

## **Does Size Moderate the Relationship Between Financial Performance and Dividend Policy? Evidence from Firms Listed at the Nairobi Securities Exchange**

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### **Abstract**

*Managers continuously confront challenging choices regarding dividend, with varying strategic options having both good and bad effects on the company's financial performance. Therefore, this study sought to investigate the effect of financial performance on dividend policy of firms listed at the Nairobi Securities Exchange (NSE). The specific objectives of this study were to examine the effect of accounting based measures, market based measures and moderating role of firm size on financial performance of firms listed at the NSE. The study was anchored by signaling theory, free cash flow theory and agency theory. This study utilized descriptive survey research design. The study focused on 63 firms listed at NSE. A census of all firms listed at NSE was undertaken. Secondary data was used and was obtained from the Capital Markets Authority (CMA) and from the financial statements in the websites of the listed firms due to its availability. The study data was collected from the period between 2016 and 2020. The study further carried out multiple regression models to test the relationship between variables and the extent to which they influence each other. Data was presented using tables and figures. The findings revealed size moderated the nexus between financial performance and dividend policy.*

**Keywords:** *Financial performance, dividend policy, fixed effect model.*

### **1.1 Background of the Study**

The financial performance (FP) of a company is vital to its health and survival. The exemplary FP of a company represents its productivity and effectiveness in managing its operational, investment and financing capital (Naser & Mokhtar, 2014). Recent changes in the financial and economics fields have led firms to seek for methods and ways, which enable them to continue and achieve performance acceptable levels, especially performance levels which are financial in nature. According to Anandasayanan and Thirunavukkarasu (2016), dividend policy (DP) is considered important elements which enter

into the self-financing process and investment decisions of a company, that is, if those decisions depend on the operational activities' cash inflows, as well as the effects these decisions may have on the firm's available investment opportunities. Therefore, the FP of the company determines its DP decisions.

Financial markets are considered important components which represent the main means of communication between users of accounting information and corporations. Investors who mobilize savings and convert them into investments contribute in economic development, providing a solid base for the economy (Al-Nawaiseh, 2013). Amidu (2017) observes that firms seek to achieve profits by carrying out many activities, which they may find themselves with two options for the funds that they obtain: to either distribute part of the profit gained to investors as dividends or keep a percentage of the profit for later reinvestment in growth or expansion. Therefore, there is need to investigate how the FP of listed firms determines their DP.

Ouma (2018) observes that two important elements can determine the DP: one is the decision to either pay shareholders dividends from the profit gained or to retain the profits for future reinvestment purposes. According to Kanakriyah (2020), a financial manager has the responsibility of ensuring any benefit to the various shareholders is apportioned equally and fairly. DP decisions entitle that a balance is struck between the future growth of a firm and the payment of current dividend to shareholders of a firm. Therefore, a firm quoted at the NSE ability to pay dividends largely depends on its FP.

Most investors primarily assess the value of an investment on received returns, which are either in the form of dividends or interest. This therefore means that the decision that a firm makes in regards to its DP carries very important information, which is of value, to its investors. However, managers are increasingly being challenged to find ways to accumulate enough resources for growth by the expanding investment market in Kenya. For the

sustainable growth of a firm, striking a balance between the various competing interests is demanding. Therefore, a need to explore the nexus between FP and DP of firms is critical.

## **1.2 Research Problem**

The nexus between FP and DP has largely remained unresolved owing to mixed empirically findings. For companies with good corporate returns, it is more rational to respond to such financial results by allocating substantial cash dividends to the stockholders. A divergent argument by Rajan and Zingales (1995) suggests that large companies adopt a favourable DP whereby increased cash dividend is distributed in comparison to small companies which often experience more challenges in rewarding the investors.

Brealey and Myers (2017) describe DP as one of the unsolved top nine most challenging problems in financial literature. Listed firms, have continued to declare and pay dividends overtime. Dividends are paid out by most companies in the form of either cash dividends or bonus shares. When unexpected income is realized in some years, a one-off extra dividend is paid by organizations and is consistently paid in the subsequent years. Many listed firms have policies on dividend that are in line with the general practice in the industry. However, management is often faced with complicated decisions to undertake in regard to DP, with every strategic option demonstrating a prospect of impacting on the FP of an organization positively or negatively.

Al-Malkawi (2020) reckoned that the firm's DP by was dictated by cultural phenomenon, which is influenced by general economic conditions, opinions of the public, regulations, briefs, customs and perceptions including several other factors, all changing continuously and impacting differently diverse firm., As a result, a constant policy for all firms at all times cannot be formed. Shareholders locally only have the power to reduce and not to increase the amount declared by the directors to be shared as dividends. The profits that are made by corporations can either be distributed in form of dividends or reinvested back into

the company. The prevailing conditions and factors during a certain period guide a company in formulating its own DP.

A study by Musiega, Alala, Musiega, Maokomba and Egessa (2013) probed dividend payout policy determinants among non-financial firms listed at the NSE and established that firms' growth opportunities and the return on equity current earnings was positively correlated to dividend payout. However, the empirical study employed convenience-sampling method, which is subject to sample bias. Mbuva, Mwangi and Kaijage (2017) study examined the relationship between FP and DP and suggested that there was a statistically significant direct association between return on equity and DP. However, the results may not be conclusive as the respondents were purposively selected which could have led to a sample biasness.

Jepkemoi, Odoyo, Simiyu and Onyango (2019) study investigated the influence of FP on DP of commercial banks listed at the Nairobi Securities Exchange, Kenya, and revealed that dividend payout of the commercial banks listed at the NSE was not influenced by liquidity. However, the design used by the research was exploratory in nature and it inhibited generalization because of the small size of the sample used. Therefore, this study seeks to investigate the effect of FP on DP of NSE listed firms.

### **1.3 Research Objective**

The objective of the study is to determine the moderating role of size on the relationship between financial performance and dividend policy of firms listed at the Nairobi securities exchange.

### **2.1 Theoretical Literature**

The nexus between the financial performance, size and dividend policy is grounded on signaling and free cash flow and agency theories. Signaling theory propounded by Litner (1956) suggests that management often uses dividend policy to convey vital signals regarding the firm's future earnings. Ideally, the evidence of stock prices reactions to dividend variation

is largely viewed as being in tandem with the signaling argument; the validity of the dividend signal indicated by the performance of the eventual earnings remains unresolved, particularly when dividends are scaled down. Signaling theory is relevant in delineating the association between FP, firm size and DP. Whenever there is a permanent change in firm earnings, the DP also changes. The effect of changes in firm's profitability which subsequently affects the dividend payout ratio depends on the size of the firm. Large firms usually have substantial resources at their disposal and this has the potential of improving the FP which in turn augments the dividend payout. In sum, when firms become bigger, the link between FP and DP become stronger and vice versa for small firms.

This study is also anchored by free cash flow theory popularized by Jensen (1986). Free cash flows are the excess cash above the amount needed to facilitate the entire investments with satisfactory discounted future income streams using effectual interest rate. The organizations that have surplus free cash flows often experience agency challenges between managers and stockholders in comparison to those firms that face cash scarcities (Easterbrook, 1984 & Jensen, 1986). By deliberately meeting every contractual obligation, the management tends to misuse the surplus cash flows of by focusing on their individual interests. The nexus between FP and DP is grounded on the free cash flow theory. The rationale is that when the company makes increased profits, the managers allocate cash dividend to the stockholders therefore decreasing the likelihood of misusing surplus cash resources of the organization. This exercise validates the rationale as to why a positive variation in FP results into analogous variation in dividend payout ratio (Jensen, 1986). From a diverse viewpoint, Jensen and Meckling (1976) postulated that possession of a particular proportion of ordinary shares in the company by the management enables them run the affairs of the company in a more efficient manner since they have certain interests to safeguard. Else, any act of misuse of the organizational resources leading into loss will harmfully affect the managers' stake in the company.

## 2.2. Empirical Literature

An empirical investigation by Gill *et al.*, (2010) was undertaken using profitability (EBIT/Total assets), free cash flows, taxation, size, growth rate of a firm (measured in sales), market/book (MTB) value and leverage level as the predictors of DP. To measure the dependent variable, dividend payout ratio was used. The study relied on a sample size of 266 organizations selected from both service and manufacturing dominating segments in USA using simple random sampling technique. The results gotten from regression analysis showed that for the service sector affiliated firms; change in profitability levels, firm growth rate (change in sales), size and gearing ratio predicted the rate of dividend payments in a significant manner. Analogous results are documented by Dang, Ngo and Hoang (2021) as well as Sondakh (2019). However, the research was carried out in US with a different economic and institutional environment and the findings might not apply locally.

On the contrary, John and Muthusamy (2010) employed ordinary least squares (OLS) regression and Litner dividend models to confirm the hypothesized factors such as earnings after tax and firm size deemed to affect DP. To achieve this objective, the research relied on a sample size of 11 companies quoted at the Bombay stock exchange, Mumbai, which dominated the Indian paper industry. The research findings suggested that cash flow and price earnings ratio significantly influenced the DP. The findings also revealed that an increase in firm size strengthened the relationship between FP and DP. Consistent findings are reported Baker *et al.*, (2019) as well as Hauser and Thornton (2017). Conversely, market to book value, earnings per share, return on assets and liquidity ameliorated in value and this led to a significant plummeting effect on DP. Nonetheless, the study disregarded the intervening factors.

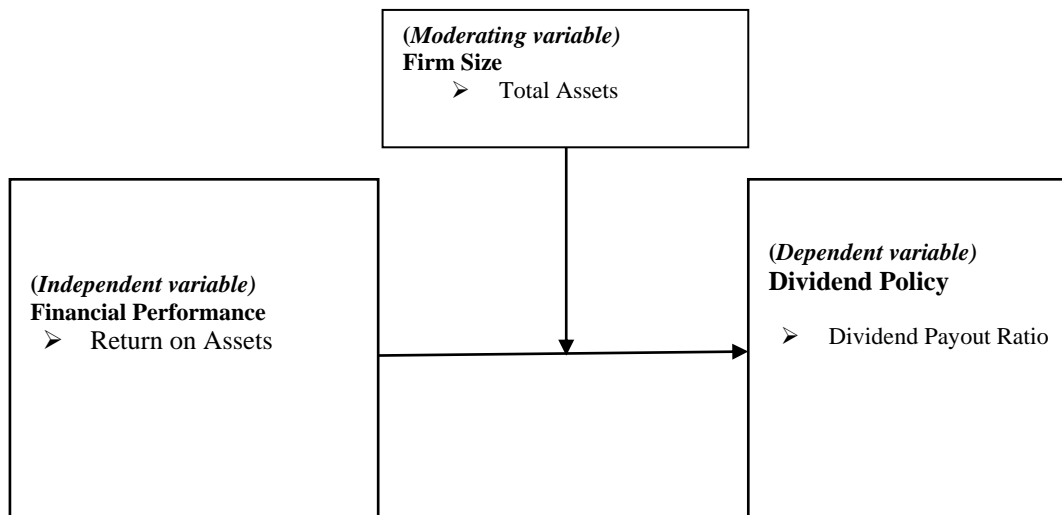
Using Tobit estimation model to probe some of the factors linked with cash dividend payments, Al-Malkawi (2017) examined the factors that take into consideration while choosing a specific kind of DP. The empirical investigation relied upon longitudinal data

from entities registered under Amman Stock Exchange in Jordan between 1990 and 2000 which is eleven year time frame. However, the study applied firm-level longitudinal data for the purposes of estimation. For analytical purposes, seven theoretical models were employed in the investigation therefore representing the vital hypothetical structure utilized for DP. The upshots suggest that the age, size and profitability of the firm considerably resulted into a positive change in DP. Similar findings were established by Bae *et al.*, (2021) as well as Al-Kayed (2017). However, the study was carried out in Asian context and the findings therefore may not apply locally.

## 2.4 Conceptual Framework

A conceptual framework is a map that helps the researcher pursues an investigation based on the interrelationship between the study variables (Regoniel, 2020). It shows the connection between the specific variables in a study mapping out the required actions in the course of the study.

Figure 2.1 shows the relationship between numerous variables. The amount to be dividends paid by a firm largely depends on its financial performance. Furthermore, the relationship between financial performance and dividend policy varies with size. An increase in size strengthens the link between financial performance and dividend policy and vice versa for small firms. The independent variable, financial performance was measured ROA while the dependent variable dividend policy was measured by dividend payout ratio. The moderating variable was firm size and was proxied by total assets.



**Figure 2.1: Conceptual Framework**

**3.1 Methodology**

The study adopted descriptive survey research design. Descriptive survey research design is applied in preliminary and exploratory studies to allow researchers to gather information and interpret it for the purpose of clarification (Orodho, 2015). Mugenda and Mugenda (2012) on the other hand posit that the purpose of a descriptive research is to determine and report a given phenomenon. Therefore, this study suited a descriptive survey research design SINCE the researcher’s main purpose was collecting and reporting data exactly the way it is presented by the respondents without any alterations.

**3.1.1 Data Sources and Variable Description**

The empirical investigation utilized secondary data collected with the help of data collection sheet. Secondary sources were used to collect data regarding FP (ROA and price earnings ratio), firm size (total assets) and DP (dividend payout ratio). This data was gathered from the Capital Markets Authority (CMA), and from the financial statements in the websites of the listed firms due to its availability. The study data was collected from the period between 2016 and 2020 using data collection sheet.

**Table 3.1: Operational Definition and Measurement of Variables**

Variable	Operational Definition	Scale	Measurement	Predicted Sign
<b>Financial Performance</b>	It is the process of measuring the results of a firm's policies and operations in monetary terms	ordinal	ROA	+



	and is measured by accounting and market based measures			
<b>Size</b>	The value of a firm’s assets, total sales and market equity. Firm size is a range and quantity of production capacity a firm possesses and the firm’s service diversity that can simultaneously be offered to numerous clients.	ratio	Log of total assets	+
<b>Dividend Policy</b>	The dividend policy of a company is the decision about the distribution of dividends to its shareholders. A dividend policy is a financial decision that involves deciding on the dividend payout ratio, the frequency of dividends and should they pay dividends at all or not	ratio	Dividend payout ratio	+

### 3.1.2 Empirical Model

The parameters of this study were estimated using panel regression models. Panel data is widely used since it gives increased precise inference of model parameters; it offers increased capacity for capturing complex of human behavior than a single time series or cross-section data; it is suited for testing and constructing more complicated behavioral hypotheses; It is important for controlling the effect of omitted variables; it uncovers dynamic relationships; it is capable of producing more precise predictions for individual results by pooling the data rather than producing predictions of individual results utilizing the data on the individual in question; it generates micro foundations for aggregate analysis of data and finally simplifying computation and statistical inference (Kothari, 2018). For estimation purposes; the model applied is as specified below;

$$DP_{it} = \beta_0 + \beta_1 FP_{it} + \beta_2 FS_{it} + \beta_3 (FP * FS)_{it} + \xi_{it} \dots \dots \dots (3.3a)$$

Where: DP = dividend policy;  $\beta_0$  = constant;  $\beta_{1-3}$  = coefficients; FS = firm size; *it*: is the cross sectional unit where  $i = 1 \dots N$ ,  $t$  is the time period where  $t = 1 \dots T$ ;  $\xi$  = error term.

**Table 4.1: Descriptive Statistics**

Variable	N	M	SD	Min	Max
<b>FP</b>	320	0.086	0.151	-2.020	0.470
<b>FS</b>	320	15.540	1.644	10.960	19.650
<b>DP</b>	320	0.195	0.263	-1.290	1.400

**Source: Study Data (2023)**

Table 4.1 presents univariate analysis of the variables that were utilized in the study. The average score of financial performance between the years 2016 to 2020 period for the 64

firms listed at the NSE was 0.086 which is comparatively low implying that the firms did not optimally utilize their assets to generate income during the period of the study. The standard deviation for financial performance was considerably high (SD = 0.151) suggesting greater variation among the listed firms on how well they utilized their resources in revenue generation.

The descriptive statistics also revealed during the period 2016 to 2020, the total assets had an average score of 15.540 which was moderately high. The standard deviation of assets was 1.644 confirming marginal disparity among the listed firms in terms of their asset base. The mean of dividend policy between 2016 and 2020 was relatively high (M = 0.195). This suggests that the investors were paid high dividends with respect to the aggregate amount of net income that the firms generated. Similarly, the standard deviation was high (SD = 0.263) showing high variability among the listed firms in terms of dividend pay-out ratio.

### 5.1 Study Findings and Discussion

To establish the link between the school administrative culture and students' academic performance, the null hypothesis specified below was tested.

*H<sub>03</sub>: Firm size does not significantly moderate the relationship between financial performance and dividend policy of firms listed at the Nairobi Stock Exchange.*

**Table 4.11: Financial Performance, Firm Size and Dividend Policy**

<b>Random Effect Generalized Least Squares (GLS) Regression</b>				
<b>DP</b>	<b>β</b>	<b>SE</b>	<b>z</b>	<b>p</b>
<b>Constant</b>	0.178	0.156	4.62	0.000
<b>FP</b>	0.721	0.095	1.03	0.303
<b>FS</b>	-0.003	0.011	-0.28	0.779
<b>FP*FS</b>	0.239	0.067	3.55	0.000
<b>R<sup>2</sup></b>	<b>Within</b>	0.025		
	<b>Between</b>	0.327		
	<b>Overall</b>	0.120		
<b>Number of Observations</b>	320			
<b>Number of Groups</b>	64			
<b>Wald chi2(3)</b>	21.77			
<b>Prob &gt; chi2</b>	0.000			

**Source: Study Data (2023)**

The findings of the moderating influence of firm size on the relationship between accounting based measures and dividend policy are presented in Table 4.11. The  $R^2$  confirmed that 12% of difference in dividend policy is collectively described by accounting based measures and firm size while the remaining 88% is elucidated by other factors not taken into account in the model. The overall generalized least squares model was significant as shown by Wald chi-square ( $\chi^2 = 21.77, p < 0.05$ ).

Based on the Random Effect Generalized Least Squares (GLS) Regression model, accounting based measures revealed an insignificant positive linkage with dividend policy ( $\beta = 0.721, z = 1.03, p = > 0.05$ ) while firm size was insignificantly negatively linked with DP ( $\beta = -0.003, z = -0.28, p = > 0.05$ ). In contrast, the interaction term (ABM\*FS) between accounting based measures and firm size ( $\beta = 0.239, z = 3.55, p = < 0.05$ ) was a positive significant predictor of dividend policy. This suggests that the linkage between accounting based measures and dividend policy became stronger as the firms became bigger. Based on the findings, the study rejected the third sub-null hypothesis ( $H_{03a}$ ), which stated that accounting based measures does not significantly moderate the relationship between accounting based measures and dividend policy.

The findings of the current study largely concur with those reported by Biger, and Tibrewala (2010) carried out using profitability, free cash flows, taxation, size, growth rate of a firm and leverage level as the predictors of dividend policy. The results showed that for the service sector affiliated firms; change in profitability levels, firm growth rate (change in sales), size and gearing ratio predicted the rate of dividend payments in a significant manner. Furthermore, the present findings are in line with those of John and Muthusamy (2010) who explored the moderating role of size on the relationship between financial performance and dividend policy. The findings revealed that an increase in firm size strengthened the relationship between financial performance and dividend policy.

## 5.2 Conclusions and Recommendations

Although the association between the financial performance, size and dividend policy has not been entirely or without a doubt explored, either theoretically or empirically in prior empirical works, the nexus has only been inferred in vast of studies. Despite the contradictory upshots, this study asserts that there is significant moderating effect of size on the relationship between financial performance and dividend policy. This suggests that size matters in augmenting the proposed relationship. Larger firms often post exceptional performance which in turn affects the dividend policy that a firm ultimately adopts.

The study recommends further empirical studies delving on several mediating factors such as cash holdings which outside the purview of the current study. This is because the relationship between financial performance and dividend policy is not always straightforward or direct, but is mainly determined by a continuum of the mediating factors. Majority of the prior empirical studies have been bivariate focusing only on the independent and dependent variables and this partly explains the mixed findings in most of the empirical inquiries.

Future studies should consider using diverse constructs or indicators to operationalize financial performance, size and dividend policy. This is because these are multi-dimensional constructs with a range of metrics which can be used to operationalize these variables. Future studies can operationalize performance using non-financial performance metrics such as customer satisfaction, internal business processes and learning and growth. Size can also be represented the number of employees or sales turnover while dividend policy can proxied by dividend yield.

Furthermore, future studies can utilize cross-sectional data sets and apply other estimation techniques such as cross-sectional and time series instead of the balanced panel data. A longer study period can also be considered as well as a larger sample size. This has the potential of giving the credible results. Finally, comparable studies can be simulated in other sectors of the economy such as state-owned corporations and other corporate sectors apart

from the listed firm. This will aid in explaining whether the institutional and cultural disparities lead into varied empirical findings and conclusions.

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