

# Asset Structure and Financial Performance: A Case of Firms Quoted Under Commercial and Services Sector at the Nairobi Securities Exchange, Kenya

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## Abstract

This study sought to determine the relationship between the asset structure and the financial performance of the firms quoted under the commercial and service sector at the NSE, Kenya. The target population by the study was the secondary data from the annual reports of the firms. The asset structure is analysed in term of: Property, Plants and Equipment; current assets; intangible assets; and long term investments and funds, which formed the independent variables. The dependent variable of interest was the financial performance of the firms, and was measured in terms of: earning per share; return on assets; return on equity, profit margin (return on sales); and current ratio, by aid of a composite index. A census was done on the entire firms listed under this sector by the year 2014, for a five year period, 2010 to 2014. A document review guide was used to collect the secondary data from the financial statements of the firms under study. A multiple regression analysis (standard) was conducted with the aid of statistical programs SPSS version 21. The results of the study indicate that asset structure had a significant statistical effect on the financial performance. In particular, the study found that: Property, Plants and Equipment, and long-term investments and funds have a statistically significant effect on financial performance, while current assets and intangible assets do not have statistical significance on financial performance. This study concluded that the firms should increase the allocation of resources towards long term investments and funds, and utilize available resources in terms of the Property, Plant and Equipment effectively.

**Keywords:** Asset structure, financial performance, listed firms, commercial and services firms.

## List of acronyms

ROA	- Return on assets
ROE	- Return on equity
NSE	- Nairobi Securities Exchange
EPS	- Earnings per Share
PPE	- Property, Plant and Equipment

## I. Introduction and Background

In Kenya, listed firms have a common characteristic in that they are more professionally managed, bigger in size with very high turnover and asset values as compared to unlisted firms (Ayot, 2013). According to Iswatia and Anshoria (2007), performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage. Listed firms contribute in many ways to the economy of Kenya. They provide employment in the firms thus reducing unemployment problems. They also pay tax to the government which is utilized to provide the necessary products and services to the citizen of the country. Furthermore, they contribute to the research and development thus increasing innovation. There are 65 firms listed in the NSE Kenya. These firms are classified into 12 categories, and one of them is commercial and services sector, which is comprised of ten firms ([www.nse.ke/listed-companies/list.htm](http://www.nse.ke/listed-companies/list.htm), 15<sup>th</sup> May, 2016). A number of companies have been experiencing declining fortunes and some have even been delisted from the NSE over the last decade and Significant efforts to turn around such companies or even liquidating them have focused mainly on financial restructuring (Ayako *et al.*, 2015).

The firms listed under commercial and services sector at NSE, Kenya, provide major services in the Kenya. Kenya airways and Express limited provide local and international transport by flight. The Nation Media Group and Standard Group limited lead in offering communication services. Other services offered by firms in this category include; provide retail services, publishing services, gas and oil products, hotel and accommodation services. These services provide a backbone to the economy of Kenya. By producing goods and services demanded by the citizens, they improve their standards of living and improve on the gross domestic product of the nation. For this reasons, these firms attract much attention and interest from the financial experts, researchers, the general public and their management (Kinkel *et al.*, 2005).

Assets structure has been defined using various aspects by different scholars based on the direction of the study. According to ZhengSheng and NuoZhi (2013), asset structure is the allocation of the resources diversely. It can be broken down into 3 components namely: turnover assets, production assets and wasting assets. Koralun-Bereznicka (2013) described asset structure as a combination of the various asset components

which were identified as: financial fixed assets; tangible fixed assets; current assets; and current investments and cash in hand and at bank. A similar approach is taken by Schmidt (2014), where asset structure is described in terms of: current assets; long term investments and funds; Property, Plant and Equipment; intangible assets; and others assets. On the other hand, Mawih (2014) studied the assets structure conceptualizing it as a component of fixed assets and current assets. Empirical evidence has concluded that the study of asset structure is significant to the business organizations. ZhengSheng and NuoZhi (2013) contends that the research of assets structure has more practical value and universal significance than capital structure as they are the main source of creating corporate value and avoid risks. Olatunji *et al.* (2014) found that investments in fixed assets have strong and positive statistical impact on the profitability of banking sector in Nigeria. Assets structure has also been widely reported by corporate finance literature to significantly affect financial structure of firm (Koralun-Bereznicka, 2013).

Financial performance refers to a firm's ability to generate new resources from day to day operations over a given period of time (Bora, 2008). It involves enhancing shareholders' wealth and profit making which are among the major objectives of a firm (Pandey, 2005). Shareholder's wealth is mainly influenced by growth in sales, improvement in profit margin, capital investment decisions and capital structure decisions (Arnott and Asness, 2003). Various indicators have been used to measure the financial performance of the firms by various scholars. The study by Okwo *et al.* (2012) measured the financial performance of firms in brewery sector in terms of operating profit margin. Similarly, a study by ZhengSheng and NuoZhi (2013) measured the business performance in terms of operating revenue on an effort determine the optimal allocation of asset structure on financial performance. Olatunji *et al.* (2014) used Net profit of the commercial banks as the measure of their financial performance. Further, a study by Wamugo *et al.* (2014), on the relationship between capital structure and performance of non-financial listed firms, used ROA and ROE as the indicators of Firm performance. This approach was also taken by the study on the effects of asset structure on the financial performance of listed manufacturing firms where financial performance of these firms was evaluated in terms of ROA and ROE (Mawih, 2014). This study develops a composite index by getting the simple average of: earning per share; return on assets; return on equity, profit margin (return on sales); and current ratio, as a measure the financial performance of the firms under study.

Previous studies on the relationship between the asset structure and financial performance of various firms have found that various components of asset structure affect the financial performance differently. Olatunji *et al.* (2014) studied the effect of investment in fixed assets on profitability of selected Nigerian Commercial Banks. The study concluded that investments in fixed assets have strong and positive statistical impact on the profitability of banking sector in Nigeria. Research of asset structure has more practical value and universal significance than capital structure, as they are the main source of creating corporate value and avoid risks (ZhengSheng and NuoZhi, 2013). This study intends to determine the nature of relationship between the asset structure and financial performance of the commercial and services firms in the Kenyan context.

## II. Research Problem and Study Objectives

The contribution of quoted firms to the economy of a country such as Kenya is enormous. Several companies, however, are experiencing declining performance and some have even been delisted from the NSE in the last decade (Wamugo *et al.*, 2014). This is contrary to the expectations of their stakeholders who span across shareholders, employees, consumers, and government among others. This sector was considered to be the most ideal for the study compared to the other sectors because during the period of study, some of the firms in this category had been experiencing financial difficulties. By January 2015, Hutchings Biemer had experienced a 14year period with its shares frozen since February, 2001 ([www.cma.or.ke](http://www.cma.or.ke), 8th Jan 2015). Audited financial statements of the Kenya Airways reported a loss of Sh25.7 billion after tax loss for the year ended in March 2015, which was attributed to investment in new aircraft. During the same year, the financial reports of Uchumi supermarkets suffered financial distress, forcing it to exit Uganda and Tanzania markets ([kenya.uchumicorporate.co.ke/investment](http://kenya.uchumicorporate.co.ke/investment), 2016). The bailing out of the distressed firms has an impact on the taxpayer and thus the need to research on the possible causes of such problems, which prompted the researcher to conduct a study in the sector.

Most of results of empirical studies on the effect of asset structure on financial performance are mixed. Okwo *et al.* (2012) studied the impact of a company investment in fixed assets on its operational net profit basing on the data obtained from four Nigerian brewery firms and the found that though there was a positive correlation between the variables, it was not statistically significant. The study by Mawih (2014) the effect of asset structure on financial performance basing the study on manufacturing firms and found that it was only petroleum sector where asset structure had impact on ROE while other firm did not have. In the same year, the study on the effect of investment in fixed asset on profitability that was conducted on commercial banks in Nigeria concluded that investment in fixed asset had strong and positive statistical impact on the profitability of banking sector in Nigeria (Olatunji *et al.*, 2014). Due to these empirical contradictions it still remains unclear

how asset structure of firms affect their financial performance.

In view of the research gaps identified above, the objective of this study is to determine the effect of asset structure on the financial performance of the firms listed under Commercial and Services Sector at NSE, Kenya. In particular, the specific objectives are to determine the effect of: Property, Plant and Equipment; current asset; intangible assets; and long term investments and funds; on financial performance of the firms under study. Further, the joint effect of the independent variables under study on financial performance was determined. Null hypotheses were tested in respect of each specific objective.

### III. Review of Literature

This study is informed by the Pecking order theory and Trade - off theory. Pecking order theory was first suggested by Donaldson in 1961 and enhanced by Myers in 1984 (Myers, 1984). It is also analyzed in the journal on Corporate Finance and investment decisions when firms have important information the investors do not have (Frank *et al.*, 2011). It states that companies prioritize their sources of financing according to the cost of financing, preferring to raise equity as a financing means of last resort. It is based on the concept of information where retained earnings are considered first in the financing pecking order because they are cheaper and are rarely affected by asymmetry of information. Second, debt is considered next since it carries low asymmetry which serves as a monitoring device against wasteful spending by the management. Finally, external equity is used as a last option because of its adverse selection effect (Ayot, 2013). The value of tangible assets affects the capital structure according to the pecking order theory of debt, as these assets are pledged as collateral, meaning that the larger their share, the higher the leverage. Redeployability of tangible assets has also been cited as a key determinant of firm capital structure (Murillo *et al.*, 2010). It has been noted that companies with higher collateral value of assets have greater access to bank loans compared to the firms dominated by intangible assets due to the reduced risk level of investments and transactions involving assets, which are easily disposable on the market (Koralun-Bereznicka, 2013). This study borrows from this perspective and makes assumption that these assets are pledged as collateral, and thus the firm with high level of tangible asset can easily access debts, without being forced by situation to issue equity. This in turn may translate to higher financial performance.

The trade-off theory was introduced by Kraus and Litzenberger in 1972. It suggests that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. It was then expanded by Myers in 1984, by introducing adjustment costs, including those stemming from asymmetric information and agency problems (Frank *et al.*, 2011). It states that there is an advantage to financing with debt, the tax benefits of debt and there is a cost of financing with debt, the costs of financial distress including bankruptcy costs of debt and non-bankruptcy costs (Ayot, 2013). Studies on the relationship between asset structure and capital structure have concluded that the higher the collateral, the higher the potential leverage. Based on this finding, this study assumes that the firm with sufficient assets is in a position to utilize the optimum capital structure which then leads to better financial performance. The assumption is also based on the findings of various scholars that: the higher the collateral, the higher the potential leverage; the higher the share of current assets the greater the long term assets; and the higher the share of current assets, the lower the short-term debt (Koralun-Bereznicka, 2013). Based on this theory, this study works on the view that sufficient assets may reduce the risk and the bankruptcy cost, thus improving the performance of the firm.

From the literature review, it is clear that there is a relationship between the asset structure of the firms and their financial performance, though it is not clear the kind and strength of the relationship, as different context produced different results. Some studies, especially those in manufacturing sector indicate a positive correlation that is statistically significant; some of the firms also indicated significant effect of some components of asset structure on the financial performance; while some firms especially those in service industry concluded that asset structure did not have a significant effect on the financial performance of their firms (Mawih, 2014).

Empirical studies on investment in fixed assets have demonstrated mixed result based on various sectors. The study by Okwo *et al.* (2012) assessed the impact of a company's investment in fixed assets on its operating profit margin. The study is based on a sample four companies in the Nigerian brewery sector over an eleven year period from 1999 to 2009. The operating profit margin was taken as the dependent variable while the independent variables were Sales/Net Fixed Assets ratio, Interest Rates, Foreign Exchange Rate, and Inventory/Cost of Sale ratio. The findings of the study was that though the relationship between the level of investment in fixed assets and its impact on the operating profit was positive, the result was not statistically significant. Therefore, the result did not suggest any strong positive impact of investment in fixed assets on the operating profit of brewery firms in Nigeria. On the other hand, the study by Olatunji *et al.* (2014) examined the effect of investment in fixed assets on profitability of selected Nigerian banks. Data were obtained from annual reports and accounts of thirteen selected Nigerian commercial Banks for the period from 2000-2012. The relationship between the dependent variable (Net profit) and independent variables (Building, Land, Leasehold premises, fixtures and fitting, and investment in computers.) indicated that there was a significant relationship between them. The study concluded that investments in fixed assets had strong and positive statistical impact on

the profitability of banking sector in Nigeria. Further, the overall result of the study by Mawih (2014) on some listed manufacturing companies indicated that the fixed assets had impact on ROE but not on ROA.

In relation to intangible assets, Martina (2015) investigated the relationship between tangible assets and the capital structure of Croatian small and medium-sized enterprises. The study was conducted on a sample of 500 Croatian SMEs for the period between 2005 and 2010. The data used for the empirical analysis were taken from companies' annual reports. The results of the research found that tangible assets are differently correlated with short-term and long-term leverage. The relationship between tangible assets and short-term leverage was negative and statistically significant in all observed years. The relationship between tangible assets and long-term leverage was positive in all observed years and statistically significant. The results showed that small and medium-sized companies use their collateral to attract long-term debt, which means that small and medium-sized companies use lower costs and the interest rate of long-term debt in relation to short-term debt. These findings are consistent with the trade-off theory which predicts a positive relation between leverage and tangibility (Frank *et al.*, 2011), and also with the pecking order theory, which is generally interpreted as predicting a negative relation between leverage and tangibility (Koralun-Bereźnicka, 2013).

Studies on the relationship between the general asset structure and financial performance also exhibits mixed results. The study by Mawih (2014) examined the effects of assets structure (fixed assets and current assets) on the financial performance of some manufacturing companies listed on Muscat Securities Market (MSM), for the period 2008-2012. The assets structure was measured by fixed assets turnover and current assets turnover while the financial performance was measured by ROA and ROE. The overall result of the study was that the structure of assets does not have a strong impact on profitability in terms of ROE. Another result of the study indicated that only the fixed assets had impact on ROE unlike ROA. Further, the result suggested that the effect of asset structure had an impact on ROE only in petro-chemical sector. It also concluded that there was no impact for current assets on ROE and ROA. On the other hand, the study by ZhengSheng and NuoZhi (2013) on the optimal allocation of Asset Structure and business performance illustrated that asset structure research had more application value and significant meaning in determining the financial performance.

This study sought to consider asset structure of the commercial and services firms listed at the NSE Kenya as the independent variables, to determine how they affect the dependent variable, which in this case is the financial performance. The components of asset structure form the independent variables in the study. These are: Property, Plant and Equipment; current assets; intangible assets; and long term investments and funds (Schmidt, 2014). These variables were measured by getting the ratio of each independent variable to the Total Assets. On the other hand, the dependent variable, the financial performance, was broken down into various indicators, whose effect was analyzed. These indicators were; EPS, ROA, ROE, profitability (profit margin), and liquidity (current ratio). A composite index was established to capture these indicators into one single measure. This was done by getting the average of the ratios involved, as all the ratios are directly proportional to the financial performance of the firms. The index was referred to as the financial performance of the firm under study. The effect of each component of the asset structure on the financial performance is established independently and relationship determined.

#### IV. Methodology

This study adopted descriptive research design. For the purpose of this study, the target population was the firms listed under Commercial and Services sector of NSE, Kenya. A census was done on the entire commercial and services firms listed in the NSE, Kenya. The study did not involve sampling as it involved a census on all the firms in this category. A census was conducted, but data for three firms were not fully available owing to the year of listing, leading to a final list of seven firms under study in view of study objectives. Since the study utilized secondary data, sampling was not applicable. A document review guide was used to collect the secondary data for all the variables in the study, which were extracted from published annual reports and financial statements of the listed companies in the NSE for the years 2010– 2014 which includes: income statement, statement of financial position, cash flow statements, statement of change in equity, notes to the accounts and the director's report. These reports were obtained from the CMA hand books.

Data was analyzed using simple regression analysis, and multiple regression analysis (standard) aided by the SPSS software version 21. Multiple regression analysis is a powerful technique used for predicting the unknown value of a variable from the known value of two or more variables (Cox, 2015). The various components of asset structure were held as independent variables while financial performance of quoted commercial and services firms were the dependent variable in view of the regression model.

In this study, a multiple regression analysis model was developed as presented below:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \varepsilon$$

Based on the specific objectives, the following simple linear regression models were also developed:

- i)  $y_1 = \beta_0 + \beta_1x_1$
- ii)  $y_2 = \beta_0 + \beta_2x_2$

$$\text{iii) } y_3 = \beta_0 + \beta_3 x_3$$

$$\text{iv) } y_4 = \beta_0 + \beta_4 x_4$$

Where:

$Y$  = Financial Performance

$\beta_0$  = Intercept,

$\varepsilon$  = Error term,

$\beta_1 - \beta_4$  = the regression coefficients,

$y_1$  = Property, Plant and Equipment,

$y_2$  = Current assets,

$y_3$  = Intangible assets, and

$y_4$  = Long term investment and funds

Three diagnostic tests were conducted before running a regression analysis. These are Normality, Multicollinearity and Homoscedasticity. The Q-Q graph for normality test indicated a normal distribution, as the individual data were fairly distributed around the mean. The normality of the data was also tested using Shapiro-Wilk test as  $N < 2000$ , where it indicated that the significance values were greater than 0.05 ( $p = 0.096 > 0.05$ ), and thus the data is found to be normal. The results of Multicollinearity test, using both Variance Inflation Factor, and Tolerance statistics indicated that there was no issues of Multicollinearity, since all values of Tolerance  $> 0.2$ , and all values of Variance Inflation Factor  $< 4$ . This study dealt with one sample and thus a t-test was used. The results show that  $p = 0.001$  which is less than a significant level of 0.05, thus, the obtained differences in sample variances are likely to have occurred based on random sampling from a population with equal variances.

## V. Results and Findings

The objective of the study was to determine the relationship between the asset structure and financial performance of commercial and service industry at NSE, Kenya. A multiple regression analysis model was developed for the joint relationship between the independent variables and the dependent variable. A simple regression analysis was conducted on the financial performance against each of the independent variables; Property, Plant and Equipment, current assets, intangible assets, and long term investments and funds. Later, a multiple regression analysis on the joint effect of Property, Plant and Equipment; current assets; intangible assets; and long term investments and funds; on the financial performance, was conducted. Regression modes were only developed in the areas where the relationship was found to be significant

### 5.1 Regression of Property, Plant and Equipment on Financial Performance

The first specific objective was to establish the effects of Property, Plant and Equipment financial performance of the firms listed under commercial and services sector of NSE, Kenya. The result for the simple linear regression analysis indicated that there was a significant relationship between the Property, Plant and Equipment of the firms under study and their financial performance at a significance level of 0.05, since the results indicated a significance level,  $p = 0.011 < 0.05$ . The simple correlation of 0.426 indicates a fairly strong positive correlation between the variables, and  $R^2 = 0.182$  indicated that 18.2% of the changes in the financial performance can be explained by the Property, Plants and Equipment of the firms.

The model indicated that one unit increase in Property, Plant and Equipment will lead to decrease of financial performance by a factor of 0.072, as indicated by the regression coefficients and the y-intercept was 1.426. This can be expressed as follows;

$$y = 1.426 - 0.072x$$

Where:

$y$  = Financial performance

$x$  = Property, Plant and Equipment.

These results were significant at 0.05 significance level, as  $p = 0.011 < 0.05$ ; hence, the null hypothesis that Property, Plant and Equipment do not have a significant effect on financial performance of the firms listed under Commercial and Services Sector at NSE, Kenya was hereby rejected.

### 5.2 Regression of Current Assets on Financial Performance

The second specific objective was to establish the effects of current assets on financial performance of the firms listed under commercial and services sector of NSE, Kenya. The simple correlation of 0.11 indicated a weak positive correlation between the current assets and the financial performance of the firms under the study. The coefficient of determination ( $R^2 = 0.012$ ) indicated that only 1.2% of the variation in the financial performance can be explained by their current assets. The equation obtained from the regression coefficient indicated that;

$$y = 1.059 - 0.028x$$

Where:

$y$  = Financial Performance

x= Current Assets

The results obtained was not statistically significant at 0.05 significance level, since  $p=0.528 > 0.05$ . Hence, the null hypothesis that current assets do not have a significant effect on financial performance of commercial and services firms quoted at NSE, Kenya is hereby supported.

### 5.3 The Regression of Intangible Assets on the Financial Performance

The third specific objective was to determine the effects of intangible assets on financial performance of firms listed under commercial and services sector of NSE, Kenya. The simple correlation of 0.049 indicated a very weak positive correlation between the intangible assets and the financial performance. The coefficient of determination ( $R^2=0.002$ ) indicated that intangible assets accounted for only 0.2% of the variance in the financial performance of the firms under study. The results of the regression coefficients indicated that;

$$y=0.878-0.009x$$

Where:

y= the financial performance

x= intangible assets

These results were not statistically significant at 0.05 significance level, as  $p=0.781 > 0.05$ . Hence the null hypothesis that Intangible assets do not have a significant effect on financial performance of the firms listed under Commercial and Services Sector at NSE, Kenya was hereby supported. This indicated that intangible assets do not have a statistically significant effect on the financial performance of the firms under the study.

### 5.4 The Regression of Long Term Investments and Funds on the Financial Performance

The fourth specific objective was to establish the effects of long term investments and funds on the financial performance of commercial and service industry at NSE, Kenya. The simple correlation of 0.527 indicates a fairly strong positive correlation between the Long term investments and funds, and the financial performance of the firms. The results also indicate that 27.8% of the variation of financial performance can be explained by the long term investments and funds of these firms as indicated by the coefficient of determination,  $R^2 = 0.278$ . The results indicated that a one unit increase in long term investment and funds will lead to an increase of the financial performance with a factor of 0.069 at 0.05 significant levels. The beta coefficient of 0.069 was identified, and a y-intercept of 0.437. This can be represented by the following linear regression model:

$$y = 0.437 + 0.069x \quad \text{Where:}$$

y = Financial performance

x = Long term investment and funds

These statistics are significant at 0.05 significance levels,  $p=0.01 < 0.05$ . Hence, the null hypothesis that Long term investments and funds do not have a significant effect on financial performance of the firms listed under Commercial and Services Sector at NSE, Kenya was hereby rejected. This means that Long term investments and funds have a statistically significant effect on the financial performance of the firms under the study.

### 5.5 The Regression of Property, Plant and Equipment; current assets; intangible assets; and long term investment and funds; jointly on the Financial Performance

The general objective of the study was to determine the relationship between the asset structure and financial performance of commercial and service industry at NSE, Kenya. To achieve this, a multiple regression analysis was conducted on the effect of Property, Plant and Equipment; current assets; intangible assets; and long term investment and funds; jointly on the Financial Performance of the firms under study. The results indicated a simple correlation of 0.668 which signify a fairly strong positive correlation between the independent variables studied, and the financial performance of the firms under study.  $R^2$  value of 0.446 (coefficient of determination) indicated that 44.6% of the changes in the financial performance can be explained by Long term Investments & Funds, Intangible Assets, Property, Plant and Equipment, and the Current Assets of these firms. These statistics are significant since  $p=0.01 < 0.05$ .

The results from ANOVA (analysis of variance) indicate that the model is a good fit in measuring the relationship between the long term investments and funds, and the financial performance of the firms under study at 0.05 significant level as indicated by  $F(4,30)=6$ , and  $p=0.01 < 0.05$ . This is an indicator that the model was statistically significant at the 0.05 level of significance, an indication that Property, Plant and Equipment; current assets; intangible assets; and long term investment and funds; jointly have a statistically significant effect on the financial performance of the firms under study.

The unstandardized and standardized coefficients aided in the development of the regression model. A multiple regression analysis model was obtained which is expressed as under

$$Y=0.356-0.084x_1+0.076x_2+0.028x_3+0.068x_4$$

Where:

Y=Financial performance

$x_1$ = Property, Plant and Equipment

$x_2$ = Current assets

$x_3$ = Intangible assets

$x_4$ = Long term investment and funds

Property, Plant and Equipment had a coefficient of -0.084, with  $p=0.008<0.05$  which indicates that Property, Plant and Equipment has a significant effect on the financial performance. The coefficient of current assets was 0.076, with  $p=1.35>0.05$ , indicating that the current assets do not have a significant effect on the financial performance. Intangible asset had a coefficient of 0.028 with  $p=0.387>0.05$ , indicating that intangible assets do not have a significant effect on with the financial performance. Finally, the long term investment and funds had a coefficient of 0.68, with  $p=0.02<0.05$ , indicating that long term investment and funds have a significant effect on the firms under the study.

This model indicates that financial performance is dependent on Property, Plant and Equipment, current assets, intangible assets and long term investment and funds. It indicates that when all variables are kept constant, a one unit increase in Property, Plant and Equipment will lead to a decrease in the financial performance by a factor of 0.084, which is statistically significant at 0.05 significance levels. An increase in one unit of current assets will lead to an increase in the financial performance by a factor of 0.076, though this is not statistically significant. Similarly, a one unit increase in the intangible asset will lead to an increase in financial performance by a factor of 0.028, which is also not statistically significant. Finally, a one unit increase in the long term investments and funds will lead to an increase in financial performance of these companies by factors of 0.68, and the effect is statistically significant, at 0.05 levels of significance.

## 6 Discussion

The general objective was to determine the relationship between the asset structure and financial performance of commercial and service industry at NSE, Kenya. The results of this study indicate that asset structure has significant relationship with financial performance of these firms, at 0.05 levels of significance. The study result is in line with the results of the study done by ZhengSheng and NuoZhi (2013) on the optimal allocation of Asset Structure and business performance with an objective to evaluate relationship between asset structure and business performance, which concluded that that asset structure research had more application value and significant meaning. On the other hand, it differs partially with result of the study by Mawih (2014) on the effects of assets structure on the financial performance of some manufacturing companies listed on Muscat Securities Market (MSM), which concluded that the structure of assets does not have a significant impact on profitability in terms of ROE.

The first specific objective was to determine the effects of Property, Plant and Equipment on financial performance of commercial and service industry at NSE, Kenya. The results of this study show that the Property, Plant and Equipment have a strong effect on the financial performance that is statistically significant. This is consistent with the study by Olatunji *et al.* (2014) on the effect of investment in fixed assets on profitability of selected Nigerian Commercial Banks, which concluded that investments in fixed assets have strong and statistically significant impact on the profitability of banking sector in Nigeria. On the other hand, it is contrary to the findings of the study by Okwo *et al.* (2012) which concluded that the relationship between the level of investment in fixed assets and its impact on the operating profit was not statistically significant.

The second specific objective was to establish the effects of current assets on financial performance of commercial and service industry at NSE, Kenya. The results indicated that current assets do not have significant effect on financial performance of these firms. These results are consistent with the findings of Mawih (2014) that concluded that there was no significant effect of current assets on either ROA or ROE. The result partially differ with the results of the study done by Yahaya *et al.* (2015), which suggested a positive effect of some current assets (the cash and bank balances, financial assets held for trading, loans and advances to customers), and a negative impact by some current assets (derivative assets, loans and advances to banks) on the Return on Asset.

The third specific objective was to determine the impact of effects of intangible assets on financial performance of commercial and service industry at NSE, Kenya. The findings of this study indicate that intangible assets do not have a significant effect on the financial performance of these firms. The results of this study partially differ with the Hanran Li and Wenzhou Wang (2014) study that observed that some kinds of intangible assets such as research and development have a significant effect on financial performance, while others such as employee benefit expense, do not.

The fourth specific objective was to establish the effects of long term investments and funds on the financial performance of commercial and service industry at NSE, Kenya. The result of this study indicates that Long Term Investments and funds have a significant positive impact on the financial performance of these firms. Previous studies have not captured this relationship significantly and thus comparison with the results of other

scholars could not be determined.

## **7 Conclusion and Recommendation**

Asset structure has a strong significant impact on the financial performance. From the study, investments in terms of Property, Plants and Equipment have a significant effect on the firms' performance. A one unit increase in Property, Plant and Equipment reduces the financial performance by 0.072 units. This means that there is an optimal asset structure in which, increase in the value of this variable will start reducing the financial performance of these firms. This can be attributed to under-utilization of these resources. These firms should limit their investments in this variable and focus on utilizing the existing ones effectively for them to improve on their financial performance. On the other hand, current assets and intangible assets do not have a significant effect on the financial performance of the firms under study. This could be attributed to the fact that only 3.7% of the changes in the financial performance could be explained by the two variables. Further, Long term investments and funds have a positive significant effect on financial performance on these firms, and therefore managers of these firms should direct their resources towards increasing long term investments and funds of their firms.

Based on the study findings, this study recommends that managers of all financial and services firms should increase their allocation of resources towards long term investments and funds in order to improve on their financial performance. They should also reduce over investment on Property, Plant & Equipment and focus on utilizing the already existing ones fully. Investment in current assets and intangible assets should be guided by other considerations since they do not affect the financial performance significantly stock may be obtained on just-in-time to reduce the costs involved in holding inventory. This study also makes recommendations to the Finance practice to put more consideration on asset structure of firms when formulating financial policies and standard operating procedures. Since asset structure has a significant effect on the financial performance, it should be factored in, in maintaining control of the budget and future financial success of these business organizations. The results of this study also add value to the world of knowledge, by establishing a model to determine the financial performance of the firms listed under commercial and services sector at NSE, Kenya, in terms of their asset structure composition.

## **8 Contribution to Knowledge**

The results of this study add value to the world of knowledge, by establishing a model to determine the financial performance of the firms listed under commercial and services sector at NSE, Kenya, in terms of their asset structure composition. This study also provides a basis for future reference to the academician and those making related studies in developing their research projects/thesis. To the regulators of business organization, this study recommends that asset structure of firms should be taken into consideration when evaluating the strength of the financial institutions, and to provide informed advice to the firms accordingly. This will reduce the cases of firms collapsing.

## **9 Areas for Further Studies**

The results of this study indicate that only 44.6% of the variation in financial performance of commercial and services firms can be explained by the asset structure, where 18.2% is explained by the Property, Plant and Equipment, and 27.8% can be explained by the firms' long term investments and funds. This indicates that 55.4% of their financial performance cannot be explained by the model. The researcher recommends further studies on these firms to explain the unexplained part of the variations, bearing in mind the focus of this study. This study has also found out that only 1.2% of the variation in financial performance of these firms can be explained by their current assets, and only 0.2% of the financial performance of these firms could be explained by their intangible assets. Since the model used in this study on the effect of current assets and intangible assets on financial performance did not pass the goodness of fit, the researcher recommends further studies to establish models that can explain their relationship and determine their effect on the financial performance.

## **10 Limitation of the Study**

The study analyzed secondary data from financial statements of the listed firms, which could contain some errors that would have remained undetected by this study. Another limitation is that the theoretical anchorage is skewed towards capital structure. This is due to the fact that asset structure theoretical review has not been popular compared to capital structure. This study therefore used the concepts of the capital structure theories to develop the theoretical review of the study. Further, the study was conducted on one sector of the firms listed at the NSE, and therefore the findings cannot be generalized to other firms in the other sectors of the economy due to contextual differences.



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