



**EFFECT OF PROFITABILITY ON SHAREHOLDER VALUE OF BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE**

**Munene, P., Malenya, A. A., & Mukanzi, C.**

---

**EFFECT OF PROFITABILITY ON SHAREHOLDER VALUE OF BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE**

**Munene, P.,<sup>\*1</sup> Malenya, A. A.,<sup>2</sup> & Mukanzi, C.**

<sup>\*1</sup> College of Human Resource Management, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Nairobi, Kenya

<sup>2</sup> Jomo Kenyatta University of Agriculture & Technology [JKUAT], Nairobi, Kenya

<sup>3</sup> PhD., Jomo Kenyatta University of Agriculture & Technology [JKUAT], Nairobi, Kenya

**Accepted: May 11, 2018**

---

**ABSTRACT**

*Whereas profitability is expected to affect the value of firms, it is not clear how they affect the shareholder value for banks listed at the Nairobi Securities Exchange (NSE). Accordingly, this study evaluated the effect of profitability on the shareholders' value of the banks listed at the Nairobi Securities Exchange. The target population was commercial banks companies listed on the Nairobi Securities Exchange. The study was designed as a census study due to the small size of population of eleven listed banks at the NSE. The study used secondary data. The secondary data was sourced from published audited financial statements of NSE listed banks for the years 2012 to 2016 on a quarterly basis. This formed 20 quarterly observations for each variable. Further data on share prices and market value of banks was sourced from the NSE database. The study adopted a descriptive research design. It used linear regression analysis of shareholder value on profitability to establish the statistical significance of the coefficient of profitability indicator at 95% confidence interval using the t-statistic and p-value to test the null hypothesis that profitability has no significant effect on shareholder value. The findings indicated that firm's profitability had a positive effect on shareholders' value. The study was limited by the sole focus on listed commercial banks and therefore did not take into account the uniqueness of non-listed commercial banks. It also only focused on banks and left out analysis of non-bank listed firms at the NSE. It was therefore suggested that a similar study be carried out not only for all banks both quoted and unquoted, but also for non-bank companies listed at the Nairobi Securities Exchange.*

**Key Words:** Profitability, Financial Performance, NSE

## INTRODUCTION

Normatively stated, creating shareholder value is the correct goal of the firm despite the fact that some other stakeholders have some claim on the firm (Booth, 1998). Thus a firm could have other implicit goals such as profit maximization, maximization of the earnings per share, maximization of corporate social responsibility and payment of suppliers (Pandey, 2005). The question that emanates is that, does higher profitability lead to shareholder value creation?

Stewart (2003) indicates that the most critical error accountants are making is to treat equity capital as a free resource. He asserts that although they subtract the interest expense associated with debt financing, they do not place any value of the fund that shareholders have put or left in a business other than the book value. This means that companies often report accounting profits when they are in fact destroying shareholder value (Stewart, 2003). To fully back the principles of value creation and thus focus on what matters to the owners of the firms, it is important that value based management is explored (Jackson, 1998). The resulting transparency should be able to bring in an explicit understanding of how and where value is created and destroyed by pinpointing the real drivers of value (Copeland, 2000). Any critical thinking about shareholder value therefore entails thinking beyond financial measurement (Rappaport, 1999).

Whereas financial performance of a firm is expected to affect firm value, it is not clear how it affects the market value of shareholders for banks quoted in stock markets especially at the Nairobi Securities Exchange. This is particularly because both theoretical and empirical literature provide confounding evidence as to the nature of this effect. Some evidence indicate that the effect is positive while others are of the view that the effect is negative yet others find no evidence of any statistically significant evidence of the effect.

Narang and Mandeep (2014) for instance find that financial performance is positively related to market value but is inversely related to risk exposure. The same relationship is established from the study by Dipiazza and Eccless (2002). In a contradictory view, Graham (2004) finds no significant effect of profitability on firm market value.

Infact, the study shows that companies manipulate their accounts to meet market expectations. It indicates that 78% of those companies interviewed admitted to artificially smoothing the earnings and sacrificing shareholder value in order to meet or beat Wall Street expectations. 55% also said they would avoid initiating a project with very positive net present value if it meant falling short of current quarter's consensus on earnings thus indicating lack of focus on creating value for shareholders and focusing on meeting the stock exchange expectations on profitability.

The problem may not be dissimilar in the Kenyan context. Mcfie (2015) for instance shows that firm value is positively related to dividend payout by a firm's financial performance. If dividend payout is assumed to be positively related to profitability, then it is clear that McFie (2015) is of the view that profitability positively affects firm value. In line with this, the study seeks to evaluate the effect of firm profitability on shareholder value of banks listed at the Nairobi Securities Exchange.

The study covered all banks listed on the Nairobi Securities Exchange market. Shareholders' value was the dependent variable against the liquidity, financial position, profitability and risk exposure of the bank as the predictor variables. The study covered the period from 1<sup>st</sup> January 2012 to 31<sup>st</sup> December 2016. This is considered a long enough period suitable to observe relevant trends which Mcfie (2015) believe they emerge after a period of three years and over.

## LITERATURE REVIEW

This study was grounded in the efficient market hypothesis (EMH) which was advanced by Fama (1970). The theory asserts that shareholder value as reflected by share prices reflect available information about the company among the investors. In essence, profitability information is incorporated in share prices in accordance with the postulations of EMH (Fama, 1970). Fama (1970) asserts that the speed with which such information is reflected in the share prices is dependent on the level of efficiency in the market. Accordingly, the value relevance of profitability information depends on how fast the investors become aware of the information so as to use it to influence their demand or supply of the shares of the earnings company. Fama (1970) indicates that there are three levels of efficiency, weak level, semi strong level and strong level of efficiency. In line with the weak level of efficiency, value relevance of earnings quality information is expected to apply to historical earnings data as indicated in the past financial statements. In the semi-strong level, share prices are expected to reflect publicly available earnings quality data both past and current. In the strong level of efficiency, all relevant earnings quality information whether public or private is reflected by the share prices of the reporting firm. Nairobi Securities Exchange has been shown to be weak form efficient (Dickinson & Muragu, 1994). Accordingly, historical information on profitability is expected to be reflected in share prices and thereby affect shareholder value.

This study sustained profitability as an independent variable. Many an author agrees that the financial goal of the firm should be maximization of shareholders' value and that this is only possible if a business is profitable. Profit maximization implies that a firm produces maximum output while applying minimum input, the underlying logic being efficiency Collins (2004). Increased efficiency increases the

profitability frontier and hence the creation of shareholders' value Stewart (2003). Pandey (2005) reiterates that the maximization of shareholders' value is theoretically and operationally a feasible normative goal for guiding the financial decision making of a firm.

In order to maximize shareholders' value profit planning is essential as it is a prerequisite for optimizing investment and financing decisions Rappaport (2006). Profit planning therefore centers on making effective operating decisions by the finance manager in the areas of pricing, costs, volume of output and selection of a firm's product lines Malmi (2001). According to Collins (2004), the costing structure of a firm plays a significant influence on a firm's profitability since the variable costs change in direct proportion to volume changes while fixed costs are constant in the short term. Profitability may therefore change as a result of the change in sales otherwise known as operating leverage Pandey (2005). It is understood that ROA is a product of net profit margin and assets turnover Collins (2004). In a nutshell profit planning helps to anticipate the relationships between volume, costs and profits which in turn influence shareholders' value Stewart (2003).

Atiyet (2012) used panel data based on a sample of firms listed on the French Stock Exchange (SBF 250 index) to study the effect of the various financing decisions as independent variables (i.e. equity issue, self-financing, debt, growth, profitability, investment opportunities and size) on the shareholder value created (dependent variable) as measured by the economic value added (EVA) and the market value added (MVA). The study sought to disclose co relational attributes between the variables considering the information signaling, the pecking order, the agency and the static trade off theories. The author used the R<sup>2</sup> coefficient to measure the global quality of the regression models, the Fischer statistic to test the

heterogeneous/independent effect of the models and the Hausmann statistic to test whether the models had fixed/random effects. The study found that profitability has no effect on firm value.

Kapoor (2009) used secondary data selected over an eight year period(2001-2008) from companies which are constituents of the CNX index that trade on the Indian National Exchange in the information technology (IT) , fast moving consumer goods (FMCG) and service sectors to perform his study. The statistical techniques of principal component analysis and regression analysis were used to explore the relationships between dividend payout (the dependent variable) and PAT to assets ratio, lagged dividend ratio, current ratio of a firm, debt to equity ratio, quick ratio, annual sales growth, cash flows ratio, the natural log of National stock exchange adjusted average closing stock prices of the firm, retained ratio, gross fixed assets ratio, nifty beta of firm, natural log of market capitalization, price earnings ratio, price to book value, promoter holding of firm, log of total assets of firm, interest coverage ratio, return on net worth, return on earnings, lagged PAT to assets ratio, and the standard deviation of earnings per share (the independent variables). Kapoor (2009) found that there was a positive significant relationship between dividend payout ratio and the following factors: systematic risk, dividend signaling & smoothing, long term solvency and financial leverage. There was negative significant relationship between dividend payout and the following factors: liquidity, ownership, growth, and expansion. This implies that the higher the systematic risk, the lower the dividend payout, similarly, the higher the growth opportunities, the lower the dividend payout.

Viswanadham and Luthra (2005) in their study 'Models for measuring and predicting shareholder value: A study of third party software service providers' conducted in the year 2005 on four

listed Indian software companies using the strategic profit model and the economic value added model based on published data present findings on shareholder value models. The researchers compared financial data obtained from the models and used peer average data to provide customized recommendations for each company to improve shareholder value. Assuming that the companies followed the said rules, the authors predict the future of return on net worth and economic value added (being measures for shareholder value). In light of this perspective, the authors present the following findings: - Indian companies seem to generally prefer the economic value added model over the strategic profit model. The findings showed that companies which are after taking into account the capital charge use the economic value added model while those who wish to take account effect of decisions on expenses and assets on shareholder value use the strategic profit model. The study found the use of the combined models as significant in predicting shareholders' value.

## **METHODOLOGY**

This study used the descriptive research design to establish how profitability affects shareholders' value among banks listed at the NSE. The target population was eleven banks listed on the NSE. The information required of the population in light of this study could only be available in the financial statements. The reason why the listed companies were selected as the target population lies in the fact that these companies present all data in line with the Capital Market Authority (CMA) and banking Act regulations apart from complying with the NSE listing requirements and the companies Act to have their accounts audited/published each year (Mbendi, 2015). Further the listed banking companies are the largest sector on the NSE and operate on wider coverage by serving all the industry sectors of the economy either directly or through their subsidiaries- this enables a representative



reflection of the study in a Kenyan scenario. The study used all the listed banks hence were designed as a census survey.

Linear regression model was used in the study. It is specified as:

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Where by  $X_1$  is the profitability indicator as measured by return on assets while  $Y$  is shareholders' value indicated by Tobin's Q. The

analysis was undertaken using the t-statistic and p-value at 95% confidence interval.

### FINDINGS AND DISCUSSION

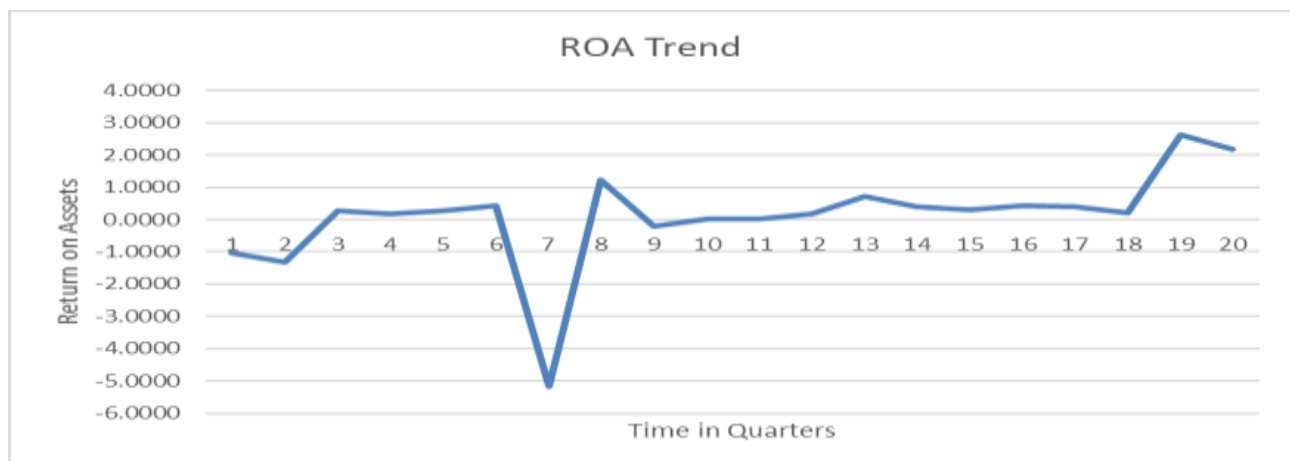
Before carrying out inferential analysis, the study evaluated the nature the variables using descriptive statistics as indicated in table I.

**Table I: Variable Descriptive Statistics**

	TOBIN'S Q	ROA
Mean	0.20769	0.10457
Median	0.08849	0.26836
Standard Deviation	0.30718	1.52494
Range	0.90928	7.81875
Coefficient of Variation	1.47903	14.58298

The dependent variable, Tobin's Q to reflect shareholders' value. It indicated a mean of 0.20769 and a median of 0.08849. Hence the value was skewed to the left. It showed a minimum of 0.02920 and a maximum of 0.93848. the trend over the 5 year period is reflected in the figure 1. The figure indicates a sharp increasing trend. This is in line with sustained improvement in bank performance that was witnessed over the time in Kenya. With a coefficient of variation, CV, of 1.479, the shareholders' value shows a lot of variability which is probably influenced by the extreme values registered in the final periods of the study.

The independent variable which measured bank profitability was based on return on assets ratio. It indicated a mean of 0.10457 and a median of 0.26836. It showed a minimum of -5.18580 and a maximum of 7.81875. This wide dispersion shows the wide range in profitability of the various banks listed at NSE. The trend over the 5 year period is reflected in the figure I. With a coefficient of variation, CV, of 14.58298, the financial return on assets shows very high variability which is probably influenced by the varying sizes of banks and therefore their financial performance of banks over the study period as shown in figure 1.



**Figure 1: ROA Trend**

The linear regression analysis was invoked to model the relationship between the dependent variable (shareholders' value) and the independent variable (profitability). The first level

of analysis focused on the model explanatory power. Accordingly the findings of the regression model are presented in table II.

**Table II: Model Explanatory Power**

Multiple R	0.76718
R Square	0.58857
Adjusted R Square	0.47886
Standard Error	0.22175

Multiple R showed the coefficient of correlation. The figure of 0.767 indicated a strong positive correlation between financial condition variables and shareholders' value as indicated by Tobin's Q. The table II showed an R-square value of 0.58857 which indicates that 58.9% of the changes in shareholders' value are explained by the changes in profitability of the banks. This implied that the remaining 41.1% of the changes in shareholder value depends on factors outside this financial condition.

indicated by the F ratio. The findings are presented in Table III. The findings indicate that the computed F is 5.3646 while the significance level of F is 0.0693. Accordingly the study rejects the null hypothesis of an unfitting model and concludes that the model meets the goodness of fit criteria for use in analysis since the model F is greater than the significance F at 95% confidence interval. Kothari (2004) suggests that the model is suitable if the significance F is less than the computed F.

After ascertaining the model explanatory power, the study checked out the model goodness of fit to the data analyzed using the ANOVA test as

**Table III: Model Goodness of Fit ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Signif. F</i>
Regression	1	1.05518	0.26380	5.36459	0.00693
Residual	15	0.73760	0.04917		
Total	19	1.79279			

Having confirmed the explanatory power and the goodness of fit of the regression model, the

findings of the regression of shareholder value on profitability variable are reflected in table IV.

**Table IV: Regression Output**

	Coefficients	Std Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.40523	0.18939	2.13965	0.04923	0.00155	0.80890
X <sub>3</sub>	0.19261	0.05478	3.51588	0.00312	0.07584	0.30938

From table IV, The overall output was presented as:  $Y = 0.40523 + 0.19261X_3$ . Accordingly, profitability had a positive effect on shareholders' value. This was because the coefficient of financial position measure, the return on assets ratio, presented as X<sub>3</sub> was a positive value of 0.19261. This was confirmed by the statistically significant t-value of 3.51588 at 95% confidence interval

which is greater than the critical t-value of 2.000. The statistical significance is confirmed by a p-value of 0.00312 which was less than the significant value of 0.05. This finding contradicts that of Purwohandoko (2017) which showed that profitability has a negative effect on firm value and therefore shareholders' value. This could be attributed to the differences in the regulatory

environment between Indonesia, where the study was undertaken, and Kenya, where the findings from this research are derived.

## CONCLUSION

The regression output showed that financial profitability had a positive effect on shareholder value. This is plausible because financial performance has a financial value effect on a business by increasing the equity base. Accordingly, banks with high levels of profitability are highly valuable. This implied that the higher the level of profitability, the greater the return and vice versa. It was because of this that very profitable banks portend a greater shareholder value than less than profitable banks. In summary, the results of the regression analysis revealed there was a significant positive effect of banks' profitability on shareholders' value. This implies that firms which increase their profitability are likely to increase shareholders' value and vice versa.

The study validated that proposition that profitability of a had a positive effect on shareholder value for shareholders of banks listed at the Nairobi Securities Exchange. This was probably because an enhanced financial performance had a direct bearing on the equity of

a firm such that the higher the profitability, the greater the retained earnings and therefore the greater the shareholder value and vice versa. This implied that firms which reduce their profitability tend to destroy shareholders' value if it is the only attribute that is varied.

It was therefore recommended that, banks must devise strategies to improve their financial performance. This is because the study found out that profitability has a positive effect on shareholder value. Profitability can be improved by enhancing income while adopting cost cutting strategies.

The study focused only on listed commercial banks. It may be possible that such banks findings may not be generalizable to all commercial banks. It is recommended that a similar study be carried out to establish the effect of financial condition of banks on shareholder value for all banks both quoted and unquoted banks.

Secondly, it was suggested that a similar study be carried out for non-financial firms especially those quoted on the stock exchange. This was because banks and other financial institutions are highly regulated such that the impact of financial condition on shareholder value may be different for non-bank firms when compared to the banks.

## REFERENCES

Musyoki, D. (2012). Changes in Share Prices as Predictors of Accounting Earnings for Financial Firms Listed in Nairobi Securities Exchange. *International Journal of Business and Public Management*, 2(2), 1-11.

Fama, E.F. (1970) Efficient Capital Markets: A Review of Theory and Empirical Work. *Journal of Finance*, 25, 383-417.

Amour, E., & Mankins, M.C. (2000). *Back to the Future*. [www.marakon.com/ideas-pdf/id-010701-armor.pdf](http://www.marakon.com/ideas-pdf/id-010701-armor.pdf). Accessed on 31 January 2018.

Amartiya, S. K., (1977). Rational fools: A critique of the behavioral foundations of economic theory. *Philosophy and Public Affairs*, Vol.6, 317-344.



- Allen, T. H., (1978). *New Methods in Social Science Research*. New York: Praegar Publishers.
- Bistrova, J., Jelena, T., & Lace, N. (2014). Defining key factors that sustain maximum Shareholder value. *Journal of Financial Studies and Research*, Vol. 12, 114-124.
- Brealey, R. A., & Myers, S.C., (2003). *Principles of Corporate Finance*. New York: McGraw-Hill publishers.
- Booth, L. (1998). *What driver's shareholder value?* Creating shareholder value Conference. Federated Press: Canada.
- Boubakar, A., Mensi, W., & Nguyen, D.K. (2008). More on corporate diversification, Firm size and value creation. *Economic Bulletin*, 7(3), 1-7.
- Boasson, V., & Boasson, E., (2005). The stock market valuation of IT innovations: Evidence from the investment banking industry. Retrieved from <http://isedj.org/isecon/2005/3354/ISECON.2005.Boasson.pdf> accessed 6th March 2018.
- Bughin, J., & Copeland, T.E, (1997). The virtuous cycle of shareholder value creation. *The Mckinsey Quarterly*, Vol.3, 156-167.
- Burr, W.J., (1938). *The Theory of Investment Value*, Cambridge: Harvard University Press.
- Christopher, M., & Ryals, L. (1999). Supply chain strategy: It's Impact on shareholder value. *International Journal of Logistics Management*, Vol.10, 2,107-116.
- Cronbach .L. (2001). *Measuring reliability of a research instrument*. [www.real-statistics.com/reliability/cronbach alpha/pdf](http://www.real-statistics.com/reliability/cronbach%20alpha/pdf). Accessed April 16<sup>th</sup> 2015.
- Collin, D. (2004). *Management and Cost Accounting*. Thomson Learning publishers: London.
- Copeland, T. (2000). *Valuation: Measuring and Managing the Value of companies*. New York: John Wiley and sons.
- Dipiazza, S., & Eccles, R. G. (2002). *Building Public trust*. New York: John Wiley and Sons.
- Drury, C., & Tayles, M. (2000). *Cost system design and profitability analysis in UK Companies*, Chartered Institute of Management Accountant.
- Dubey, R. (2000). Understanding the real measure of performance: EVA. *BusinessToday*, February- March issue, 94-98.
- Emory, C.W. (1976). *Business Research Methods*. Illinois: Richard D. Irwin, Homewood.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *N.Y. Times, Section 6*, Vol.30, 126-127.

- Graham, J.R. (2004). *The Economic Implications of Corporate Financial Reporting*. [www.faculty.fequa.duke.edu/charvey/Research/workingpapers/w73-the\\_economic\\_implications.pdf](http://www.faculty.fequa.duke.edu/charvey/Research/workingpapers/w73-the_economic_implications.pdf) accessed 28 February, 2018.
- Gosh, B.N. (1982). *Scientific Methods and social research*, New Delhi: Sterling Publishers Pvt limited.
- Horne, V.J.C (1970). *A Risk-return Analysis of a Firm's Working Capital Position*. Engineering Economist.
- Jackson, T. (1998). *Managers versus shareholders (again)*. Financial Times 24 September.
- Jensen, M.C. (1986). Agency cost of free cash flow, corporate finance and takeover, *American Economic Review*, vol. 76, 323-339.
- Jensen, M.C. (2001). Value maximization, stakeholder theory, and the corporate Objective function. *Journal of Applied Corporate Finance*, vol. 14 (3), 119-125.
- Kapoor, S. (2009). *Impact of Dividend Policy on Shareholders' value: a Study of Indian Firms*. Jaypee Institute of Information Technology, India.
- Kakani, R.K., Saha, B., & Reddy, V.N. (2001). Determinants of financial performance of Indian corporate sector in the post – liberalization era: An exploratory study. NSE Research initiative, Paper no.5, <http://ssrn.com/abstract=904983>, accessed 30th March 2018.
- Kaplan, R.S., & Norton, D.P. (1992). The balanced score card: measures that drive Performance, *Harvard Business Review*, Jan-Feb, 71, 9.
- Kaplan, R.S., & Norton, D.P. (1996). *The balance scorecard: Translating Strategy into Action*, Harvard Business School Press.
- Knight, F.R., & Pretty, J.D. (2015). *The Impact of Catastrophes on Shareholder Value*, [www.templeton.ox.ac.uk](http://www.templeton.ox.ac.uk), 20<sup>th</sup> January 2015.
- Knight, J.A. (1998). Value based management-developing approach to creating Shareholder value. London: Mc-Graw-Hill Publishers.
- Kothari, C.R. (2004). *Research Methodology (Methods and techniques)*. New Delhi: New age International Publishers.
- Krejcie & Morgan (1970). *Determining Sample Size for Research Activities*, *Educational and Psychology Measure*, [www.academia.edu/8303970/SAMPLESIZE](http://www.academia.edu/8303970/SAMPLESIZE) Accessed on 30<sup>th</sup> January 2018.
- Lambert, D.M., & Burduglu, R. (2000). Measuring and selling the value logistics, *International Journal of Logistics Management*, Vol. 11(1), 1-17.

Leauby, B.A., & Wetzel, K. (2002). Know the Score: The balanced score card approach to strategically assist clients, *Pennsylvania CPA Journal*, spring, 29-32.

Mbendi, (2015). The banking Sector in Kenya. [www.mbendi.com/indy/fsrv/bank-kenya](http://www.mbendi.com/indy/fsrv/bank-kenya) accessed on 7th April 2018.

Mcfie, (2015). Enhancing your brand through integrated reporting. *Journal of the Institute of Certified Public Accountants of Kenya*. Dec 2014-Jan 2015 issue.

McNulty .C. (2002). *What is your real cost of capital?* Harvard Business Review, October.

Modigliani, F., & Miller, M. (1958). The cost of capital corporate finance and the theory of investment. *American Economic Review*. Vol. 48, 261-297.

Modigliani, F., & Miller, M. (1963). Corporate income taxes and the cost of capital, *American Economic Review*. Vol. 53, 433-443

Mugenda, O., & Mugenda, A.G. (2012). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: African Centre for Technology Studies.

Myers, C.S. (1977). Determinant of corporate borrowing. *Journal of Financial Economics*, Vol.13, 67-78.

Narang, S., & Mandeep, K. (2014). Impact of firm specific attributes on shareholder Value creation of Indian companies: An empirical analysis. *Journal of Global Business Review* vol.15 (4), 847-866.

Omura, T. (2005). *Models of shareholder value creation*. University of Queensland.

Pandey, I.M. (2005). "What drives shareholder value", Working paper No. 2005-09-04, Indian Institute of Management, India.

Pandey, I.M. (2005). *Financial Management*. New Delhi: Vikas Publishing.

Purwohandoko, K. (2017). The Influence of Firm's Size, Growth, and Profitability on Firm Value with Capital Structure as the Mediator: A Study on the Agricultural Firms Listed in the Indonesian Stock Exchange. *International Journal of Economics and Finance*; 9 (8); 103-110. ISSN 1916-971X

Rappaport, A. (1999). *Creating shareholder value: a guide to managers and investors*, New York: The Free Press.

Rappaport, A. (2006). *Ten ways to create shareholder value*. Harvard Business Review. [www.hbr.org](http://www.hbr.org). Accessed 26<sup>th</sup> January 2015

Robson, R. (2004). *Corporate governance, a practical guide*. London stock exchange.

Sayilir, O. & Farhan, M. (2017). Enterprise Risk Management and Its Effect on Firm Value in Turkey. *Journal of Management Research*, 9 (1) 57-71.

Sharpe, W.F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, Vol.19 (3), 425-442.

Stewart, G.B. (1994). EVA®. Fact and Fantasy, *Journal of Applied corporate finance*, Summer, 71-84.

Stewart, G.B. (2003). How to fix accounting: measure and report economic profit, *Journal of Applied Corporate Finance*, Vol. 15 No.3, 87-96

The Nairobi Stock Exchange. (2015). Companies listed, [www.nse.co.ke](http://www.nse.co.ke) , accessed 18<sup>th</sup> April, 2018.

Viswanadham, N., & Luthra, P. (2005). Models for measuring and predicting Shareholder value: A study of third party software service providers, *Sadhana*, Vol.30, 475-498.

Varaiya, Nikhil, Kerin, Roger, A., & Weeks, D.(1987). The Relationship between growth, profitability and firm value. *Strategic Management Journal*, Vol.8 (5), 246 – 250.

Walters, D. (1999). The Implications of Shareholder Value Planning and Management For logistics Decision Making, *international Journal of Physical Distribution Logistics Management*, Vol. 29 (4), 240-258.