

## Financial Characteristics and Market Value Added for Non-Financial Firms Listed at the Nairobi Securities Exchange in Kenya

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*How to cite this article: Kithinji, D.K., & Simiyu, E. (2021). Financial Characteristics and Market Value Added for Non-Financial Firms Listed at the Nairobi Securities Exchange in Kenya. Journal of Finance and Accounting, 1(2), 1-9.*

### Abstract

This study intended at assessing why in the recent past, market value added for most firms in Kenya has been on a downward streak, and whether their financial characteristics manipulate their market value-added, or otherwise. The specific objectives included: to investigate the effect of firms' total assets, investment strategies, effective tax rate, and assets utilization on firms' market value-added. The research paper embraced a descriptive research design. The target population was 36 non-financial businesses listed at the Nairobi Securities Exchange. Panel regression analysis was used. The findings indicated that effective tax rates had a negative and considerable impression on the market value-added of non-financial corporations. Further, conclusions divulged that investment patterns had a constructive and foremost effect on the market value-added of non-financial firms. Though, the size of a firm and assets utilization had no significant influence on the market value-added of non-financial firms. The study concluded that effective tax rates and investment patterns are significant determinants of market value added on non-financial firms. The study advocated that the government should contemplate slashing the tax rates correlated to non-financial firms. The management of non-financial firms should develop apt investment models to guide and inform the way a firm makes key investment determinations.

**Keywords:** *Financial Characteristics, Market Value Added, Non-Financial Firms Listed, Nairobi Securities Exchange*

### 1.0 Introduction

Stewart (2013) identifies a firm's Market value-added as the net wealth generated for investors, at any given point in time, comparing this to their initial investments within the firm. It is the disparity between the present time market value of the firm and the book value of the preliminary injection of capital by shareholders. It is often used for bigger and overtly traded corporations. If a firm exhibits a high market value-added, it will look as if it is attractive to potential investors because of the better prospects that it will produce definite earnings. This could also be a denotation of the presence of excellent leadership, efficient assets' utilization, the existence of favorable tax tariffs and incentives, possession of many high prized assets, availability of growth and investment opportunities.

Market value added is vital particularly in this era where mergers and acquisitions are key growth strategies across sundry industries. It is imperative for any investor to carefully study

and review the market value added to ensure value for investment and assess the firm's going concerned and survival. For a firm with a positive market value-added, it is simpler to obtain outward funding and boost its market share (Kinsley, 2009).

According to Broere (2013), a firm's financial characteristics are attributes that affect the firm's financial performance precisely. They are internally spawned or sourced from within a firm. A firm's attributes may broadly include financial and non-financial factors. Financial factors include productivity, accessibility of convertible assets, capital structure, taxation, investments, and leverage. Non-financial factors entail shareholding, labor, mature of the firm (quantity of eons of establishment, registration with the authority database, and started operations within the business market), and board of directors' characteristics. These elements are swayed by forces within and without the firm's operations e.g., the target market, the industry in which it operates, and the economic environment. They may include, Size of the firm, Effective tax rate, Investment patterns, and Asset utilization.

Non-Financial firms are private or public corporations, holding companies, non-profit making institutions, or associations listed at the Nairobi Securities Exchange (NSE). In principle, they take part in the fabrication of market goods and non-financial services. Their monetary dealings are utterly distinct and intentionally separated away from those of the founders. They fall primarily into three sectors; public (directly/majorly staked by the régime) private (whose complete stake is in the hands of stockholder groups, other corporates, and private entities), and extraneously controlled non-financial firms ran in a territory secluded from that of its mother company. Unlike their counterparts (Financial and Related Services Firms), they have distinctive facets that set them apart from other firms. Their capital structure, sources of funding, regulatory framework, mode of reporting, and carrying out activities are some key distinctive factors. Non-financial firms create and dispense goods and services to meet the demands of their customers. However, they are principally allied to financial firms since they (non-financial firms) attain financing and risk products from them (Financial firms) that give them the leeway of operating, growing, and bolstering themselves from market and business fluxes (Uma, 2011).

### **1.1 Research Problem**

The market value-added of many listed non-financial firms studied from 2013-2017 has been fluctuating and mostly declining at an average rate of 11%. Within and beyond this period of analysis, numerous registered non-financial businesses have been releasing profit warnings and subsequently reporting diminished profits at concerning proportions e.g., Standard group ltd, Uchumi supermarket ltd, and Kenya Airways, just to name a few. Many aspects of the firm have been measured to comprehend its relationship with its financial characteristics. Little consideration has been afforded to the market value added and whether the instability and flux in the overall market values of these firms are related to the financial attributes of these firms, or if it is entirely related to other factors other than its financial characteristics.

Gacugu (2012) explored market positioning, marketing routines, firm attributes, outward environment, and performance of tour firms in Kenya, considering market orientation, customer and competitor placement, firm size, age, and effect of the external market. The conclusions were that a significant correlation existed between all variables considered on the performance of the 23 tour companies considered.

Kaguri (2013) who evaluated the connection amongst firm attributes and business functioning of life insurance corporations in Kenya concluded that the selected characteristics i.e., leverage, size, management experience, and liquidity, have significance in influencing

the financial functioning of life insurance enterprises. Mahfoudh (2013) carried out a study on the effect of carefully chosen firm aspects on the financial performance of firms listed in the agricultural sector considering firms' size, liquidity, and general industry performance. The study deduced that Size does not significantly affect the overall performance, small effect of age on performance, and liquidity has a positive effect on performance.

Nashipai (2014) assessed the market portion habits, structural attributes, and operation of Kenyan cement production corporations. Variables measured were organizational factors, environmental factors, people factors, and organizational climate. The study concluded that there occurred a development in the cement industry, resulting from effective market segmentation, Organizational characteristics also influence firm performance, executive assembly, custody and scope of a firm are the administrative aspects that pertain to cement firms.

Warui (2016) considered the consequence of a firm's financial traits on the financial accomplishment of reserves and credit cooperative groups in Murang'a County. The study revealed that Liquidity would change financial performance by 9.1%, capital adequacy would impact financial performance by 1.9%, Change in management efficiency affected financial performance negatively by 1.9%, asset quality affected negatively financial performance by 1.8 units.

Haruna (2017) evaluated the impact of firms' financial attributes on the financial performing of Nigerian registered insurance corporations, concerned about Liquidity, Size, and Age. The study determined that Liquidity and Age have an adverse effect on the financial functioning whilst the size of the company undoubtedly increases the financial performance of Insurance companies in Nigeria. Ndolo (2017) explored the outcomes of chosen firm traits on capital structure determinations of listed corporations and concluded that the size of the firm does affect the capital composition. Asset structure has a constructive result on capital structure and profitability has a decreasing association with capital structure.

The magnitude of market value addition cannot be over-emphasized especially in encouraging the information of all stakeholders of a firm both locally and internationally. Very few of the copious studies considered have assessed the reasons behind the reduction in these firms' market value-added, scrutinizing collaboratively, the effect of the financial model of capital structure. Henceforth, the purpose of this study sought to fill this void and evaluate whether at all there exists a correlation between the financial characteristics of a firm and its overall market value-added.

## 1.2 Research Objectives

- i. To assess the effect of firm size on the market value added among non-financial firms listed at the NSE.
- ii. To examine the effect of effective tax rates on market value added among non-financial firms listed at the NSE.
- iii. To examine the effect of investment patterns on market value added among non-financial firms listed at the NSE.
- iv. To assess the effects of assets utilization on market value added among non-financial firms listed at the NSE.

## **2.0 Literature Review**

### **2.1 Theoretical Framework**

Agency theory was offered originally by Jensen and Meckling (1976). The hypothesis relates to decisions made by a firm's management on behalf of its shareholders. The theory delves into a potential dilemma that develops where the assigned agents (management) acts in their own interests contrary to those of its principals (shareholders). The primary cause of a struggle in this relationship arises when there is a difference in the overall goals or a difference in risk aversion in any of these parties. For example, managers decide to sacrifice the short-term profitability of the firm in a view of re-investing for imminent growth in earnings. Shareholders, on the other hand, maybe engrossed in short-term returns in form of dividends not preferring the deferred and potentially higher returns after re-investment (Bergstein, 2014). This theory concentrates on the effective tax rate, asset utilization, and the investment patterns variables since the strategic measures adopted, how well assets are put into use, and the investment choices the firm makes, depending on the decisions of management.

Signaling theory affords a notional perspective to potential shareholders in terms of performance and future positive prospects. If a company increases its returns to shareholders, it depicts good performance to the public and if it would wish to source for additional funding from the public, either through debt or equity, any investor will be confident of a good return and would be inclined to invest in such a firm. The increased return on investments has a positive direct result on the market value of the firm's stakes due to an upsurged level of demand. This in turn renders an overall surge in the shareholders' wealth as the market worth of the investments is superior to the book value of the original investment (Funke, 2007). The theory provides stakeholders with a basis for understanding the prospective performance of a firm without an in-depth look. It however can be subject to manipulation with the intention of giving false signals to the public for specific interests by management. The underpinned variable by this theory is the investment patterns and size of the firm since a positive trajectory of these two variables signals good performance.

### **2.2 Empirical Review**

Mahfoudh (2013) studied the value of a firm's financial characteristics on the performance of firms listed in the agronomic sector focusing on the firms' size, liquidity, and general industry performance. The study employed a correlation research design and analyzed the collected data from the 50 companies' well-thought-out using multiple regression analysis. The study made the conclusion that; size as a variable has no noteworthy effect on overall performance. The study did not nevertheless deliberate on non-financial variables affecting the agricultural sector. It was also restricted to the agricultural sector while the results might be different if extrapolated to a different industry.

Yao (2016) assessed the determining factors of effective tax rates for firms registered inside the Chinese stock market and reviewed variables like political power and tax preference. The study adopted a two-sided censoring model and concluded that the political powers have a higher influence in determining the tax payable and the taxation rates in the Chinese jurisdiction. The tax preference bore no significant impact on the effective tax rate determined and thus could not be a contributing factor of the tax payable by listed firms.

Mazraeh (2013) studied the affiliation between firm financial features, investments, and financial leverage of technology companies in India. The study adopted a descriptive survey

design and analysis was through simple regression, concluding that there exists a constructive link between sound investment determinations and a firm's monetary leverage. There is nevertheless a contextual gap as it only focuses on technology companies.

Nkechi and Sunday (2020) analyzed the effect of asset utilization on the net worth of large-cap companies listed on the Nigeria Stock Exchange Market. While secondary data sources derived from the panel data obtained from the annual financial statements of twenty companies with large market capitalization were used, the ex-post-facto research design was used. The conclusions of this study validate that the net worth of companies with a high market capitalization in Nigeria is positively and substantially shaped by both current assets and tangible non-current assets. Nonetheless, the study was performed in Nigeria and not Kenya. The current study sought after analyzing the effects of assets utilization on market value added among non-financial firms listed at the NSE.

### 3.0 Research Methodology

The research paper embraced a descriptive research design. The target population was 36 non-financial businesses listed at the NSE. The analysis counted on secondary information amassed from the NSE Handbooks, firms' financial reports and pertinent publications done by scholars within a similar scope, and the overall running of non-financial enterprises registered at the Nairobi Securities Exchange. Statistics were gathered for the time frame 2013-2017. Panel regression analysis was used.

### 4.0 Results and Discussion

#### 4.1 Descriptive Statistics Results

This section provides descriptive summary outcomes for the study variables. Specifically, the study recapitulates the mean, standard deviation, minimum and maximum values of each variable. The findings are shown in Table 1.

**Table 1: Descriptive Summary**

Variable	Obs	Mean	Std. Dev.	Min	Max
Market Value Added	175	-183.63	811.933	-4900	1068.97
Return on Total Assets	175	0.0399	0.62881	-7.5334	1.74761
Effective Tax Rate	175	-0.3717	1.77711	-18.168	5.67972
Investment Strategies	175	2.44753	6.67595	-0.74	67.68
Asset Utilization	175	0.97093	1.08352	0.00229	6.58577

The study discoveries in Table 1 are an outright depiction that the mean of market value-added for all the non-financial firms listed at NSE over the review period from 2013 to 2017 was -183.63, with a standard deviation of 811.933. These breakthroughs unswervingly translate that the market value of shares for the majority of the non-financial firms was less than the book worth of stocks. This vindicates the negative typical market value-added. This means that most of the non-financial corporates registered at NSE have been performing poorly. The discoveries also signal that the mean of Return on Total Assets for all the non-financial firms listed at NSE over the concentrate timeframe from 2013 to 2017 was 0.0399 or 4%, with a standard deviation of 0.62881 or 63%. The findings infer that the firms were doing well in terms of return on total assets. This is an indication of growth in the size of the firms, which agrees with most of the similar studies previously done.

The results further reveal that the mean effective tax rate for all the non-financial firms listed at NSE over the measurement period from 2013 to 2017 was -0.3717, with a standard deviation of 1.77711. In addition, the results signal that the mean investment pattern for all the non-financial firms listed at NSE over the measurement period from 2013 to 2017 was 2.44753, with a standard deviation of 6.67595. This indicates that nearly all the non-financial firms had higher market value than book value, presuming that undeniably the effective tax rate does have a significant impact on market value. The discoveries validate that the mean of asset utilization for all the non-financial firms listed at NSE over the measurement period from 2013 to 2017 was 0.97093, with a standard deviation of 1.08352. The outcomes mean that for most of the firms, the value of total assets was more than the value of total sales.

## 4.2 Panel Regression Analysis

### 4.2.1 Hausman Test

To determine whether the fixed or random-effects model is appropriate Hausman test was utilized. The Hausman test fundamentally tested whether the unique errors ( $ui$ ) are correlated with the regressors.

**Table 2: Hausman Test Results**

	(b) Random	(B) fixed	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Return on Total Assets	-19.593	-19.637	0.04445	4.47622
Effective Tax Rate	-73.459	-73.99	0.53045	1.45372
Investment Strategies	11.9234	11.2778	0.64565	0.41652
Asset Utilization	31.4419	32.2387	-.7968116	.
chi2(5)	1.52			
Prob>chi2	0.8234			

Based on the outcomes in Table 2, the probability value of 0.8234  $>0.05$  leading to the accession of the null hypothesis that the unique errors ( $ui$ ) are not correlated with the regressors and, therefore, the random-effects model is more appropriate.

### 4.2.2 Random-effects Regression Model

Following the Hausman test results, a random-effects regression model was conducted to clarify the effect of financial characteristics on the market value-added of non-financial firms listed at the NSE. The results are shown in Table 3.

**Table 3: Random-effects Regression Model Results**

MVA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Return on Total Assets	-19.593	23.9861	-0.82	0.414	-66.605 27.4192
Effective tax rate	-73.459	7.52863	-9.76	0.000	-88.215 -58.703
Investment Strategies	11.9234	3.49263	3.41	0.001	5.07802 18.7689
Asset Utilization	31.4419	26.7716	1.17	0.240	-21.03 83.9133
_cons	-269.87	127.995	-2.11	0.035	-520.73 -19.001
R square	0.0306				
F statistics	111.18				
Prob > chi2	0.000				

The regression results in Table 3 signify a constant value of -269.87, which validates the value of market value addition of non-financial firms when the firms' financial characteristics are assumed to be zero. The findings indicate that the effective tax rate has a negative and substantial effect on the market value-added of non-financial firms ( $\beta = -73.459$ ,  $p=0.000$ ). This implies that an upsurge in the effective tax rate by 1 unit would lead to a decline in market value added by 73.459 units. The findings concur with Maina (2014) assertion that there was a negative relationship between income tax and economic performance.

The results further reveal that investment patterns have a positive and momentous effect on the market value-added of non-financial firms ( $\beta = 11.9234$ ,  $p=0.001$ ). This denotes that an upturn in investment patterns by 1 unit would lead to an increase in market value added by 11.9234 units. The findings agree with Osano (2013) conclusion an active investment strategy has a positive influence on financial performance. Similarly, Mazraeh (2013) discovered a constructive link between apt investment decisions and a firm's financial leverage. Additionally, Koroti (2014) found out that investing decisions positively affected the factories' financial performance.

However, the implications show that the size of a firm ( $P = 0.414$ ) and asset utilization ( $P = 0.240$ ) do not have a significant effect on the market value-added of non-financial firms. The results agree with Mahfoudh (2013) conclusion that size as a variable has no noteworthy effect on overall performance. However, the findings contradict Gacugu (2013) assertion that size has a significant influence on firm performance. Haruna (2017) also concluded that size positively enhances the financial performance of companies. Further, the results on assets utilization disagreed with those of Bukit, Haryanto and Ginting (2018) and Akinleye and Dadebo (2019) who established that asset utilization had a significant impact on firms' value and success.

From the regression results, the overall model is significant. This is supported by F statistic of 111.18 and a reported P-value of  $0.000 < 0.05$ . In addition, the R square of 0.0306 implies that jointly, all the financial characteristics explain 3% of total variations in market worth combined of non-financial firms registered at the NSE.

The overall equation is as follows:

$$\text{Market Value Added} = -269.87 - 73.459 \text{ Effective Tax Rate} + 11.9234 \text{ Investment Strategies}$$

## 5.0 Conclusion

Based on the findings, this explorative endeavor strongly made suppositions that the financial attributes of a firm (effective tax rates and investment patterns) had a significant effect on the market value-added of non-financial firms registered at the NSE. The effective tax rate was uncovered to have a negative and significant effect on the market value-added of non-financial firms. The insinuation would be that an escalation in effective tax rates is likely to diminish the market value-added of non-financial firms. The study secured and strongly held that investment patterns had a positive and significant effect on the market value-added of non-financial firms. The consequence is that an increase in investment patterns is anticipated to increase the market value-added of non-financial firms

## 6.0 Recommendations

Guided by the conclusions of the study, there is proof that effective tax rates had a negative and noteworthy effect on the market value-added of non-financial firms. The study endorses that the government ought to slash down the tax rates linked to non-financial firms since a decrease in the tax rates is projected to give a boost up to the firm performance in terms of market value-added.

The study also recognized that investment patterns had a positive and significant effect on the market value-added of non-financial firms. The study urges that the management of non-financial firms ought to cultivate apt investment models to steer and enlighten the way a firm makes key investment determinations.

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