

**ANALYSIS OF DIVIDEND POLICY AND STOCK RETURN IN NAIROBI SECURITIES
EXCHANGE, KENYA.**

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ABSTRACT

Global Securities Exchange witnessed slow performance between 2009 and 2018. Foreign direct investment declined in developed countries and also in Africa. In Kenya, Nairobi Securities Exchange Witnessed Volatile performance during the study period with 2011 and 2015 revealing bear run. During the period of volatility, making investment decisions by investors may have been challenging. Performance indicators such as NSE 20 Share Index, market capitalization, equity turn over, liquidity of stocks all were not stable and witnessed downward trend within the study period. The study sought to analyze the relationship between dividend policy and stock return in Nairobi Securities Exchange. The study is anchored on stock return theories and dividend policy theories .Reviewed literature revealed varied results. Studies reviewed used different methodology and variables arriving at conflicting results. Limited studies reviewed conform to the present study. The study adopted longitudinal research design; the target population was Nairobi Securities Exchange. Secondary data was drawn from Nairobi Securities Exchange. Results revealed that dividend policy significantly influence stock return ($R^2=0.1882$, $p=0.024<0.05$), consequently, dividend yield has an inverse significant relationship on stock return in Nairobi Securities Exchange, ($p=0.007<0.05$). Result of this study is useful to policy makers, investors, regulators and finance analyst.

Key words: Investment, Dividend Policy, dividend yield, payout ratio, dividend per share, Stock return.

JEL Classification: E22, G12, G12, G12, G12, G12

1. Introduction

The Nairobi Securities Exchange 20 Share Index recorded high of 5,346 points during the first quarter of the year but dipped to 4,040 points in December 2015, representing 2.0 percent compared to December 2014. The total number of shares traded went down to 6,812 million from 8,134 million reported in 2014 (The Kenya Economic Survey, 2016). Further, NSE 20 Share Index recorded 3,982 points during the first quarter of 2016 but declined through the fourth quarter to 3,186 points in December 2016, dropping by 2.1 percent compared to December 2015. The total number of shares traded decreased from 6,812 million in 2015 to 5809 million in 2016 resulting to a corresponding drop in equity turn over from ksh.209 billion in 2015 to ksh.147 billion in 2016 (Kenya Economic Survey, 2017).

Figures 1 confirm that the NSE 20 Share Index was erratic (irregular) during the study period. During such times making investment decisions either by individual investors or institutional investors may be very challenging. There is a peak in NSE 20 Share Index in quarter 25 which is the first quarter of the year 2015 followed by a sharp drop towards last quarter (quarter 28) of 2015; this coincides with the bear run in 2015. There is also a sharp drop of NSE 20 Share Index between quarter 9 and quarter 12 (year 2011) which also coincides with the 2011 bear run. It is from this background that the study sought to establish relationships between dividend policy and NSE 20 Share index in a bid to guide investors, policy makers and regulators when making decisions about Nairobi Securities Exchange during volatile periods in the burse. Figure 1 shows NSE 20 Share Index trend for 2009 to 2018 (Quarter 1 to Quarter 40).

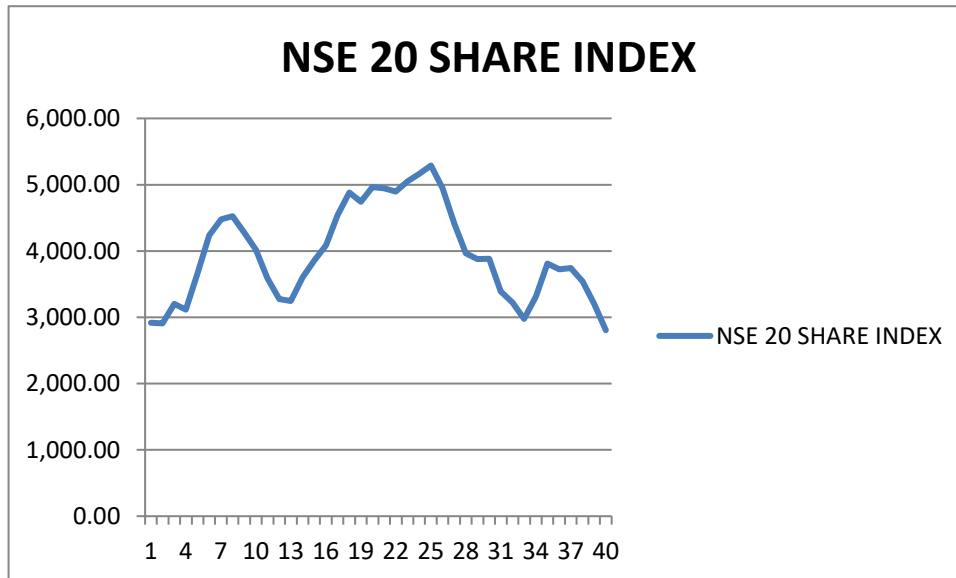


Figure 1: NSE 20 Share Index trend for 2009 to 2018(quarter 1 to quarter 40)

Source: Nairobi Securities Exchange Data bases 2009 – 2018

In 2012, the NSE 20 Share Index increased by 29 percent to close at 4,133.02 points from 3,205.02 points in 2011 which was an indication that the market recovered from a slump in 2011. Both FTSE, NSE Kenya 15 Index and FTSE NSE Kenya 25 Index increased by 39 to close at 125.75 points and 128.46 points respectively 2016 (Kenya Economic Report, 2011). With observed volatility witnessed during the study period, analysis of relationship between dividend policy and stock return became essential

Furthermore, reviewed studies revealed mixed results concerning the association between dividend policy and stock return in Nairobi Securities Exchange; Kamini and Malhotra (2013) used correlation, multiple regression, linear regression, and secondary data; they asserted that dividend yield has a significant negative association with company's stock prices. Furthermore, results confirm observations by Al-Masum (2014) who used panel data and opined that there exists a significant inverse association between dividend yield and prices of stocks. However, in South Africa, Nicol (2013) used explanatory and descriptive design and revealed contradicting results by observing that dividend yield influences return on stocks positively. Furthermore, Kamini and Malhotra (2013) observed that dividend per share does not influence prices of

shares. On the contrary, Garba (2014) used Pearson moment correlation and annualized weekly secondary data and revealed that dividend per share influence stock return of the companies positively. These studies however did not use time series analysis; quarterly data were not used; the studies were done at the firm level and were done using different methodologies and in different countries. Therefore, the present study sought to establish the relationship between dividend policy and stock return in Nairobi Securities Exchange in Kenya.

2. Theoretical Background

Dividend decision is the decision by firms to pay part of their net profit to shareholders as dividends or to retain part of the net profits or all of it and plough it back to the business. Empirical studies and theory link dividend payments with stock return and value of the firm. It is from this background that this study sought to analyze dividend policy and stock return amidst unstable movement of NSE 20 Share Index in the bourse. From theoretical perspective, Modigliani and Miller (1961) postulated that share prices, firm's value and cost of capital does not depend on dividend policy of a firm. They argued that, when debt finance increase, the cost of capital also decreases, being that there is absolutely no equity financing, dividends cannot be used to improve a company's share prices or its value. Modigliani and Miller's (1961) assertions contradicted Lintner (1956), Gordon (1962), and Walter (1982) who proposed that dividend policy is relevant. However, according to Pandey (2005), Modigliani and Miller (1961) theory had unrealistic assumptions such as investors were assumed to be operating in perfect capital markets, no transactions and floatation costs, no taxes, the firm has rigid investment policies, and that there is no risk of uncertainty. Despite these, no clear agreement has been reached conclusively to give direction on whether dividend policy affects stock return or company's value hence it has remained a puzzle.

3. Research Hypothesis

H₀₁: Dividend per share has no significant relationship with stock return in Nairobi Securities Exchange.

H₀₂: Payout ratio has no significant relationship with stock return in Nairobi Securities

H₀₃: Dividend Yield has no significant relationship with stock return in Nairobi Securities

4. Data Methods

The stage of collecting data in research is a very important stage, in a quantitative study where secondary data is involved, it is essential to ensure reliability by sourcing data from official and reliable sources or documents. Data collection depends on the type of research design, sampling methods and procedures, presence or existence of control variables in the study and lastly is managing and dealing with missing data (Herman *et al.*, 2019). Some of the considerations in data collection stage are the cost of data collection, the practicality of the proposed method of data collection, if samples are involved, always ensure that samples are representative of the entire population under study and that bias are minimized as much as possible to avoid making wrong inferences and generalizations (Chinelo, 2016). Secondary time series data in the present study were collected from Nairobi Securities Exchange (NSE) and The Central Bank of Kenya (CBK). Secondary data with quarterly payout ratio, quarterly Dividend Per Share (DPS), quarterly Dividend Yield (DY), and quarterly NSE 20 share indices for the ten-year study period (2009-2018) sourced from NSE were used in this study. Given that Central Bank of Kenya (CBK) and Nairobi Securities Exchange (NSE) are reliable and reputable bodies in the country, the data sourced from them are expected to be accurate and authentic.

The study adopted longitudinal research design. Data analyses were done using Stata software. Quarterly aggregate data from 2009 to 2018 were drawn from Kenya National Bureau of Statistics, Central Bank of Kenya, and Nairobi Securities Exchange. The secondary data was transformed to their natural logarithms to attain standardization and then differenced to ensure stationarity.

4.2. Model Specifications

A model developed to establish a relation between dividend policy (X's) and stock Return (Y) in Nairobi Securities Exchange.

$$Y_{t-1} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_{3t} + \beta_4 X_{4t} + e$$

Where:

Y_{t-1} = NSE 20 Share Index at quarter t,

β_0 = Constant coefficients,

β_1 = coefficient of dividend per share (DPS),

β_2 = Coefficient of payout ratio (POR),

β_3 = coefficient dividend yield (DY),

X_{t-1} = dividend per share at time t,

X_{2t-1} = payout ratio at time t,

X_{3t-1} = dividend yield at time t,

e_t = error term at time t.

4.3 Diagnostic Tests

Eyduran and Ozdemir and Alarslan (2005) define diagnostic statistics as methods used in detecting problems which may be encountered in model or data set. In this study, stationarity tests, Pearson's correlation analysis, multicollinearity tests, autocorrelation and normality tests are used to know data characteristics that could interfere with study results and corrective measures were taken to arrive at valid results that could be generalized.

4.3.1. Stationarity Test

In a time series study, data are first transformed (standardized) by getting their natural logarithms and their differences before proceeding with analysis; when stationarity is not achieved before data analysis, the results may be considered invalid hence may not be used to make inferences and generalizations (Granger & Newbold, 1974, Gujarati, 2006). Most researchers employ the first difference approach, mainly as a result of Nelson & Plossers' (1982) work in which they argued that many macroeconomic time series use difference stationarity and not trend stationary. Granger & Newbold (1974) refer to results obtained from regressions that contain non-stationary data as spurious regression results which are empirical results with high relationship strengths and reduced Durbin-Watson, which can be seen as very good results but are of no use (Gujarati, 2006). Table 1 to Table 4 therefore reveal stationarity tests of differences of natural logarithms of NSE 20 Share index, Dividend Yield, Dividend per Share, payout ratio Interest Rate, Gross Domestic Product (GDP) and Inflation.

Table 1 Stationarity test for NSE 20 Share Index

| | |
|--------------------------------------|--------------------|
| Dickey – Fuller test for unit root | Number of obs = 38 |
| -----Interpolated Dicker-Fuller----- | |

| | Test | 1% Critical Value | 5% Critical Value | 10% Critical Value |
|------|--------|-------------------|-------------------|--------------------|
| Z(t) | -3.195 | -3.662 | -2.964 | -2.614 |

Mackinnon approximate p-value for z(t) = 0.0203

Table 1 reveals that unit root test for NSE 20 Share Index is stationary after first differencing. On the other hand the unit root test showed non-stationarity at level. Stationary data reveal that the data are stationary around zero with constant mean and increased variance over time. Furthermore, this can be confirmed by looking at the absolute value of test statistics which is -3.195 and it is more than absolute value of 5% of critical value which is -2.964 and also more than absolute value of 10% critical value which is -2.614.

Table 2. Stationarity test for Payout Ratio

.dfuller LAGPOR

| Dickey – Fuller test for unit root | | Number of obs = 38 | | | |
|--------------------------------------|-----------|--------------------|-------------------|--------------------|--|
| -----Interpolated Dicker-Fuller----- | | | | | |
| | Test | 1% Critical Value | 5% Critical Value | 10% Critical Value | |
| | Statistic | Value | Value | Value | |
| Z(t) | -7.390 | -3.662 | -2.964 | -2.614 | |

Mackinnon approximate p-value for z(t) = 0.0000

Table 2 reveal that unit root test for Payout Ratio are stationary after first differencing while at level, the unit root test shown non-stationarity. Stationary data reveal that the data is stationary around zero with constant mean and increased variance over time. Furthermore, this can be confirmed by looking at the absolute value of test statistics which is -7.390 and it is more than absolute value of 5% of critical value which is -2.964 and also more than absolute value of 10% critical value which is -2.614.

Table 3. Stationarity test for Dividend Yield

.dfuller LAGDY

| Dickey – Fuller test for unit root | | Number of obs = 38 | | | | | |
|--------------------------------------|--------|--------------------|--------|----------|--------|----------|--|
| -----Interpolated Dicker-Fuller----- | | | | | | | |
| Test | 1% | Critical | 5% | Critical | 10% | Critical | |
| Statistic | Value | | Value | | Value | | |
| Z(t) | -4.684 | -3.662 | -2.964 | | -2.614 | | |

Mackinnon approximate p-value for z(t) = 0.0001

Table 3 reveal that unit root test for Divided Yield are stationary after first differencing while at level, the unit root test shown non-stationarity. Stationary data reveal that the data is stationary around zero with constant mean and increased variance over time. Furthermore, this can be confirmed by looking at the absolute value of test statistics which is -4.684 and it is more than absolute value of 5% of critical value which is -2.964 and also more than absolute value of 10% critical value which is -2.614.

Table 4. Stationarity test for Dividend Per Share

.dfuller LAGPOR

| Dickey – Fuller test for unit root | | Number of obs = 38 | | | | | |
|--------------------------------------|--------|--------------------|--------|----------|--------|----------|--|
| -----Interpolated Dicker-Fuller----- | | | | | | | |
| Test | 1% | Critical | 5% | Critical | 10% | Critical | |
| Statistic | Value | | Value | | Value | | |
| Z(t) | -6.269 | -3.662 | -2.964 | | -2.614 | | |

Mackinnon approximate p-value for z(t) = 0.0000

Table 4 reveal that unit root test for Dividend per share are stationary after first differencing while at level, the unit root test shown non-stationarity. Stationary data reveal that the data are stationary around zero with constant mean and increased variance over time. Furthermore, this can be confirmed by looking at the absolute value of test statistics which is -6.269 and it is more than absolute value of 5% of critical value which is -2.964 and also more than absolute value of 10% critical value which is -2.614.

4.3.2. Multicollinearity Test

Before data analysis, it is always important to check data for multicollinearity effects. When data has issues of multicollinearity, the data is considered redundant and overlapping. When multicollinearity increases, it becomes challenging to explain the associations between the variables under study hence it is not easy explaining effects of any of such variables to arrive at inferences and conclusions (Wonsuk *et al.*, 2014, Hair *et al.* 1998).

Adeboye, Fagoyinbo and Olatayo (2014) opined that Multicollinearity is related to standard error, multicollinearity always cause challenges in regression process. When there is Multicollinearity problems, standard errors may appear unreasonably big, most of the parameter estimates may be insignificant and if there may be some level of significant associations, they may be those that are unexpected. However, complete elimination of multicollinearity is impossible hence the most important task in research is to try to reduce the level or degree of multicollinearity to arrive at valid results (Neter, Wasserman & Kutner 1989). Most scholars advice that researchers should always check possibility of multicollinearity of data before using the data in their studies.

The (VIF) analysis was used to test for possibility of multicollinearity; the test was conducted on all variables excluding variables with an insignificant relationship with the dependent variable. Results in Table 5 shows that the payout ratio has the highest VIF number hence co-linearity is a concern and it was excluded in the last model by elimination method.

Table 5. Multicollinearity test amongst Dividend Policy Factors

| Variable | VIF | 1/VIF |
|--------------------|----------|----------|
| Payout Ratio | 6.40E+06 | 0 |
| Dividend Per Share | 753301.6 | 0.000001 |
| Dividend Yield | 1.010000 | 0.990054 |
| Mean VIF | 3.03E+06 | |

Table 6 reveals that since VIF values are less than 10, collinearity is of no concern. For final measurements using regression analysis, the payout ratio was excluded and independent variables remained two.

Table 6. Multicollinearity Test without Payout Ratio (POR)

| Variable | VIF | 1/VIF |
|--------------------|------|----------|
| Dividend Per Share | 1.03 | 0.970558 |
| Dividend Yield | 1.01 | 0.993229 |
| Mean VIF | 1.02 | |

4.3.3. Autocorrelation

Many statistical tests always hold that errors in statistical models are independent of each other, meaning that errors are not correlated at all. When the said assumption is not achieved in a time series analysis, then such errors are considered to be auto correlated. Since time series analysis is done by collecting data from the same participant at several points in time, and not from several participants at a single point in time, assuming that errors are independent may not be true in most of the statistical analysis. When this happens, the results of the analysis, their inferences and generalizations may be misleading, unnecessary, useless and hence corrective measures about the same is imperative (Bradly & Sean, 2006). Table 3.13-3.18 show Durbin _ Watson statistics. Post regression command “dwstat” was used in stata 8. Durbin_ Watson statistics in Table 7 can be interpreted using d ; d_1 and d_u are reported in the table. These numbers are called critical values. Durbin_ Watson statistics have four different regions that have different meanings. The regions stretch along a number line between 0 and 4. The four regions are positive serial correlation, indeterminate, no serial correlation, indeterminate and negative serial correlation (Nelson, 2006). Values between 0 and d_1 and between $4-d_1$ are indicative of serial correlation (at 95% confidence level) value between d_u and $4-d_u$ and $4-d_1$ are indeterminate, that is, they may or may not indicate a serial correlation (statistics do not reach the 95% confidence level in these areas).

Table 7. Serial Autocorrelation test for NSE 20 Share Index, dividend yield and dividend per share

| Source | Ss | Df | MS | Number of obs | = | 39 |
|--------|----|----|----|---------------|---|----|
|--------|----|----|----|---------------|---|----|

| | | | | | | |
|----------|-------|------------|-----------|---------------|-----------|----------------------|
| | | | | F (2, 36) | = | 4.17 |
| Model | | .046628113 | 2 | .023314057 | Prob > F | = 0.0235 |
| Residual | | .201177921 | 36 | .005588276 | R-squared | = 0.1882 |
| | | | | Adj R-squared | = | 0.1431 |
| Total | | .247806034 | 38 | .006521211 | Root MSE | = .07475 |
| NSE20 | SHARE | Coef. | Std. Err. | T | P> t | (95% Conf. Interval) |
| INDEX | | | | | | |
| DIVIDEND | YIELD | -.3417788 | .1194082 | -2.86 | 0.007 | -.5839499 .0996078 |
| DIVIDEND | PER | -.0413046 | .1542002 | -0.27 | 0.790 | -.3540371 .2714279 |
| SHARE | | | | | | |
| _cons | | .0036117 | .0120971 | -0.30 | 0.767 | -.0281458 .0209224 |

.dwstat

Durbin-Watson d-statistic (3, 39) = 1.237281

Table 7 reveal serial autocorrelation test for NSE 20 Share Index, dividend yield and dividend per share. Durbin_ Watson test statistics tests the null hypothesis that residuals from ordinary least squares regression are not auto correlated against the alternative hypothesis that the residuals are AR1 process. The Durbin _Watson statistics ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive correlation; a value towards 4 indicates negative autocorrelation. Table 3.13show that d statistics is 1.24 and n =3, k= 39. The d statistics is neither closer to 0 nor closer to 4. It is concluded that the d statistics is closer to 2 hence NSE 20 Share Index, dividend yield and dividend per share show no serial autocorrelation.

4.3.4. Pearson's Correlations Analysis.

The results in Table 10 reveal a negative association between of NSE-20 Share Index and payout ratio, negative relationship between NSE- 20 share index and dividend yield, negative relationship between NSE-20 Share Index and dividend per share, positive relationship between payout ratio and dividend yield and positive relationship between dividend yield and dividend per share.

Table: 8. Pearson's Correlations Analysis

.pworth LAGNES20 SHAREINDEX LAGPOR LAGDY LAGDPS, sig

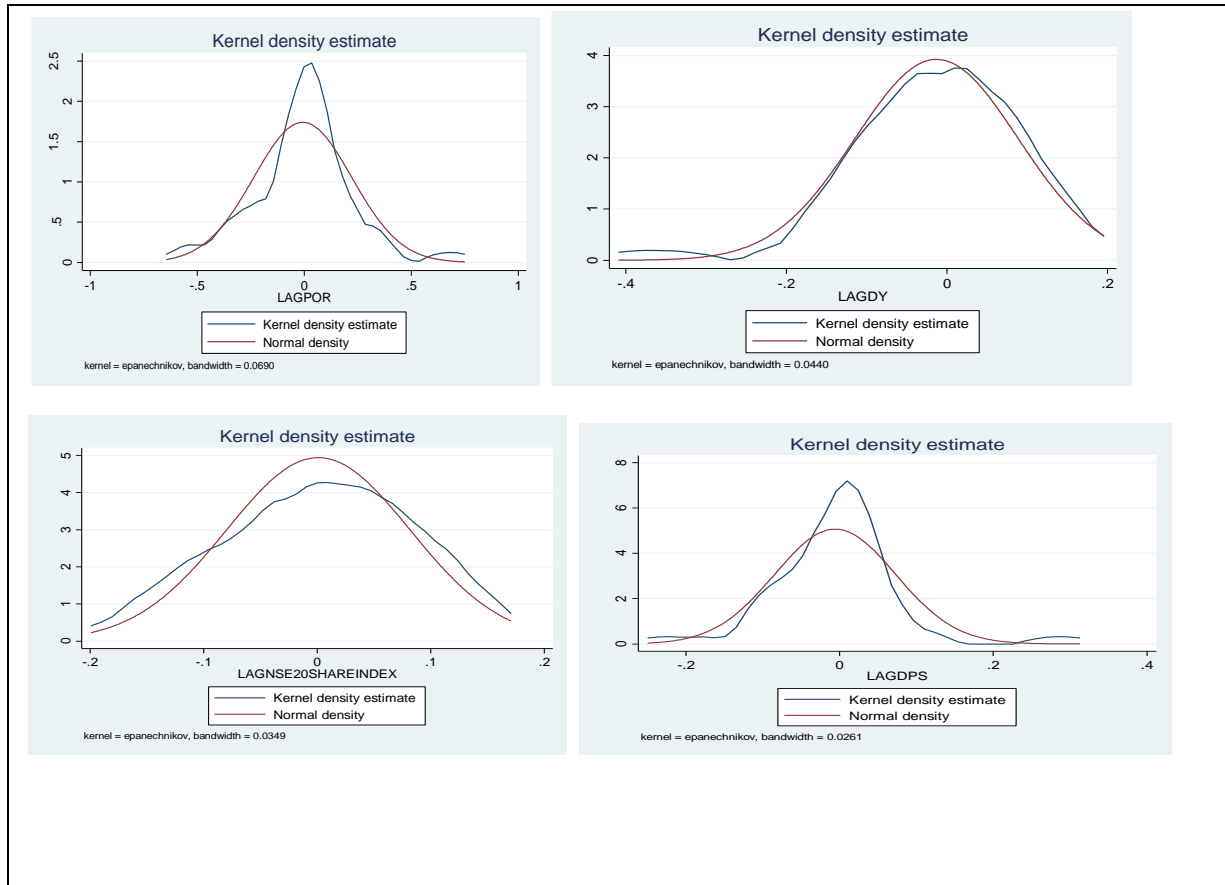
| | LAGNSE- X | LAGPOR | LAGDY | LAGDPS |
|--------------------------|----------------------|------------------|------------------|---------------|
| LAGNSE20SH- X | 1.0000 | | | |
| LAGPOR | -0.1818 0.2679 | 1.0000 | | |
| LAGDY | -0.4319 0.0060 | 0.0823 0.6185 | 1.0000 | |
| LAGDPS | -0.0584 0.7239 | 0.4924 0.0014 | 0.0422 0.7987 | 1.0000 |

4.3.5. Normality Test

Das and Imon (2016) postulated that in statistical analysis, it is normal to assume that the data that a research will be using in analysis is normal. If such assumptions are not achieved because of one thing or the other, then generalizations and conclusions may not be valid. It is hence imperative to perform normality test of the data to be used before performing statistical analysis or else the researcher risk drawing incorrect conclusions. Normality can be assessed either

visually or by performing normality tests. Before analysis was done, the data were tested for normality as shown below.

Table: 9. Normality Test for NSE 20 Share Index, dividend yield, dividend per share and payout ratio



Source: Field Data 2019

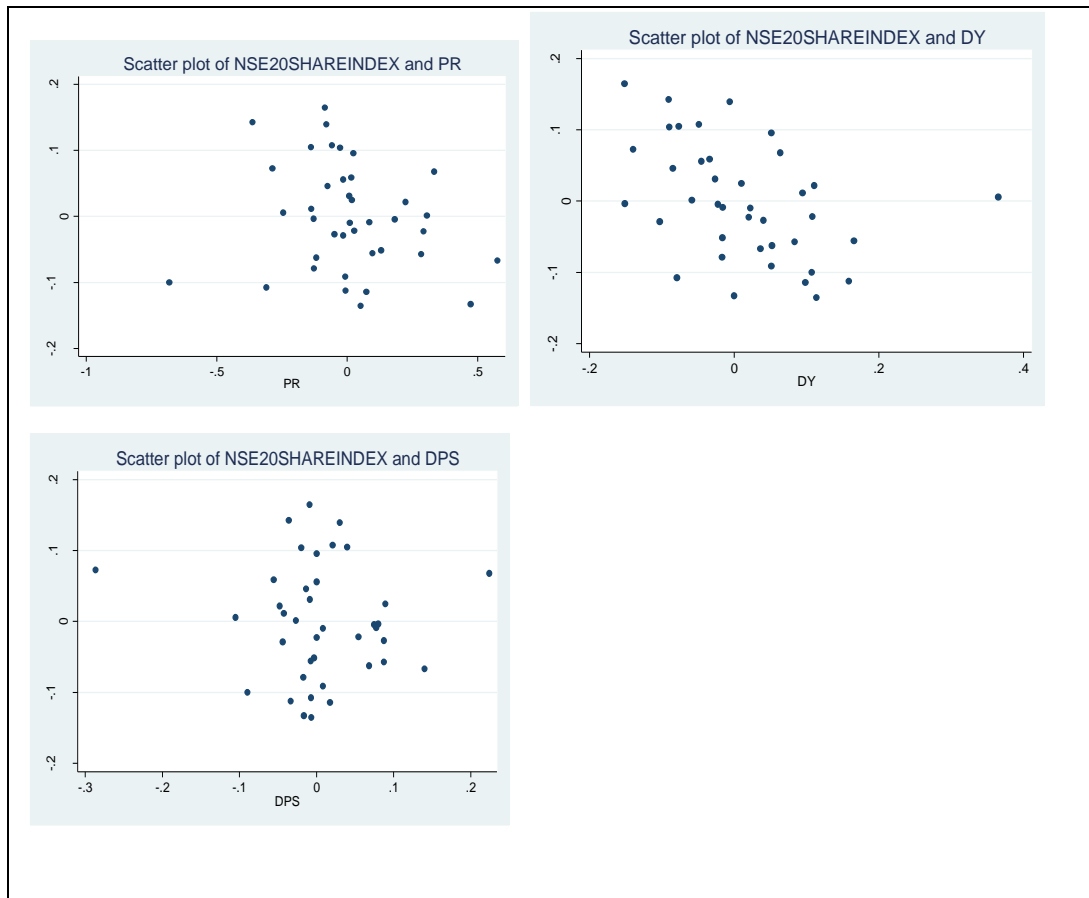
Table reveal that Kernel density estimate for differenced data for NSE 20 Share Index, dividend yield, dividend per share, payout ratio are all normally distributed, this can be seen by Kernel density estimate with diagrams which are bell shaped. Many of the statistical procedures such as correlation, regression, t tests, and analysis of variance, parametric tests are based on the assumption that the data are a normally distributed, that is, it is assumed that the populations from which the samples are taken are normally distributed. Normality should be taken seriously, when these assumptions do not hold, it not possible to draw accurate and reliable inferences about reality (Ghasemi & Zahediasl, 2012)

4.3.6. Testing for the Assumption of Linearity

Michael and Dennis (2005) postulated that scatter plots refers to plots that are designed to reveal the association between two variables. They opined further that among all data graphs, scatter plots were introduced last in research. They explained that scatter plots are necessary for researchers to study the relationships between bivariate variables distinctively and directly. There are quite number advantages of scatter plots over other forms of graphs used in research; there is the possibility of adding smoothening lines and curves which passes among them (Michael & Dennis, 2005). The term scatter plot was introduced in research by Herche's (1833). He constructed the scatter plots and suggested their use for smoothing data (Lambert 1967). Tables 3.20 shows the spread of the NSE-20 Share Index and dividend yield, dividend per share, payout ratio, Gross Domestic Product, interest rate, inflation.

Scatter plots for NSE-20 Share Index, dividend yield, dividend per share, payout ratio.

Table 10: Testing for the Assumption of Linearity



Show Scatter plot of NSE-20 Share Index and dividend yield, dividend per share, payout ratio, Gross Domestic Product, interest rate and inflation. The scatter plots reveal that spread of NSE 20 Share Index and payout ratio suggests a negative linear relationship, spread of NSE 20 Share index and dividend yield shows a negative linear relationship, spread of NSE 20 Share Index and dividend per share suggests positive linear relationship, spread of NSE 20 Share Index and interest rate shows no linear relationship and spread of NSE 20 Share Index and infaltion shows a negative linear relationship.

5. Results

Relationship between dividend policy and stock return in Nairobi Securities Exchange.

Hypothesis stated that there is no relationship between dividend policy and stock return in Nairobi Securities Exchange. To test this hypothesis, data were first transformed by calculating the first differences of their natural logarithms. The transformation enabled the data to be stationary. The first differences of natural logarithms of the NSE 20 Share index were regressed on the first differences of natural logarithms of two measures of dividend policy namely, dividend per share, and dividend yield. Table 11 presents the relationship between dividend policy and NSE 20 Share Index over 10 year period.

Table 11: Relationship between dividend policy and twenty share Index

| | | | | | | |
|----------------|------------|-------|------------|---------------|------|----------------------|
| Source | Ss | Df | MS | Number of obs | = | 39 |
| | | | | F (2, 36) | = | 4.17 |
| Model | .046628113 | 2 | .023314057 | Prob > F | = | 0.0235 |
| Residual | .201177921 | 36 | .005588276 | R-squared | = | 0.1882 |
| | | | | Adj R-squared | = | 0.1431 |
| Total | .247806034 | 38 | .006521211 | Root MSE | = | .07475 |
| NSE20 INDEX | SHARE | Coef. | Std. Err. | T | P> t | (95% Conf. Interval) |

| | | | | | | |
|--------------------|------------|----------|-------|-------|-----------|-----------|
| DIVIDEND YIELD | -0.3417788 | .1194082 | -2.86 | 0.007 | -.5839499 | -.0996078 |
| DIVIDEND PER SHARE | -0.0413046 | .1542002 | -0.27 | 0.790 | -.3540371 | -.2714279 |
| _cons | -0.0036117 | .0120971 | -.30 | 0.767 | -.0281458 | .0209224 |

Source: NSE Quarterly data 2009-2018

The result in Table 11 reveals that dividend policy has a positive significant relationship with stock return ($R^2 = 0.1882$, $p= 0.024$). From the findings in Table 13, coefficient of determination $R^2=0.1882$, $F(2, 36) =34$, $p=0.0235$. This shows that the probability of variance in stock return that is explained by measures of dividend policy which are dividend yield, and dividend per share is 18.82% however 14.31% variation in stock return could be explained by independent variables. The final equation for the model in Table 13 is given by Equation 1 (p-values in parentheses):

$$NSE20 - ShareIndex_t = -0.0036117 - 0.3417788DY_t - 0.0413046DPS_t \dots\dots\dots 1$$

(0.007)(0.790)

From Equation 1, -0.34177 change (negative) in dividend yield at time t will lead to a corresponding change in NSE -20 Share Index at time t by one unit and -0.0413046 change (negative) in dividend per share will lead to a corresponding change in NSE-20 Share Index at time t by one unit.

Results in Table 13 shows that dividend yield has a negative significant relationship with stock performance ($\beta = -0.34$, $p=0.007$), dividend yield is dividend income per share divided by price per share.

6. Discussion

The results imply that when dividend yield increases, stock return decreases, and when dividend yield decreases, stock return increases. The results in the present study confirm finance principles since dividend yield is given by cash dividend divided by the market price per share. An increase in market price per share leads to a decrease in dividend yield which consequently leads to an increase in stock return. The results in the present study are consistent with Kamini and Malhotra (2013) who asserted that dividend yield has a significant inverse association with the market price of the firm's stock. Furthermore, results confirm observations by Al-Masum (2014) who opined that there exists a significant negative relationship between dividend yield and stock price ($p=0.005$). However, in South Africa, Nicol (2013) revealed contradicting results by observing that dividend yield influence returns positively. Nicol (2013) however had a unique

methodological approach; the study covered 15-year period, included both listed and delisted firms in Johannesburg Securities Exchange, was done in South Africa, did not include firms in the financial sector and basic industries due to the nature of their financial structures, was done at the firm level and used monthly data. These differences led to varying results. This present study concludes that investors should consider dividend yield when making investment decisions.

Results in Table 11 shows that dividend per share has an inverse insignificant relationship with stock return ($\beta=-0.041$, $p=0.790$). Dividend per share is arrived at by dividing dividends by the number of ordinary shares outstanding. Given that this ratio does not affect investor's decisions about their investments, it does not affect the stock return. The results in the present study are consistent with Adam *et al.* (2014); they studied dividend policy and financial performance of telecommunication companies quoted at the Nairobi Securities Exchange. Their results revealed that dividend per share inversely but insignificantly influence the financial performance of telecommunication companies listed at the Nairobi Securities Exchange ($p=0.946$). The present study contradicts Sharif *et al.* (2015) who studied the effect of dividend policy on stock prices and revealed that dividend per share had an insignificant positive relationship with market share prices ($p=0.542$).

The present study however is inconsistent with Kamini and Malhotra (2013) who found out that dividend per share has a positive but insignificant relationship with stock price ($p=0.294$). On the contrary, Garba (2014) revealed that dividend per share has a significant positive impact on the common stock return of the sampled firms ($p=0.000$). The study by Garba, however, had differences from the present study, first, he randomly selected ten companies, next, his study period was thirteen years and he used annual data. His study was also based in Nigeria. The study by Garba (2014) revealed conflicting results because he focused only on manufacturing firms in Nigeria, he is not clear about the method he used to sample 10 firms out of the targeted 106 firms hence the results may be biased and he used weekly data which were annualized using geometric mean. These studies however did not use time series analysis and they did also not use quarterly data.

7. Conclusion

The study concludes that dividend policy influences stock return positively in NSE. The overall probability value for the model is $p=0.024$ and R^2 of 0.1882; dividend yield is also found to be inversely and significantly related to stock return in Nairobi Securities Exchange. Therefore, investors, managers, and investment analysts are advised to consider the dividend policies of firms before investing in Nairobi Securities Exchange.

The model revealed that there is significant relationship between dividend policy and stock return in Nairobi Securities Exchange. Further, the model revealed that despite significant results, of all measures of dividend policy, on dividend yield has significant but inverse relationship with stock return. Dividend yield is a ratio given by dividend income divided by income per share.

The results here are consistent with most of empirical works reviewed in the present study. Dividend yield reflects the portion of a company's earning that is given to shareholders as dividends. Depending on the need or believes of investors, some investors would opt for re-investing their dividend proceeds so as to earn more income streams in form of capital gain while other investor will take the dividends. Whichever direction an investor may take, neither of them is safe, for instance a company may declare high dividends but its performance is poor. On the other hand a company may declare little dividend but its managers make good investment decisions with the retained earnings. In conclusion, investors should assess investment activities of a firm and its financial soundness before considering to reinvest dividend proceeds or to receive the proceeds. Reviewed theories contradicts the results in the present study, other measures of dividend policy which are dividend per share, earning per share and payout ratio revealed positive relationship with stock prices in reviewed literature. It is however noted that none of the reviewed studies used Nairobi security exchange 20 share index as a proxy of stock return as used in the present study given that there is limited literature on articles that used Nairobi Securities Exchange as a proxy of stock return, hence the cause of conflicting results. The reviewed studies used common stock, stock prices, financial performance, wealth maximization and liquidity and profitability, firm performance.

8. References

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