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Voluntary Disclosure and Stock Market Return of Non-Financial Firms Listed on the Nairobi Securities Exchange

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Abstract

Voluntary disclosure is empowering the public to get more informed about the company and portrays how the organization wants the outsiders to perceive it in their decision-making process. Voluntary disclosure provides information beyond the compliance requirement by the law. This study examined the effect of voluntary disclosure on stock market return of non-financial firms listed on the Nairobi Securities Exchange. The study adopted positivism as data collection and hypothesis development and testing was achieved. The study used quantitative research design to correlate study variables using mathematical analysis methods. The correlation results indicated that voluntary disclosure portrayed a positive association to stock market return. Regression of coefficients of the static model results indicate that voluntary disclosure and stock market return of non-financial firms listed on the Nairobi securities exchange is positively and significantly related. The results implied that there exist a positive and significant relationship between voluntary disclosure on stock market return since their coefficient values were positive. The regression coefficients result of lagged stock market return and stock market return was positively and significantly related. The regression of coefficients results indicate that voluntary disclosure and stock market return is positively and significantly related. The study concluded that voluntary disclosure has a positive and significant effect on stock market return in non-financial firms on the Nairobi securities exchange. Therefore, voluntary disclosure was found to play a significant role in the stock market performance that generated return predictability. These results imply that when more information is disclosed about the firm then the market generating excess returns. Voluntary disclosure of information could facilitate the public to be more confident in the company. The study also shows that voluntary disclosure is relatively correlated with stock returns over time. The

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Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

study recommends that by taking the voluntary disclosure into account as a significant determinant of stock market volatility in asset price models, investors can enhance their stock returns. The results can also help policymakers' efforts to stabilize stock market volatility and uncertainty in order to protect investors' wealth and attract more investors.

Keywords: *Voluntary Disclosure, Stock Market Return & Non-Financial Firms*

1.1 Introduction

Stock market returns play significant roles in the economy. They provide useful signals regarding the future state of the economy, including economic and financial status (Concetto & Ravazzolo, 2019; Dalika & Seetharam, 2015; Fredrick & Muiva, 2015). Their stochastic behavior provides information concerning market expectations and risk attitudes of investors in the market (Bintara & Tanjung, 2019; Duy, & Huu Phuoc, 2016; Gu & Li, 2018). Investors use stock market indices to understand trends in the economy. The stock market returns are useful for policymakers, researchers, and stock market participants keen on making various forecasts, developing regulatory rules, constructing portfolio strategies, or determining implications for policy (Alajekwu, Obialor & Okoro, 2017; Hasanbaglou & Salteh, 2016; Makau & Jagongo, 2018; Nyangara & Mazviona, 2014).

Voluntary disclosure is empowering the public to get informed about the company and providing more information beyond the compliance requirement by the law (Ghadiri, 2014; Musyoka, 2017). Similarly, voluntary disclosure is significant and benefits investors, companies, and the economy in general (Zhang & Niu, 2015). Voluntary disclosure significantly decreases the feeling of mistrust and speculation and increases investor confidence as they feel fully prepared to make investment decisions with transparency in the information at hand (Zhang & Niu, 2014). Voluntary disclosures could include strategic information such as company characteristics and strategy, non-financial information such as socially responsible practices, and financial information such as stock price information and profit level (Wambugu, 2016; Ghadiri, 2014). Voluntary disclosure of information could facilitate the public to be more confident in the products and services the company is offering (Ghorbani, Salehi, Rostami & Kazemi, 2015). The voluntary disclosure index in the current study includes human capital, strategy, competition and outlook, production, and marketing strategy as they form an important base of operations of the company. The index is similar to the study by Mwangi and Mwiti (2015) and Asava (2013).

Studies on the relationship between voluntary disclosure and stock market returns revealed inconsistent findings. The studies by (Soufiene & Assidi, 2020; Ta Quang & Binh, 2014; Mwangi & Mwiti, 2015; Wambugu, 2016; Ghadiri, 2014) found that voluntary disclosure is positively related to stock market returns. In contrast, Ghorbani, Salehi, Rostami and Kazemi (2015), Zhang and Niu (2015), Asava (2013), Kasim (2015) and Mutiva (2017) found that voluntary disclosure is negatively related to stock market returns, while Dyduch and Krasodomska (2017) found no relationship between voluntary disclosure and stock market returns. Therefore, the reviewed literature on the relationship between voluntary disclosure and stock market returns yielded inconsistent findings and different methodologies were applied. The technical analysis mainly focuses on scrutinizing the historical price movements of a particular stock to predict the future trend of the stock (Kwofie & Ansah 2018). Fundamental analysis tends to focus more on the profit growth of companies and any other announcements that could potentially lead to an increase in the share price of a particular stock (Bintara & Tanjung, 2019; Celani & Singh, 2011).

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Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

1.2 Statement of the Problem

Stock market returns among non-financial firms listed on the Nairobi securities exchange (NSE) were uncertain for investors to predict future prices (Ngugi, 2017; Karungu, Memba, & Muturi, 2018). Theoretically, investors are unable to precisely interpret what causes returns trends to deviate from the expectation. The stock market returns for the period of the current study were reported to have decreased by 6.71% in the year 2019 (NSE, 2020). Similarly, the share market performance among the non-financial firms listed on the NSE for the last quarter of 2017 declined considerably to Kshs. 25.39 billion from Kshs. 46.10 billion in the same quarter in 2016 (NSE, 2020). The stock market in Kenya decreased by 189 points since the beginning of 2019 and the only time Kenya stock market reached an all-time high of 6161.46 points was in January of 2007 (NSE, 2019). Besides, some non-financial firms such as Marshall East Africa Ltd, Hutchings Biemer and Baumann were delisted while Atlas Africa Industries Ltd and Deacons were suspended from trading (CMA, 2018).

Previous studies revealed inconsistent findings on the relationship between voluntary disclosure and stock market returns. The studies by (Soufiene & Assidi, 2020; Ta Quang & Binh, 2014; Mwangi & Mwiti, 2015; Wambugu, 2016; Ghadiri, 2014) found that voluntary disclosure is positively related to stock market returns. In contrast, Ghorbani, Salehi, Rostami and Kazemi (2015), Zhang and Niu (2015), Asava (2013), Kasim (2015) and Mutiva (2017) found that voluntary disclosure is negatively related to stock market returns, while Dyduch and Krasodomska (2017) found no relationship between voluntary disclosure and stock market returns. Therefore, previous studies were not adequate to give inferences about the Kenyan market. Consequently, a knowledge gap exists, to fill this gap current study on the effect of voluntary disclosure on the stock market return of non-financial firms listed on the Nairobi securities exchange was conducted to fill this gap.

1.3 Objective of the Study

To examine the effect of voluntary disclosure on stock market return of non-financial firms listed on the Nairobi Securities Exchange

1.4 Research Hypotheses

H_1: Voluntary disclosure has a positive and significant effect on the stock market return of non-financial firms listed on the Nairobi Securities Exchange

2.0 Literature Review

2.1 Theoretical Review: Signaling Theory

Michael Spence developed the Signaling Theory in 1978. The theory states that information disclosure in corporate annual reports is used as a signal to improve the corporate image and attract new investors and help to strengthen relationships with the stakeholders. The theory reports that inconsistency in the financial statements and accounting distortions is a factor that makes drives away the investors. The higher the financial statements' transparency, the higher the stock market returns (Connelly, Certo, Ireland & Reutzel, 2011). Investors prefer organizations that disclose all the information to the public without any form of distortions. The theory reports that full disclosures increase confidence hence high stock market returns. The stocks' prices may be stated differently by the organization to attract investors, which may reduce the expected returns (Machdar & Murwaningsari, 2017). The theory holds that managers of firms with higher

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

performance voluntarily disclose more information to promote a positive image. According to Spence (1978), the report's voluntary disclosure provides the right signals about a firm's expected performance. It avoids the risk that outsiders make wrong judgments based on the non-disclosure of corporate data.

The theory describes that during the publication of accounting information, information asymmetry may guide stock price reactions. According to Celanim and Singh (2011), the motivation to attract more investors and competition between companies compels managers to provide accounting data that has been altered in their favor. Furthermore, the theory establishes most of the shareholders of a company such as investors have little access to company operations and they rely on publicly available information to make investment decisions (Yuniningsih, Hasna, Wajdi & Widodo, 2018). The theory's weaknesses are that the management may manipulate accounting figures to allow the investors to appreciate the company's stock portfolios and become more attracted to invest. In addition, the Signaling theory's weaknesses are the lack of information on how perceived alternative signals might be signaled during the time of decision making.

The theory is relevant to the current study because it attests that voluntary information disclosure in corporate annual reports is used as a signal to improve the corporate image and attract new investors (Kamuti & Omwenga 2017). Therefore, investors prefer organizations that disclose all the information to the public without any form of distortions. Company stakeholders such as investors do not have full access to all company operations details, and they rely on publicly available information to make investment decisions. The disclosure of all relevant information provides right signals about a firm's expected performance and avoids the risk that outsiders make wrong judgments. Therefore, the theory is appropriate and informs the variable of voluntary disclosure and stock market returns in the study.

2.2 Empirical Review

In Poland, Dyduch and Krasodomska (2017) examined the effect of corporate social responsibility disclosure on stock market returns of the companies listed on Warsaw Stock Exchange. The study used multiple linear regression. The results show that the relationship between voluntary disclosure and stock market returns is not significant. The voluntary disclosure included revealing information such as financial data, shareholders information, corporate social responsibility, and human resources.

Similarly, in France, Soufiene Assidi (2020) examined the effect of voluntary disclosure on the stock value performance of French listed firms over a ten- year period from 2006 to 2016. The study used the generalized method of moment (GMM) system estimator method to avoid the estimation problems induced by endogeneity. The study findings add new evidence to the relationship between voluntary disclosure policies and firm stock return performance. A positive and strong significant association between voluntary disclosure and stock return is explained by considerable evidence showing that firms with low protection of shareholder rights exhibit discretionary voluntary disclosure to increase firm stock return value.

In Vietnam, Ta Quang Binh (2014) examined the level of voluntary disclosure among Vietnamese non-financial listed companies. They investigated the requirements of information in the annual reports of Vietnam's financial analysts, illustrates the viewpoints of financial managers and measures the actual voluntary level in the Vietnamese corporations' annual reports. It also determines the relationship between firms' characteristics, ownership structure, corporate governance structure and the extent of voluntary disclosure in the annual reports of 199

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Vietnamese listed companies in the year ending 31st December 2009. The important finding of the study was the more voluntary disclosure, especially general corporate information and forward-looking information, the less cost of capital that the firm has to pay, the more variability of the stock market returns and the less volatility of trading volume on Vietnamese stock market.

In Kenya, Mwangi and Mwiti (2015) examined the effect of voluntary disclosure on stock market return of twenty sampled firms listed on the Nairobi Securities Exchange. A descriptive research design was adopted. The study used secondary data for five years from 2009 to 2013. Multiple linear regression of stock market performance against voluntary disclosure, exchange rate, interest rate and rate of inflation were used. The study findings showed that voluntary disclosure is positively related to market performance. The study further indicated that the disclosure index is based on an investor's perspective; hence, the disclosure items incorporated in the disclosure index are based on what investors are likely to consider as relevant or essential.

A similar study to that of Mwangi and Mwiti (2015) was conducted by Wambugu (2016) to examine the effect of voluntary financial disclosures on the stock market returns of firms quoted on the Nairobi Securities Exchange. The study purposively chose 20 companies consistently making up the NSE - 20 share index for five years 2009-2013. The study findings indicate that financial disclosures that include corporate governance, corporate social responsibility, environment accounting, human resource accounting, financial services sector, dividend payout and firm size had a positive relationship with stock returns. The study concluded that increasing corporate governance, corporate social responsibility voluntary disclosure, human resource accounting voluntary disclosure and size voluntary disclosure results in higher levels of stock returns.

The empirical review of previous studies revealed inconsistent findings on the relationship between voluntary disclosure and stock market returns. The studies by (Soufiene & Assidi, 2020; Ta Quang & Binh, 2014; Mwangi & Mwiti, 2015; Wambugu, 2016; Ghadiri, 2014) found that voluntary disclosure is positively related to stock market returns. In contrast, Ghorbani, Salehi, Rostami and Kazemi (2015), Zhang and Niu (2015), Asava (2013), Kasim (2015) and Mutiva (2017) found that voluntary disclosure is negatively related to stock market returns, while Dyduch and Krasodomska (2017) found no relationship between voluntary disclosure and stock market returns. Therefore, the reviewed literature on the effect of voluntary disclosure on stock market returns portrays a knowledge gap. The findings of the studies are inconsistent. The current study tested H_1 that voluntary disclosure has a positive and significant effect on stock market return.

2.3 Conceptual Framework

The conceptual framework was developed from the literature review, and it sheds light on the methodology that was used in the study. The conceptual model in Figure 1 depicts the relationship between voluntary disclosure on the stock return market to non-financial firms listed in the Nairobi Securities Exchange.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

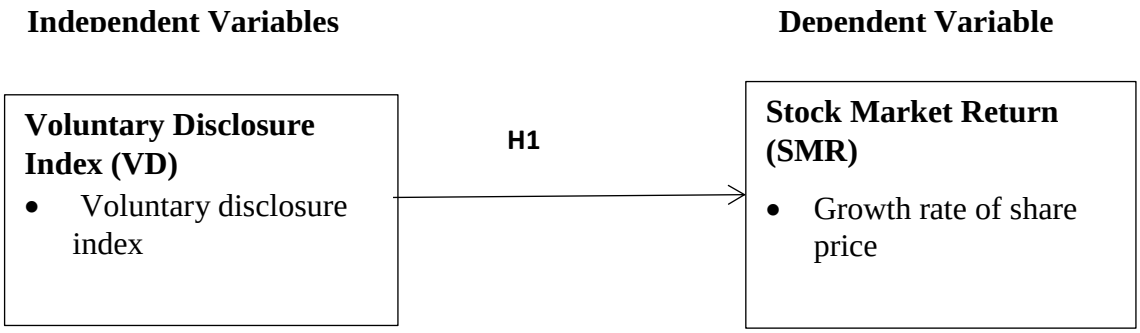

Figure 1: Conceptual Model

2.3.1 Stock market return

There are inconsistencies on how the stock market return is measured. Some studies use accounting-based measures such as ROE and ROA to measure stock market return (Corredor, Ferrer & Santamaria, 2015; Kirui, Wawire & Onono, 2014; Concetto & Ravazzolo, 2019; Suciati, 2018). On the other hand, other scholars (Chowdhury & Gizelis, 2016; Machdar, Manurung & Murwaningsari, 2017; Ali, 2017; Santosa, 2020) use the growth rate of share price as a measure of stock market returns.

In the current study, the researcher used growth rate of share price to measure the stock market return. The justification of using the growth rate of the share price values is that the stock prices change every day depending on the market forces and when more investors buy a stock then the price moves up (Baloch, 2015; Rashid, Fayyaz & Karim, 2019; Cherono, 2018; Oprea & Brad,2014). Most of the investors are more concerned with the rise or fall of the share prices to make the investment decision. Therefore, the growth rate of the share price was the best proxy to measure the stock market return as follow.

$$SMR = \frac{Pi_t - Pi_{t-1}}{Pi_{t-1}} * 100\% \quad (1)$$

Where:

SMR: Stock Market Return

$P_{i,t}$: Average stock price in year t

$P_{i,t-1}$: Average stock price in year t-1 (previous year)

The study used growth rate of share price to measure the stock market return. According to Bintara and Tanjung (2019) return can be computed by stock price in year (^{t}) less average stock price in year $^{t-1}$ (previous year) dividing by lagged stock price. The empirical studies reviewed revealed yearly growth rate of the share price was the best proxy to measure the stock market return (Chowdhury & Gizelis, 2016; Machdar *et.al*, 2017; Ali, 2017; Santosa, 2020).

2.3.2 Voluntary disclosure

Voluntary disclosure is permitting the public to get more informed about the company (Ghadiri, 2014). In the measurement of voluntary disclosure, a set of optional information that is disclosed in annual reports selected to construct a voluntary disclosure index. The voluntary disclosure in this study includes strategy, competition/outlook, production, marketing strategy and human

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

capital. The non-financial firms under the current study had voluntary disclosure index measured by the ratio between the acquired score and the maximum five possible score of drawn lists for each company's annual reports.

In this study, the index was built based on the studies of Soufiene Assidi (2020), Ta Quang Binh (2014), Mwangi and Mwiti (2015). Therefore, the current study used disclosure of the information on human capital, strategy, competition and outlook, production, marketing strategy. The voluntary disclosure index was calculated by the ratio between the acquired score and the maximum possible of drawn list for each company. The company is expected to disclose maximum of five parameters which will be equal to 1, in case of 4 disclosures this translate to 0.8 score. The score ranges from minimum of 0 to maximum of 5 possible disclosure.

$$VD_{it} = AS_{it} / MPS_{it} \quad (2)$$

VD i, t= Voluntary Disclosure

AS i, t= Acquired Score

MPS i, t=Maximum Possible Score

The current study used disclosure of the information on human capital, strategy, competition and outlook, production, marketing strategy. The voluntary disclosure index was calculated by the ratio between the acquired score and the maximus possible of drawn list for each company. Some limitation of the index includes substitution biasness and lack of individual relevance. Therefore, the current study used average of five disclosures items to minimize the biasness of index.

3.1 Research Methodology

The study adopted positivism as data collection and hypothesis development and testing was achieved. Hypotheses was tested and confirmed, which can be used for further research. Further, positivism was established on quantifiable observations and accordingly, statistical analysis is obtained. The study used a deductive approach since the researcher tested the hypothesis and establish a conclusion of whether voluntary disclosure affect the stock market return. The study used quantitative research design to correlate study variables using mathematical analysis methods. Descriptive is often used as a pre-cursor to more quantitative research designs with the general overview giving some valuable pointers as to what variables are worth testing quantitatively (Williams, 2007).

The target population for the study was all 43 non-financial firms listed on the Nairobi securities exchange. The unit of analysis for the study was individual non-financial firms listed in NSE. The targeted population included eight sectors namely, agricultural sector, manufacturing and allied, commercial and services sector, investment, automobiles, construction and allied sector, telecommunications and technology, energy, and petroleum. The study did not consider firms listed under the banking and insurance sectors since they are associated with tight regulations and compliance. In addition, the heterogeneity makes such sector difficult to perform hypothesis testing for the study variables (Mwangi *et al*., 2012). The researcher conducted a census. However, only thirty-one (31) non- financial companies were active over the study period and thus were used in the study. This enabled the researcher to achieve observations of 310 for panel data.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Model Specification

To test the hypothesis in current study, static and dynamic panel model were used. Static panel data analysis considers time series data and cross-sectional data simultaneously. The static panel model before interaction as presented in equation 3.

$$SMR_{it} = \beta_0 + \beta_1 VD_{it} + \varepsilon \quad (3)$$

Where;

SMR = Stock Market Return

i=non-financial firms (1…31)

t= time (2010-2019)

β_0 = Constant

VD = Voluntary Disclosure Index

β_1= Coefficient of the independent variable

ε = Error term is a residual variable when the model does not fully represent the actual relationship between the independent variables and the dependent variables. A one-way error model assumes $\lambda t=0$ while a two-way error allows for $\lambda \in R$.

The composite error component:

$$u_{i,t}=\mu_i+\lambda_t+\varepsilon_{i,t}$$

Where;

μ_i– the unobservable individual-specific effect

λ_t– the unobservable time-specific effect

$u_{i,t}$– the remainder disturbance

On the other hand, dynamic panel data model contains at least one lagged dependent variable as independent variable. The investors rely on information of current prices or today prices to predict future returns. Dynamic panel models have ability to determine short and long run values of coefficients. Additionally, such models make it possible for researchers to choose which explanatory variables are potentially endogenous or exogenous (Harrison, 2007). The dynamic panel model before interaction as presented in equation 4.

$$SMR_{it} = \beta_0+\beta_1 SMR_{it\_1} + \beta_2 VD_{it} +\varepsilon \quad (4)$$

SMR_{it-1} = Lag Stock Market Returns

4.0 Results and Findings

4.1 Descriptive Statistics

The section presents the descriptive statistical analysis of the data collected for all variables for the period 2010 to 2019. The descriptive statistics encapsulate the measure of central tendency such as the mean, the measures of dispersion such as standard deviation, minimum and maximum observations as well as measures of distribution (skewedness and kurtosis) were used. Descriptive statistics were presented as voluntary disclosure (ratio) and stock market return (percentage). The

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

analysis is useful in enabling the presentation and visualization of raw data in a meaningful way. The results are presented in Table 1.

Table 1: Descriptive Statistics Outputs

Variable	Voluntary Disclosure	Stock Market Return (%)
Panel A	Aggregate Values	
Mean	0.8761	4.5%
Min.	0.2000	-97%
Max.	1.0000	42.75
Std Dev.	0.1796	3.823
Skewedness	0.0540	0.038
Kurtosis	0.0150	0.045
Panel B	Annual Means	
Year		
2010	0.787	5.00%
2011	0.787	19.30%
2012	0.813	1.40%
2013	0.819	13.00%
2014	0.852	0.80%
2015	0.897	9.10%
2016	0.948	-2.60%
2017	0.948	1.80%
2018	0.955	-2.30%
2019	0.955	-0.60%
Panel C	Equality of Means	
Anova F	5.700	4.076
Welch F	0.008	0.003

A balanced panel of 31 non-financial firms observed for 10 years, voluntary disclosure as an index, stock market return variable is a percentage. Table 1 show the summary of descriptive statistic for the secondary data observations of 31 firms over the 10 years period (2010-2019). The study result had a total observation of 310. The results indicate that voluntary disclosure had a mean of 0.8761 with a minimum of 0.200 and maximum of 1.000. This implied that the prevailing attitude of information disclosure in stock market significantly varied over time. This is also depicted by the standard deviation of 0.1796 smaller than the mean showing small disturbances in voluntary disclosure. Stock market return had a mean of 4.49% with a minimum of -97% and maximum of 42.75%. The standard deviation was 3.82 signifies variation in stock market return. This implied that despite some firms recording increase in their stock performance, there were firms whose stock gain was declining steadily which points to presence of struggling firms.

In panel C, the results on test for equality of means indicate that voluntary disclosure (F-statistic=5.700, P-value=0.000), and stock market return (F-statistic =4.078, P-value=0.003). The Welch test also indicate that the variables had significant levels below the critical 0.05. The test for equality of means implied that the variable means are different, and it is alternative to the ANOVA and can be used even if the data violates the assumption of homogeneity of variance.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

4.2 Correlation Analysis

Correlation analysis was carried out to detect the association between the explanatory variables. The mean score for each of the independent variables was calculated using Pearson's correlation. When the p-value is less than or equal to 0.05 the correlation is statistically significant. However, if the p-value is greater than 0.05 correlation is not statistically significant (Statistics Solution, 2018). Positive correlation implies that as one variable increases the other variable tends to also increase and negative correlation implies inverse.

Table 2: Correlation Analysis Outputs

	Stock Market Return	LagStock Market Return	Voluntary Disclosure
Stock Market Return	1.000		
Lag Stock Market Return	0.897*	1.000	
	0.000		
Voluntary Disclosure	0.779*	0.377*	1.000
	0.000	0.000	

The results in Table 2 indicate that the lagged stock market return was positively and significantly associated to stock market return (r= 0.779*, p=0.00<0.05). This implied that there was a high association between lagged stock market return and stock market return of 89.7%. Voluntary disclosure was positively and significantly associated to stock market return (r= 0.779*, p=0.00<0.05). This implied that there was a high association between voluntary disclosure and stock market return of 77.9%. The correlation coefficient matrix presents voluntary disclosure portrayed a positive association to stock market return. The level of association between the independent variables and the dependent variable was high of above 70%. Further, the results indicate that there was no multicollinearity between the independent variables since the R-values were below 0.7 as recommended by Cooper and Schindler (2008).

4.3 Regression Analysis

The first stage involved regressing stock market return against explanatory variables as specified under static and dynamic panel models. Static panel data analysis considers time series data and cross-sectional data simultaneously. While dynamic panel data model contains at least one lagged dependent variable as independent variable. Dynamic panel models have ability to determine short and long run values of coefficients. Additionally, such models make it possible for researchers to choose which explanatory variables are potentially endogenous or exogenous (Harrison, 2007). Regression analysis was conducted to determine whether there was a significant relationship between the independent and dependent variables. In the static model, voluntary disclosure was predicted against stock market return of non-financial firms listed on the Nairobi Securities Exchange. The results are as shown in Table 3.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Table 3: Regression Outputs for Models

Static Model: Random - effects

Stock Market Return	Expected sign	Coef.	Std. Err.	z	P>|z|
Voluntary Disclosure	Positive (+)	0.316	0.047	6.740	0.000
Constant		0.292	0.030	9.890	0.000
F-statistic		9.36			
Prob > chi^2		0.000			
Rsquared		0.562			
Number of observations		310			

Dynamic Model: Random- effects

Stock Market Return	Expected sign	Coef.	Std. Err.	z	P>|z|
lagStock Market Return	Positive (+)	0.270	0.050	5.440	0.000
Voluntary Disclosure	Positive (+)	0.217	0.048	4.490	0.000
constant		0.283	0.032	8.710	0.000
F-statistic		10.53			
Prob > chi^2		0.000			
Rsquared		0.655			
Number of observations		310			

As presented in the Table 3, the regression of coefficients of the static model results indicate that voluntary disclosure and stock market return of non-financial firms listed on the Nairobi securities exchange is positively and significantly related (β=0.316, p=0.000). The coefficient of determination R Square is 0.562. The static model indicates that voluntary disclosure, explains 56.2% of the variation in stock market return. The findings further confirm the reliability of static model on voluntary disclosure against stock market return was significant with a Prob= 0.000 and supported by F-statistic of 9.36. The results imply that there exist a positive and significant relationship between voluntary disclosure on stock market return since their coefficient values were positive and the p-values were less than the critical 0.05.

Further, a dynamic panel model which has ability to determine short and long run values of coefficients was developed. The dynamic model, the dependent variable stock market return was lagged. The regression coefficients result of lagged stock market return and stock market return was positively and significantly related (β=0.270, p=0.000). The regression of coefficients results indicate that voluntary disclosure and stock market return is positively and significantly related (β=0.217, p=0.000).

The coefficient of determination R Square was 65.54%. The dynamic model indicates that lag stock market return and voluntary disclosure explains 65.54% of the variation in stock market return. This depicted an increase from 56.62%to 65.54% as compared to the statistic model. This imply that dynamic model is more suitable and reliable in explaining relationship of explanatory variable and dependent variable. The findings further confirm that the dynamic regression model of lag stock market return, voluntary disclosure against stock market return was significant with a

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 1||Page 76-90||February||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Prob= 0.000 and supported by F-statistic of 10.53. This implies that there exist a positive and significant relationship between voluntary disclosure on stock market return of non-financial since their coefficient values were positive and the p-values were less than the critical 0.05. The findings implied that the variables present significant impact on stock market performance in the long run.

The fitted static model before interaction.

$SMR_{it}= 0.292 + 0.316VD_{it}$

The fitted dynamic model before interaction.

$SMR_{it} = 0.283 + 0.270SMR_{it\_1} + 0.217VD_{it}$

4.4 Discussion of Findings

The objective of the study sought to examine the effect of voluntary disclosure on stock market return of non-financial firms listed on the Nairobi securities exchange. Correlation results in Table 2 showed that voluntary disclosure was positively and significantly associated to stock market return of non-financial firms ($r= 0.779$, $p=0.00<0.05$). The results in the static model indicate that voluntary disclosure and stock market return is positively and significantly related ($\beta=0.316$, $p=0.000$). Further, the dynamic model results indicate that voluntary disclosure and stock market return is positively and significantly related ($\beta=0.217$, $p=0.000$).

The p-values 0.000 were below the critical 0.05 and thus we reject the null hypothesis that voluntary disclosure have no significant effect on stock market return of non-financial firms. The findings is consistent with Wambugu (2016) who examined the effect of voluntary financial disclosures on stock returns of firms and discovered that financial disclosures had a positive relationship with stock returns. The study established that an increase in corporate governance, corporate social responsibility voluntary disclosure, human resource accounting voluntary disclosure and size voluntary disclosure lead to increase levels of stock returns.

The finding is also consistent with Asava (2013), who examined the effect of voluntary disclosure on stock returns of companies listed on the Nairobi Securities Exchange and discovered that there was a relationship between voluntary disclosures and stock market returns. Further, the studies by Mwangi and Mwiti (2015), Ghadiri (2014) and Musyoka (2017) found that voluntary disclosure is positively related to stock market returns. In contrast, the findings by Dyduch and Krasodomska (2017) revealed that the relationship between voluntary disclosure and stock market returns is not significant. Ghorbani, Salehi, Rostami and Kazemi (2015), Zhang and Niu (2015), Kasim (2015) and Mutiva (2017) found that voluntary disclosure is negatively related to stock market returns. The different findings may be attributed to variables on disclosure, different models, and methodology on data collection.

Finally, the current findings are in line with signaling theory and efficient market hypothesis which hold that voluntary disclosure provides accurate signals about a firm's expected performance. It eliminates the risk of outsiders making wrong judgments based on non-disclosure of corporate data. The theory attests that voluntary information disclosure in corporate annual reports is used as a signal to improve the corporate image and attract new investors. The disclosure of all relevant information sends the correct signals about a firm's expected performance and reduces the risk of outsiders making incorrect judgments.

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5.1 Conclusions

The study concluded that voluntary disclosure has a positive and significant effect on stock market return in non-financial firms on the Nairobi Securities Exchange. Therefore, voluntary disclosure was found to plays a significant role in the stock market performance that generated return predictability. The voluntary disclosure of the information has a significant impact on how a firm's investors perceive it for their decision-making process. Therefore, the study concludes that increased voluntary disclosure leads to higher levels of stock market returns.

6.1 Recommendations

The study further recommends that the listed firms should adopt voluntary disclosure above the statutory requirements set by the regulatory bodies because it will portray a corporate image to investors. The extent of voluntary disclosure in the annual report is related to a company's corporate governance practices. There is a strong positive significant relationship between voluntary disclosure and stock returns, indicating that disclosure assists investors in making better investments decision.

These findings are of great importance to the managers of non-financial firms listed at the Nairobi securities exchange, because it will enable them to understand the relationship between voluntary disclosure and stock market returns. The findings of this study will assist or guide firms in making prudent information disclosure decisions in listed non-financial firms in NSE. The results are immensely helpful to investors and financial analysts/advisers in identifying the specific accounting information variable(s) that significantly affect stock market returns. Furthermore, the findings are expected to guide foreign investors who may want to invest in non-financial firms listed in NSE to make a comprehensive decision that will earn more returns.

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