FINANCIAL DETERMINANTS OF DIVIDEND PAYOUT OF LISTED COMPANIES IN THE NAIROBI SECURITIES EXCHANGE

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Abstract: The main objective of the study was to assess the determinants of dividend payout of listed firms in Kenya. The study adapted a causal research design and used qualitative information. The target population was sixty four (64) firms listed at the Nairobi Securities Exchange. A questionnaire was the preferred instrument for data collection. The researcher gave out 64 questionnaires and received 43 for analysis representing 67% response rate which was considered adequate. Data analysis was done with the help of SPSS and it brought out the relationship between dividend payout and its determinants. The findings revealed that the variables considered in this study namely profitability, cash flow, sales growth and market value had a positive relationship with dividend payout.

Keywords: Dividend payout, Probability, Cashflow, Sales growth.

I. INTRODUCTION

In the investment market individuals are faced with an increasing complex choice of financial products from which to make investments decisions. Logically, an investor will choose the investment that guarantees protection of wealth, and comparatively provides higher returns in the market (Cole & Shastry, 2009). According to the Rationality and Efficient Market Hypothesis (EMH) predominated theory of 1980s an efficient market stock will always trade at their fair market value in the securities exchange reflecting all available information, making it almost impossible for investors to purchase undervalued shares or sell shares at inflated prices. This then means that the only way an investor would probably achieve higher returns in this market set up is by investing in riskier stocks. Research studies have shown that investors do not necessarily think rationally but are led by emotions, subjective thinking, and at times by the herd mentality (Shah & Oppenheimer, 2008). Overtime, the EMH is steadily becoming deficient to provide explanation for the market behaviour, subsequently leading to a shift in thinking, with the understanding that the market consists of human beings whose behaviours cannot solely be understood through mathematical or economic studies (Ozerolet al., 2011). The contemporary capital markets are therefore being analyzed from a new perspective of behavioural finance, a theoretical model applying the principles of psychology and sociology to finance (Pompion, 2008). The behavioural theorists’ postulate that investment decisions are to some extent influenced by personal prejudices and perceptions that fall short of the criteria of rationality as proposed in the EMH.

II. STATEMENT OF THE PROBLEM

The payment of dividend is a dilemma faced by many managers. Managers are unsure whether to pay a large, small or zero percentage of their earnings as dividends or to retain them for future investments. This has come about as a result of the need for management to satisfy the various needs of shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividends now. Dividend policy remains an unresolved
issue despite the numerous studies that have been done (Arnott & Asness 2003; Farsio et al., 2004; Nissim & Ziv, 2001). Whereas some see it as relevant, others see it as irrelevant. Thus there has not been a universal agreement. Moreover, most of the studies have been in the developed economies. Thus can the findings of those studies (Aivazian et al., 2001; Al-Haddad, et al., 2011) be replicated in developing countries such as Kenya? The questions therefore to be asked were: Should the firm pay out money to its shareholders, or should the firm take that money and invest it for its shareholders? If a firm decides to pay a dividend, then what factors will it influence it to pay dividends? What are the key KPIs (Key Performance Indicators) that will influence the firm to pay dividends? What are the KPIs that will enable the firm justify itself to pay dividends to its shareholders? All these questions remain a puzzle for management as there is no one-size-fits all with dividend policy.

III. OBJECTIVES OF THE STUDY

a) General objective

The study sought to assess the financial determinants of dividend payout of listed firms in Kenya.

b) Specific objectives

The research was guided by the following specific research objectives:

i. To determine whether firm's profitability affects the dividend payout decision among listed companies in Kenya.

ii. To determine whether firm's cash flow affects dividend payout decision among listed companies in Kenya.

iii. To determine whether firm’s sales growth affects dividend payout decision among listed companies in Kenya.

iv. To determine whether firm's market value affects dividend payout decision among listed companies in Kenya.

IV. THEORETICAL FRAMEWORK

The main theories reviewed in this section include the efficient market hypothesis theory and the dividend theory.

a) Rationality and Efficient Market Hypothesis (EMH) Theory

According to Kiplangat et al., (2010) an efficient market as one where a large number of rational investors intent to maximize profit, compete with each other in trying to predict future values of individual securities, and one where current information is almost available to all participants. In an efficient market, the security prices are presumed to reflect the effects of information based on past, current and future events. Kiplangat et al., (2010) further examined determinants of investor confidence in Kenya and found that daily price movements in the NSE are significantly related to investor sentiment since the Equity Market Sentiment Index (EMSI) captured capital market related news and events.

b) Information Content/ Signaling Theory

Bhattacharya (1979), John and Williams (1985) and Miller and Rock (1985) developed this theory. It states that investors regard dividend changes as signals of management’s earnings forecast. It states that payment of dividends convey information to the market with respect to the management expectations of future earnings. A change in dividend up or down is viewed as a signal that management expects future earnings to change in the same direction thus an increase in dividends is a positive signal that should lead to a rise in share prices and vice versa. However, Modigliani and Miller (MM) argued differently. They noted the fact that companies are reluctant to reduce dividends and hence do not raise dividends unless they anticipate higher earnings in the future. They argued that a higher than expected dividend increase is a signal that the firm’s management is forecasting poor earnings in the future. Therefore, investor’s reactions to changes in dividend policy do not necessarily mean that investors prefer dividend to retained earnings. Rather, they argued the price changes following dividend actions simply indicate that there is important information or signaling content in dividend announcements.

V. LITERATURE REVIEW OF THE DETERMINANTS OF DIVIDEND PAYOUT

a) Firm Profitability

A study by Baker, Powell & Veit in 2002 revealed that the current year earnings and previous year’s dividends influence the dividend payment pattern of the firm. This conclusion was reached at by carrying out mathematical model on the
dividend paid out by US firms and hence the conclusion that the dividend policy adopted by firms has an impact on the market value of the firm. These studies were further supported by study by Baker, Dutta and Gandhi (2007) in which by surveying managers of firms listed on the NYSE they concluded that future earnings and pattern of past dividends are the major determinants that influence the dividend policy adopted by firm from a possible 22 factors that were in the questionnaire used. Following this study numerous studies have been carried out to with the aim to find out that dividend policy does have an impact on the value of a firm and also on shareholders wealth maximization. Most of these studies have been done in the more developed markets. (Baker, Powell & Veit, 2002; Baker, Dutta & Gandhi, 2007).

b. Cash Flow

Arnott and Asness (2003) put forward that the positive relationship between current dividend payout and future earnings growth is based on the free cash flow theory. That is low dividends due to low growth which can be as a result of lower quality investments and also less ideal projects even though there is some excess free cash to use. This they said was much the case for firms with limited growth opportunities. By paying dividends it would mean managers raising funds which may put them under more scrutiny and thus reduce conflicts of interest. Murekefu and Ouma (2012), pointed to an assumption that since investments of lower quality lead to low future earnings growth but due to diminished conflicts of interest it will result into better future earnings growth and better quality projects for investing. This therefore means that by paying dividends it reduces free cash flow which in turn improves firm’s performance (Arnott & Asness, 2003; Adaoglu & Lasfer, 2011).

c. Sales growth

There is exists a direct link between growth and financing needs: rapidly growing firms have external financing needs because working capital needs normally exceed the incremental cash flows from new sales. Thus there is a significant negative relationship between historical sales growth and dividend payout. Growth in sales is used as proxies for the firm’s future prospects and investment opportunities. Growth in sales was found by Amidu and Abor (2006) to have statistically significant and negative associations with dividend payout ratios. This is indicative of the fact that, growing firms require more funds in order to finance their growth and therefore would typically retain greater proportion of their earnings by paying low dividend.

d. Market Value of the firm

There have been studies done on the emerging markets to establish whether dividends affect the market value of the firm. John (2013), carried out a study on Nigerian managers perception of factors influencing the dividend policy and came up with similar findings that pattern of past dividends, level of current earnings, current degree of financial leverage, availability of alternative source of liquidity all significantly influence the dividend policy decision adopted by the firm. All these studies have yielded to the same conclusion that dividends affect market value of the firm.

d. Dividend Payout Policy

The dividend policy of a company determines what proportions of the available earnings are to be distributed to equity holders by way of dividend and what proportion will be retained for taking up new investments. According to Davis (2006) dividend policy is in essence the framework which the Managers choose to pursue in deciding the quantum and pattern of the cash distribution to the shareholders over a period. The impact of a firm’s dividend policy is still an issue of contention. Capstaff et al., (2004) define dividend policy under the relevance theory that dividend policy is a practical approach which treats dividend payable as an active decision variable and retention only as residue.

VI. RESEARCH METHODOLOGY

a) Research Design

For this research study causal research design was used. Causal research design was used as the study sought to find the relationship between variables and thus determine the relationship between firm performance and dividend payout and thus explain whether there was a relationship that existed.

b) Target Population

The population for the study was all the listed companies in the NSE which are Sixty four in total (See Appendix I) as at 26th March 2016 targeting one senior employee representative from each of these companies.
c) Sampling Technique and Sample Size

The sample size in the study comprised of all the 64 firms listed on the NSE.

e) Data Collection Instruments

The study used primary data collection method and secondary data. Secondary data was collected from existing literature and reports. This was collected in electronic form and therefore a checklist was used so as to collect data on the listed firms’ names, the dividends paid, the total assets, revenues, and the net profit after tax as these are the variables that were used in the study. Primary data was collected using a questionnaire. The questionnaire was in the format of close ended questions.

f. Data Analysis

Regression analysis was used to establish the relationship between the independent and dependent variables. The model was as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 - \beta_3X_3 - \beta_4X_4 + \varepsilon \]

Where:

- \( Y \) = Dividend payout
- \( \beta_1, \beta_2, \beta_3, \beta_4 \) and \( \beta_5 \) represent the coefficients of firm performance
- \( X_1 \) = Profitability
- \( X_2 \) = Cash Flow
- \( X_3 \) = Sales growth
- \( X_4 \) = Market Value
- \( \alpha \) = Constant term indicating the level of performance in the absence of any independent variable (firm performance)
- \( \varepsilon \) = Error term: representing, other factors other than the above corporate governance which are not defined in the model.

VII. RESEARCH FINDINGS AND DISCUSSION

a. Pearson’s Correlation

The study sort to determine the relationship between the dividend payout decision and the factors that determine the payout decision (profitability, cash flow, sales growth and firm's market value). The correlation coefficient can range from -1 to +1, with -1 indicating a perfect negative correlation, +1 indicating a perfect positive correlation, and 0 indicating no correlation at all.

Pearson’s Correlation Coefficient Matrix

<table>
<thead>
<tr>
<th></th>
<th>Dividend payout</th>
<th>Profitability</th>
<th>Cash flow</th>
<th>Sales growth</th>
<th>Market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend payout</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>Pearson Correlation</td>
<td>.491</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.001</td>
<td></td>
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<tr>
<td>Cash flow</td>
<td>Pearson Correlation</td>
<td>.205</td>
<td>-.018</td>
<td>1</td>
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<tr>
<td></td>
<td>Significance</td>
<td>.186</td>
<td>.910</td>
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<tr>
<td>Sales growth</td>
<td>Pearson Correlation</td>
<td>.131</td>
<td>.361</td>
<td>.258</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.404</td>
<td>.017</td>
<td>.095</td>
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<tr>
<td>Market value</td>
<td>Pearson Correlation</td>
<td>.453</td>
<td>.249</td>
<td>-.106</td>
<td>.325</td>
</tr>
<tr>
<td></td>
<td>Significance</td>
<td>.002</td>
<td>.107</td>
<td>.500</td>
<td>.034</td>
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Note: Correlation is Significant at 0.05

All the independent variables profitability, cash flow, sales growth and market value correlate positively with dividend payout although at varying degrees. This shows that as profitability, cash flow, sales growth and market value change (decrease/increase), dividend payout also changes (decrease/increase) in a similar direction. When individual factors were considered, the results show there is a weak positive correlation between the dividend payout decision and the
factors that affected the dividend payout decision. The factor with the highest correlation was profitability ($r=.491$) followed by market value ($r=.453$). The value with the least correlation was sales growth ($r=.131$). Although Pearson Correlation test was carried out and it showed that there existed a significant relationship between the dependent and independent variables, it did not establish the direction of the linear relation between the variables and the strength of each. Thus regression test had to be carried out to test this further. Below are the results for the regression test. Considering the Objectives, relationship between dividend payout decision and the factors affecting the dividend payout decision.

### b. Model Summary and ANOVA

Table below shows the results for variations between the dependent and independent variables. R² is the coefficient of determination and shows how dividend payout is influenced by profitability, cash flow, sales growth and market value.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Change Statistics</th>
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<td></td>
<td>1</td>
<td>.691a</td>
<td>.477</td>
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<tr>
<td></td>
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<td>Std. Error of R</td>
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<td>the Estimate</td>
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<td></td>
<td>R Square Change</td>
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<td></td>
<td></td>
<td>F Change</td>
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<td>df1</td>
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<td>df2</td>
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<td></td>
<td></td>
<td>Sig. F Change</td>
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<td>F</td>
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</tr>
<tr>
<td>1</td>
<td>.477a</td>
<td>.422</td>
<td>0.57844</td>
<td>.477</td>
<td>8.680</td>
<td>4</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), marketvalue, cashflow, profitability, salesgrowth

b. Dependent Variable: Dividend payout

The coefficient of determination is such that $0 \leq r^2 \leq 1$, and denotes the strength of the linear association between $x$ and $y$. As shown in table , Pearson $r (= .691)^2 = .477$. The overall $p$ value for the null hypothesis (tests of significance of the model) that there is a significant relationship between dividend payout and its determinants. The $p$ value was .000 as shown in table above. This shows that the relationship between dividend payout and its determinants (profitability, cash flow, sales growth and market value) was significant i.e. $p < 0.05$. In addition, with R² of .477 for the model, this means that the independent variables in the model (profitability, cash flow, sales growth and market value) could offer about 47.7% explanation of the variance in the dependent variable dividend payout. This implies that variations in independent variables causes 47.7% change in dependent variable. But, the conservative explanation offered by adjusted R square was 42.2%. This is a weak relationship such that the predictors identified in this study are great influencers of dividend payout. The 57.8% remaining implies that there are other factors that affect dividend payout other than the factors identified in this study. Hence, this implies that profitability, cash flow, sales growth and market value impact on dividend payout positively and this numerical evidence is one strong enough to support the notion that there exists a strong relationship between the study variables. Furthermore, table below shows the ANOVA results which were done to test the model fit. The F statistic and its significance (p-value) are presented and interpreted.

<table>
<thead>
<tr>
<th>Table : ANOVA</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
</tr>
<tr>
<td>Regression</td>
<td>11.616</td>
</tr>
<tr>
<td>1 Residual</td>
<td>12.714</td>
</tr>
<tr>
<td>Total</td>
<td>24.331</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Dividend payout

b. Predictors: (Constant), Profitability, Cash flow, Sales growth and Market value

The results in table show that the F statistic was 8.680 and was significant at 5% level of confidence ($p = 0.000$). This means that the model was fit to explain the relationship between dividend payout and its determinants identified in this study i.e. profitability, cash flow, sales growth and market value.

c. Distribution of Coefficients

The table of coefficients shows the relationship between the variables and their influence on dividend payout. The influence is represented by Beta coefficients/weights which show the relative importance of independent variable in both standardized and unstandardized terms.
First, table shows that there was a positive relationship between all the independent variables except for sales growth. Profitability ($\beta = .513, t = 3.783$), cash flow ($\beta = .445, t = 2.685$), sales growth ($\beta = -.286, t = -.2031$) and market value ($\beta = .481, t = 3.592$) and dividend payout. This shows that the impact of profitability, cash flow, and market value on dividend payout was positive. Sales growth on the other hand had a negative impact on the dividend payout decision. Furthermore, the significance levels were analyzed. As shown in the table, all the variables had a significant relationship with dividend payout since the $p$-values were less than 0.05 i.e. $p < 0.05$. Overall, the consistency of regression coefficients on the predictors in the model suggest that these variables are important factors influencing dividend payout in firms listed at the NSE but at varying degrees. From the regression model the following regression equation is derived: Dividend payout ($Y$) = $-0.421 + 0.513X_1 + 0.445X_2 - 0.286X_3 + 0.481X_4 + \varepsilon$ where:

$X_1$ = Profitability  
$X_2$ = Cash Flow  
$X_3$ = Sales growth  
$X_4$ = Market Value  

Constant = $-0.421$, shows that if profitability, cash flow, sales growth and market value are all rated as zero or held constant; dividend payout would be a factor of $-0.421$.  
$X_1 = .513$, shows that one unit increase in profitability results in an increase in dividend payout by a factor of 0.513 and vice versa  
$X_2 = .445$, shows that one unit increase in cash flow results in an increase in dividend payout by a factor of 0.445 and vice versa  
$X_3 = -.286$, shows that one unit increase in sales growth results in a decrease in dividend payout by a factor of 0.286 and vice versa  
$X_4 = .481$, shows that one unit increase in market value results in an increase in dividend payout by a factor of 0.481 and vice versa  

From the above regression model, holding profitability, cash flow, sales growth and market value constant, dividend payout in the firms listed at the NSE would be a factor of $-0.421$. Thus, it can be seen that all the independent variables have a positive influence on the dependent variable (dividend payout) except for sales growth which has a negative relationship with the dividend payout decision. This study had not intended to establish a causal relationship between the factors and dividend payout but to show the strength of relationships.

From this we can conclude the below hypothesis statements:

$H_1$: Firm's profitability influences dividend payout decision among selected listed companies in Kenya.

$H_2$: Firm's cash flow influences dividend payout decision among selected listed companies in Kenya.

$H_3$: Firm's sales growth influences dividend payout decision among selected listed companies in Kenya.

$H_4$: Firm's market value influences dividend payout decision among selected listed companies in Kenya.
VIII. SUMMARY OF FINDINGS AND CONCLUSIONS

Using a simple linear regression model of the form $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 - \beta_3 X_3 - \beta_4 X_4 + \epsilon$ where $Y$ was dividend payout, $X_1 =$ Profitability, $X_2 =$ Cash flow, $X_3 =$ Sales growth, $X_4 =$ Market Value and $\epsilon =$ Error term. the study looked at financial determinants of dividend payout among sixty four (64) firms listed at the NSE. This study was guided by five theories: Rationality and Efficient Market Hypothesis (EMH) Theory, Information Content/ Signaling Theory, Dividend Irrelevance Theory of Modigliani and Miller, Agency Theory and Bird in the Hand Theory. Overall, the results showed that the determinants identified in this study namely profitability, cash flow, sales growth and market values have a significant impact on the dividend payout decision. The impact for all except the sales growth is positive and significant at 95% level of significance. This study concludes that the firm performance variables are major determinants in the firm’s decision to pay dividends. It can also be concluded from the findings that dividend policy impacts positively on firm performance/value. The relationship between dividend policy and firm performance/value is also strong and significant. It is therefore true that the performance of a firm affects its decision to payout dividend. All the firm performance variables have a positive effect on the dividend payout decision of the listed firms.

REFERENCES


