital and ability to postpone a project.

Dividend determinants are numerous classified into quantitative and non- quantitative measures. Quantitative measures include profits or earnings, previously paid dividends, cash flow, liquidity et cetera while qualitative measures are; size of firm, growth prospects, business risk, industry ownership structure and others. Many companies still prefer to distribute part of their earnings as cash dividends rather than repurchase stock because the decision to pay dividends is not as flexible as that of buying back stock. The inflexibility of dividends makes it a better signal of future firm performance. What this means is that a decision to pay dividend cannot be arbitrarily varied by corporate managers. Less flexibility of any distributive decision relates to more signaling power and vice versa (Servaes and Tufano, 2006).

Kenya's capital market is developing in terms of its capital market size, structure and performance. The Nairobi Securities Exchange (NSE) is a securities market in the country mobilizing savings and investments for the public across over 50 companies classified into nine industries. The nine industries are; Agriculture, commercial and services, Telecommunication and technology, Automobile and accessories, Banking, Insurance investment, Manufacturing and allied, construction and allied, Energy and Petroleum (NSE, 2012).

In examining the dividend puzzle, current after tax earnings and prior dividends are tested for their effectiveness in predicting dividend payout using panel data estimation technique of 40 firms from the year 2000 to year 2010. This is anchored on Fama and Blahnik (1968) dividend model to try and fit the model to panel data at the Nairobi Securities Exchange (NSE) in the period 2000 to 2010.

The paper contributes to knowledge of how well earnings and lagged dividends (one period) explain dividend distribution of public firms at the Nairobi Securities Exchange. Further contribution would be to finance literature on key determinants of dividend payout in emerging stock markets and also provoke thinking among academic and research community about dividend behavior in developing capital markets. The paper is organized as follows; next section describes the problem and objectives. Then follows a review of extant literature relevant to study, methodology of study and a discussion of findings and recommendation.

1.1 Statement of the problem

Dividends distribution continue to preoccupy researchers and scholars the world over partly because no single and consistent explanation have been given for how and why firms pay dividends and whether this is a consistent undertaking. The dividend picture of public firms in Kenya's stock market look unclear or confusing to investors. Dividend return is noted to be variable and (or) inconsistent from various annual financial reports by listed companies. Thus this study sought to investigate how well current earnings and prior dividend explain payout of dividends by public firms at the NSE.

1.2 Objectives

- i) To examine the relationship between current after tax earnings and prior dividends on dividend payout behavior by listed firms at the Nairobi Securities Exchange.
- ii) To determine how well current after tax earnings and prior dividends predict dividend payout between the sectors at the NSE.

1.3 Hypotheses

- i) Current after tax earnings and prior dividends positively and significantly relate to dividend payout by listed firms at the NSE.
- ii) Current after tax earnings and prior dividends are key predictors of dividend decisions across all the sectors of the Nairobi securities Exchange.

II. Literature Review

Dividend policy deals with three issues: i) what fraction of earnings should be distributed? ii) Should the distribution be in form of cash dividends or stock repurchases? iii) Should a firm maintain a steady, stable dividend growth rate? The major policies identified are; pure residual policy where decisions to pay dividends depend on free cash flow after investment needs are factored. Here dividends are expected to vary with profits, cash flows and capital budgeting. Constant dividend policy on the other hand is where dividend paying firm decides on how much to distribute as dividends based on a constant proportion of earnings generated in any given period. Here again the payout is expected to vary because profits are variable from year to year. Lastly a smoothed residual policy is one where dividends are kept at the minimum and firms do not react to temporary changes in earnings but only to sustainable increases in earnings (Kyle and Frank, 2013). The policies are consistent with a number of hypotheses that support either low payout or high payout.

The pecking order hypothesis argues for low payout. It states that internally generated resources are a priority when sourcing funds needed for capital projects. Retained earnings are a cheaper source compared to external funding. Here dividends payment is discouraged since it contributes to cheap internal sources of finance compared to issuing equity or even borrowing to finance expansion. It therefore suggests that firms that pay high dividends experience low growth.

Miller and Scholes (1978) developed the tax preference hypothesis which looks at effect of tax on clientele. He concluded that different tax rates on dividends and capital gain create different clientele. Individual investors' tax preferences may also influence their dividend preferences. Investors afraid of higher taxes are likely to prefer low or no dividend payouts in an attempt to reduce their taxable income thus preferring capital gains (Howatt et al., 2009). Al-Malkawi (2007) came up with the bird in hand theory which asserts that dividends are worth more than retained earnings to investors citing uncertainty of future cash flows. His theory assumes investors as risk averse preferring a predictable return cash dividends now rather than capital appreciation in future. Dividend payout under this hypothesis is therefore high. Agency hypothesis by Jensen and Mecklin (1976) postulates that high payouts reduce internal resources and consequently the cost of monitoring managerial activities. The cost is transferred to lenders when capital is sourced from external sources particularly debt. By paying dividends to shareholders, free cash flows are reduced and thus managers have no opportunity to make suboptimal investments (Bartram et al., 2009 & De Angelo et al., 2006).

Signaling hypothesis by Bhattacharya (1980) posits that dividend payment bridges the information gap between management and investors. It argues that due to information asymmetry between investors and managers on the financial strength of a firm, companies choose to payout a dividend to send a signal to investors that their firm is financially stable and remains profitable. Informational gap between insiders and outsiders may cause the true intrinsic value of the firm to be unavailable to the market. Empirical studies on the variables used in the study realized mixed results which make the investigation worthy of further attention.

2.1 Profitability

The concept of profitability in this study refer to current earnings after tax attributable to common shares. The variable is used in the study as one of the independent variables hypothesized to be positively related to dividend payout. A study of Indian firms' dividend behavior by Bose and Hossainey (2011) indicate that firms increased dividend in line with profits and vice versa. Amidu and Abor (2006) examined dividend behavior in Ghana and concluded that profitable firms tend to disburse more dividends. Corporate earnings as a variable may also refer to year to year changes in net income which was studied by Fama and Babiak, (1968) in their dividend policy theory while Lintner (1956) investigated absolute level of earnings in his classical theory.

2.2 Prior Dividends

Prior dividends may be directly related to current dividends because managers consider what has already been paid to determine by how much dividends will positively change. An increase in dividends may be the result of good performance in previous periods which may continue into the future (Fasio et al, 2004). However previous dividends may not significantly influence current dividends due investor preference other than dividends or even high income tax.

2.3 Current Dividend Payout

Dividend payout refer to dividends paid out of current earnings per share. This dividend may be zero, low, moderate or high. A dividend policy is a consistent dividend payout rate by firms over time. A direct association is hypothesized between earnings and lagged dividends and that shareholders view dividend payment as signal of future profitability even with a temporary drop in earnings. Many scholars including Kiyondi & Oyugi (2013) find a strong positive correlation between an increase in dividend and an increase in the earnings. A decrease in dividend payout may decrease value of stock more than a rise in stock value resulting from an increase in dividends. The conclusion is that dividends signal the market about the financial prospects of a firm if and when cash distributions impact firm value positively. The conceptual framework for the study is presented below.



Figure 1: Conceptual Framework

III. Methodology

Panel data estimation technique was used to analyze how well earnings and prior dividends predict dividend payout of listed firms in nine sectors namely agriculture, automobile, banking, commercial, construction, energy, insurance, investment and manufacturing. Firm-year observations from 40 dividend paying companies (440) for the period 2000 to 2010 was obtained from NSE report 2012 using a purposive sampling method to ensure only those firms that paid dividends for at least six years out of the eleven became part of sample. First a fixed effect and random effect coefficients were generated and tested for their difference using Hausman (1978) specification test. The result indicated that the two sets of statistics were not statistically different. Therefore random effects regression model sufficiently captured differences that may have been observed in the panel data. Panel data was organized and tested to ensure consistency with the assumptions of the classical linear regression model. Descriptive analysis was first done to highlight measures of central tendency followed by correlation tests and pooled ordinary least square regression involving earnings change and prior or one period lagged dividends on dividend payout per share. Earnings changes was selected instead of absolute earnings per share because an earlier study by Bulla (2013) returned a low goodness of fit value of 15 percent. Therefore a modified variable for earnings suggested by Fama and Babiak (1968) was preferred to test its efficiency and reliability.

IV. Findings

Panel data of dividends paid per share for all the 40 firms and 431 observations at the NSE was pooled and analyzed descriptively and inferentially. When the data was pooled across 40 companies, mean dividends per share is Kshs.1.10 and a standard deviation of 0.92 and a range of Kshs.3.67. this show some stickiness in dividend payout by listed firms at the exchange. Conversely dividend payout risk according to the risk coefficient Table 1 is highest in the Automobile sector (COV 0.955) and lowest in the investment sector with a coefficient of variation of 0.533. This means investors preferring dividend returns are less likely to receive them from sectors ranking low in this list.

Table 1: Risk Coefficient Table for current DPS_{it}

Segment	Mean DPS	Standard Deviation	COV	Rank	
Agriculture	1.05		0.92	0.876	7
Construction	1.19		0.73	0.613	3
Banking	1.04		0.92	0.885	8
Commercial	0.99		0.79	0.797	6
Insurance	0.87		0.53	0.609	2
Manufacture	1.85		1.25	0.675	5
Energy	1.40		0.94	0.671	4
Investment	0.45		0.24	0.533	1
Automobile	0.449		0.429	0.955	9

Table 2 shows earnings risk was highest in the automobile sector and lowest in the manufacturing sector after ignoring investment sector for insufficient data. This is attested to by the coefficient of variation computed for the sectors and the ranking.

Table 2: Risk Coefficients for current EPS_{it}

Segment	Mean	Standard Deviation	COV	Rank
Agriculture	3.84	9.7	2.53	7
Automobile	1.98	6.88	3.474	9
Construction	3.82	4.7	1.23	4
Banking	3.66	4.17	1.13	3
Commercial	4.418	7.3	1.65	6
Insurance	3.2	4.61	1.44	5
Manufacture	6.61	5.97	0.903	2
Energy	7.84	21.46	2.737	8
Investment	1.17	0.96	0.82	1

A coefficient of variation computed for the sectors (Table 3) based on prior dividends paid indicate that investment sector had the lowest risk while agriculture sector had the highest risk. Construction sector is second best by risk coefficient followed by insurance industry. This means that for an investor to maximize dividends on the basis of dividend history, stocks from investment, construction and insurance sectors would be selected in that order.

Table 3: Risk Coefficient for Prior Dividends per Share.

Segment	Mean	Standard Dev	COV	Rank	
Agriculture	1.03		1.0	0.97	9
Automobile & Acc.	0.46		0.43	0.94	8
Construction	1.19		0.7	0.58	2
Banking	1.00		0.91	0.91	7
Commercial	0.98		0.79	0.81	6
Insurance	0.83		0.52	0.63	3
Manufacture	2.0		1.37	0.69	5
Energy	1.39		0.95	0.68	4
Investment	0.498		0.194	0.39	1

4.1 Correlation Statistics

Table 4 below show correlations coefficients between the explanatory variables and the explained variable. Prior dividends had the strongest association with current dividends at 0.855 then followed by current earnings per share whose coefficient was 0.575. Therefore dividends in the financial market is largely dictated by prior dividends. Current earnings are also important since it is moderately linked to dividends as well. The two factors are critical to influencing dividend decisions at the NSE with significant implications on a two tailed test.

Table 4: Correlations Table between the Variables.

	Current DPS	Current Earnings Per share	Previous DPS
Pearson Correlation	1	.575**	.855**
Current DPS		.000	.000
Sig. (2-tailed)			
N	425	424	386

4.2 Regression results

Fama and Babiak(1968) dividend model was tested for its validity in the capital market to determine how well it performed. Hence by regressing dividend paid per share against changes in earnings and absolute levels of previous dividends, the model performance improved significantly to 78 percent as represented in equation (1).

$$DPS_{it} = 0.154 + 0.03\Delta EPS_{it} + 0.824DPS_{it-1} \quad (1)$$

Se (0.034) (0.003) (0.023)
t 4.576 9.0 35.894
P 0.000 0.000 0.000
*R*² = 0.778
F = 672.203 (2,382) *P* = 0.000
DW = 2.155

A change in previous dividends by a shilling increases current dividend payout by shs. 0.82. A change of earnings per share by a shilling would increase current dividends by Kshs.0.03. per share. The mean DPSt for the market is Kshs.0.154 per share. Prior dividends alone explain 75% of the 78% explanatory power of this model by Fama and Babiak (1968). Looking at effects of factors by sector, the commonest factor predicting dividend payout across all sectors was priordividends paid. This is then followed by current earnings which influence payout in only three sectors namely Agriculture, Banking and construction.

V. Discussion

Previous/lagged dividend is a key factor influencing dividend payout at the NSE. The coefficient of correlation is positive and very strong at 0.85. This finding is consistent with Fama and Babiak (1968); Lintner's (1956); Market statistics for these factors indicate that on average previous dividends range from a low of ksh 0.46(automobile) to a high of ksh 2.00(manufacturing). Market average for previous dividends is ksh 1.09 and standard deviation of 0.903. Construction sector led in this factor given a risk coefficient of 0.58 (lowest). The riskiest sector is agriculture with a coefficient of 0.97. Current after tax earnings was a key predictor in the sectors of agriculture banking and construction while previous dividends was a key predictor in all the nine sectors of the capital market. In addition it was realized that Fama and Babiak (1968) dividend model better fits the panel data used in this study with a 78 percent explanatory power.

VI. Conclusion

Findings of the study provide valuable insights about key factors affecting dividends decisions at the NSE. Prior dividends and earnings per share are positively and significantly related to dividends paid per share. This indicates hypothesis one is not rejected. This is consistent with Lintner (1956), Fama and Babiak, (1968), Bulla (2013), Fasio et al (2004), Hossainy (2011) and Amidu and Abor (2006). The two factors were also found to be key predictors of dividend decisions at the NSE which lead to the failure to reject hypothesis two. Summary statistics from respective sectors reveal that all sectors use prior dividends to set current dividends in the market but only three sectors are further guided by earnings. This implies that dividends paid previously is a key predictor of dividends paid by the listed firms which is in contrast with Lintner (1956) who discovered net earnings as primary determinant of dividends. In addition, Fama and Babiak (1968) dividend model performed well at fitting data used in this study. The proportion of the changes in dividends paid explained by model

components is 78 percent compared to Lintners (1956) 15 percent. Construction and manufacturing sectors had the lowest risk based on prior dividends and current earnings per share while agriculture and automobile carried the highest risk with regard to prior dividends and current earnings.

VII. Recommendation

The following recommendations are made from the conclusions above first, corporate managers need to pay more attention to prior dividends and level of current earnings relative to previous earnings after tax when making dividends decisions in the current year. Secondly, the dividend model that explain dividend decisions at the NSE is one by Fama and Babiak (1968). It predicts payout by regressing changes in earnings and previous dividends on dividend payout. Third, previous dividends influence future dividend to a great extent since about 80 percent of expected dividends is explained by prior dividends.

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