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Current Ratio And Stock Market Price Of Non Financial Firms Listed At Nairobi Securities Exchange, Kenya

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Abstract
Analysts of financial statements and investors at the stock market consider a multiplicity of factors and metrics when making decisions on what stocks to invest in. This study set out to establish the effect of current ratio on market price of shares of non financial firms listed at the NSE. Not much is known about the effect of current ratio, as a measure of liquidity, on changes in stock market prices of firms listed at the NSE. Studies on current ratio have mostly been carried out in developed capital markets with little emphasis on its applicability in developing securities markets such as the NSE. This occurrence has been the basis of great interest in the issue by capital market researchers in accounting. Correlational research design was used. A census of all non financial firms listed at the NSE was conducted and secondary data collected through computation of average rate of change in market price of shares and computation of current ratios of non financial firms listed at the NSE for the financial years 2012 to 2016. Panel data was analysed using descriptive statistics and inferential statistics. Inferential statistics involved development and testing of predictive ability of current ratio panel data regression model. It was established that the mean current ratio of non financial firms listed at the NSE was positive and greater than unit (i.e. 2.382025). The implication was that non financial firms listed at the NSE had current asset values that were more than two times the value of current liabilities. It was also established that current ratio was not statistically significant in influencing the market price of shares of non financial firms listed at the NSE.

Key words: Current ratio, Average rate of change in market price of shares

1.1 Introduction

Financial performance of firms needs to be accurately measured to facilitate prediction of wealth attributable to shareholders well in advance to avoid reliance on market share prices of firms (Pandey, 2013). In order to achieve the objective of measuring firm financial performance and strength as a means of gauging shareholder wealth, investors and stock market analysts widely engage in financial statement analysis as a means of acquiring information that will facilitate them and or their clients to make optimal investment decisions (Irungu & Gatuhi, 2013). Information presented in financial statements should be analysed and interpreted by users to facilitate prediction of financial health, liquidity and operational efficiency of firms in terms of future capital gains and dividend earnings. Investors will be able to make decisions concerning investment opportunities that will cause them to realize their investment objectives based on the outcome of financial statement analysis. According to Edmonds et al (2016) financial statement analysis endeavours to isolate information needed for making a particular decision from the totality of the contents of financial statements and reports. Diversity of users, varied information needs and general nature of financial statements requires that a variety of analytical techniques be used to assist in deriving meaning from financial statements. Three techniques of analysis commonly used are horizontal analysis, vertical analysis, and ratio analysis. Ratio analysis is

technique where relationships between different items reported in the financial statements are expressed in form of ratios (Edmonds et al, 2016). Ratio analysis is considered a prominent and preferred tool of analysis because it does not use absolute money amounts to compare performance of firms. Also by eliminating the size factor ratio analysis facilitates more relevant comparison of financial statements (Robinson et al, 2009). Ratio analysis groups financial statements information into distinct categories that measure different aspect of performance of a firm thereby facilitating comparison and investigation of relationships between financial reports information and return on shares (Ross, Westerfield & Jordan, 2010). Ratios focus attention on areas of the business that need additional analysis such as liquidity and cash position of a firm. Realization of this fact can only be made possible through categorization of ratio (Barry & Jamie, 2011). Ross, Westerfield and Jordan (2010), and Robinson et al (2009) asserted that due to large number of ratios and ease of use, ratios should be grouped into liquidity, activity, solvency, market valuation and profitability ratios. Investors at the capital market are concerned with the stock return of their investments, also referred to as shareholder wealth or value. Shareholder wealth is often measured in terms of gain or loss of stock value and cash distributions over a period of time (Dita & Murtaqi, 2014). Ndeda (2013) further states that stockbrokers through use of financial statements and financial markets analysis techniques are able to provide information and advice to both current and potential investors about the viability of various investment alternatives.

1.2 Statement of the problem

Information on financial health of an entity is often expressed in monetary terms and is usually communicated to users by accountants through publication of annual financial statements (Barry & Jamie, 2011). The annual financial statements are then subjected to independent examination by external auditors. Unqualified audit reports and changes in stock prices usually relied on by investors have been of minimal use as indicators of shareholder wealth. Analysts of financial statements and investors at the stock market should consider a multiplicity of factors and metrics for guidance when making decisions on what stocks to invest in. There is need to establish whether change in market price of shares reflects financial results derived from performance indicators of liquidity such as current ratio. Few studies have been carried out on the effect of current ratio, as a measure of liquidity, on changes in stock market prices of firms listed at the NSE. Majority of the studies on current ratio have targeted developed capital markets with little emphasis on its applicability in developing securities markets such as the NSE making it an issue of great interest to capital market researchers in accounting.

1.3.1 Objectives of the Study

A study objective was to establish the effect of current ratio on market price of shares of non financial firms listed at the NSE.

1.3.2 Hypothesis

Ho: Current ratio has no statistically significant effect on market price of shares of non-financial firms listed at Nairobi Securities Exchange.

1.4 Justification of the Study

This study will provide investors with a mechanism of utilizing the current ratio metrics derived from financial statements generated internally and available in the public domain to predict future returns on investments.

1.5 Scope of the Study

The study was confined to establishing the effect of current ratio on market price of shares of non financial firms listed at the NSE. The study covered all the non-financial firms listed at the NSE for a period ranging from 2011-2017 and specific to 5 financial years 2012 to 2016.

2.0 Literature Review

Financial ratios also known as accounting ratios are the oldest, simple and practical planning and financial analysis tools that first appeared in the mid nineteenth century, and ever since have been in use among accountants, financial analysts, and both internal and external users for making economic decisions such as investment and performance evaluation decisions. During the past decades many financial and accounting models have been developed with an aim of trying to unravel the predictive potential of financial statement ratios (Kabajeh, Nu'aimat & Dahmash, 2012). Lai and Cho (2016) asserted that financial ratios were widely acknowledged as accurate indicators of investment potential of firms and were depended upon by investors as major providers of insight into liquidity of firms. Barry and Jamie (2011) indicated that, although ratios are useful indicators of performance they have shortcomings that relate to external and internal factors of an organization and also problems specific to consolidated accounts. Distortion of ratios may also be because they are based on end of period figures that are not a reflection of year long business operations. Liquidity ratios which include current ratio, quick ratio and net working capital to total assets ratio measure company's ability to meet its short-term obligations as they fall due (Gitman & Zutter, 2012; Khotimah & Mortagi, 2015; Edmonds et al, 2016; Arkan, 2016). A study by Anwaar (2016) where five independent variables were used with quick ratio being the only financial ratio in the liquidity category revealed that there was an insignificant relationship between quick ratio and stock returns. A study by Arkan (2016) revealed that for industrial and service sector companies there was no significant statistical positive relationship between current ratio and stock price movement, implying that the ability of current ratio to explain the stock price trends for listed companies was too poor. In the same study results from investment sector companies revealed existence of a significant positive correlation between current ratio and stock price trend.

3.0 Research Methodology

This study used correlational research design because it enabled quantitative measures of variables to be studied. The study population was all firms listed at the Nairobi Securities Exchange (NSE) during the period January 2011 to December 2017. Due to the small study population involved, a census of all non financial firms listed at the NSE was conducted and firms whose published financial statements were available and complete throughout the study period purposively selected giving a sample size of 36 non financial firms. Secondary data was collected through computation of average rate of change in market price of shares and computation of current ratio. Panel data was analysed using descriptive statistics and inferential statistics. Inferential statistics involved development and testing of predictive ability of current

ratio panel data regression model. Average rate of change (AROC) in market price of shares was used as a measure of change in shareholder wealth during the window period. The study used a window period of -20 trading days to +20 trading days to cover the entire period of interest. Current ratio was measured as current assets divided by current liabilities (Robinson et al, 2009).

The Fixed effects model and random effects model were considered for use in the analysis for this study since pooled regression (constant Coefficient) model assumes that intercepts and slope coefficients are the same over time and for all the cross-sectional units, and therefore would end up ignoring important differences that exist over time or between cross-sectional units. The fixed and random effects models cater for heterogeneity or individuality among the cross-sectional units by allowing intercepts to change for each cross-sectional unit. In order to decide which model between fixed effects model and random effects model was suitable for evaluating the effect of current ratio on market price of shares the Hausman test was conducted (Halcoussis, 2005).

4.0 Result findings

4.1 General Information

The general Information about composition of various industry sectors listed at the NSE during the period 2012 to 2016 was obtained. Table 1 below shows the various industry sectors of firms listed at the NSE, the number of firms in each industry sector and the total number of firms listed at the NSE for the financial years 2012 to 2016.

Table 1 Distribution of Firms Listed at the NSE per Industry Sector

S/No.	NSE Industry Sector	Firms in Each Industry Sector				
		2012	2013	2014	2015	2016
1	Agriculture	7	7	7	7	7
2	Automobile and Accessories	3	3	3	3	3
3	Banking	11	11	11	11	11
4	Commercial and Services	9	11	11	11	11
5	Construction and Allied	5	5	5	5	5
6	Energy and Petroleum	5	5	5	5	5
7	Insurance	6	6	6	6	6
8	Investment Services	3	4	6	6	6
9	Manufacturing and Allied	7	8	9	9	9
10	Telecommunication and Technology	2	1	1	1	1
11	Real Estate Investment Trust Sector	0	0	0	0	1
Total Number of Firms Listed at the NSE		58	61	64	64	65

The results presented in table 1 above indicate that between the years 2012 and 2016 there was a steady increase in listing of firms at the Nairobi Securities Exchange as indicated by the change in number of firms listed from a total of 58 firms in 2012 to a total of 65 firms in 2016. This signified an increase of 12.1 % in the number of firms listed at the NSE. Also observed from the results was the fact that the total number of industry sectors at the NSE increased from 10 sectors in 2012 to 11 sectors in 2016 signifying a 10 % growth in the number of industry sectors listed at the NSE. The most recently introduced industry sector was the Real Estate Investment Trust Sector which was introduced in the year 2016. Industry sectors Agriculture, Banking,

Construction and Allied, Automobile and accessories, Real Estate Investment Trust Sector, and insurance, comprising 54.5% of total industry sectors showed no change in the number of firms listed at the NSE during the years 2012 to 2016. Telecommunication and Technology industry sector comprising 9.1 % of total industry sectors showed a decline in the number of listings at the NSE. It was also established that 36.4 % of industry sectors listed at the NSE, comprising of Commercial and Services, Energy and Petroleum, Investment services, and Manufacturing and Allied had shown an increase in number of firms listed at the NSE over the period 2012 to 2016.

4.2 Descriptive Characteristics of Average Rate of Change in Market Price of Shares and Current Ratio

The mean, standard deviation, number of observations, minimum and maximum average rate of change in market price of shares and current ratio of non financial firms listed at the Nairobi Securities Exchange were established and information presented in Table 2 below.

Table 2 Descriptive Characteristics of Average Rate of Change in Market Price of shares and Current Ratio

Variable	Mean	Std Deviation	Minimum	Maximum	Observation (N)
AROC	0.002869	0.0321816	-0.062869	0.414214	180
CR	2.382025	3.143129	0.176521	20.7939	180

The results presented in table 2 indicate that the mean average rate of change in market price of shares of non financial firms listed at the Nairobi Securities Exchange, during the event periods, was 0.0028692 (0.28692 %) with a standard deviation of 0.0321816 over the study period of five years from 2012 to 2016 financial years. The minimum average rate of change in market price of shares of firms listed at the Nairobi Securities Exchange was -0.062869 (-6.2869%), while the maximum was 0.414214 (41.4214 %). The positive mean average rate of change in market price of shares is an indication of general increase in the shareholder wealth upon announcement of financial statements results for the of non-financial firms listed at the Nairobi Securities Exchange and considered in this study for the financial years 2012 to 2016.

Table 2 also shows that non financial firms listed on NSE had a mean current ratio (CR) of 2.382025 and a standard deviation of 3.143129. The minimum and maximum current ratio observed for the non financial firms that were studied was 0.1765206 and 20.7939 respectively for the 180 observations during the period 2012 to 2016. On average current assets were 2.382025 time the amount of current liabilities. The results are in agreement with assertions of Robinson et al (2009) that a high current ratio implies that there is no reliance on operating cash flow and outside financing to meet short term obligations as they fall due.

4.3 Effect of Current Ratios Model on Shareholder Wealth

The panel estimates of the current ratio model were determined, first based on fixed effects regression model and then based on random-effects regression and Hausman test conducted to select between fixed effects regression and random effects regression. Panel estimates of fixed effects regression model were determined and the results obtained presented in Table 3 below.

Table 3: Panel Estimates of Current Ratios Model Based on Fixed Effects Regression

AROC	Coefficients	Std. Err.	t	P>|t|	[95% Conf. Interval]	
CR	-0.000623	0.001085	-0.57	0.567	-0.002769	0.001522
Constant	0.004354	0.003535	1.23	0.220	-0.002635	0.011343
Sigma_u	0.015077					
Sigma_u	0.032362					
Rho	0.178337	(fraction of variance due to u_i)				

Further panel estimates of random effects regression model were determined and the results obtained presented in Table 4 below.

Table 4: Panel Estimates of Current Ratio Model Based on Random Effects Regression

AROC1	Coefficients	Std. Err.	z	P>|z|	[95% Conf. Interval]	
CR	0.001575	0.000758	2.08	0.038	0.000089	0 .003061
Constant	-0.0008822	0.002985	-0.30	0.768	-0.006733	0 .004969
Sigma_u	0					
Sigma_u	0.0323618					
rho	0	(fraction of variance due to u_i)				

Lastly Hausman test on suitability of fixed effects or random effects model for evaluating the effect of current ratio model on market price of shares listed at the NSE was conducted and results obtained indicated in Table 5 below.

Table 5: Hausman Test on Suitability of Fixed or Random Effects Models

Test Summary	Chi-Sq. Statistic	Probability
Cross-section random	8.01	0.0046

The Hausman test to determine the suitable model between fixed and random effects resulted in p =0.0046 that was significant at 0.05 leading to rejection of null test hypothesis that random effects model was suitable estimation method. The random effects model was dropped from further interpretation and evaluation. Instead alternative test hypothesis that fixed effects model was suitable estimation method for evaluating the effect of current ratios on market price of listed non financial firms accepted and subjected to further interpretation and evaluation.

Table 3 shows that fixed effects regression model had an intraclass correlation coefficient (rho) of 17.83% implying that 17.83 % of the total variance (between unit variance and within units variance) of AROC in the market price of shares (dependent variable) was due to differences across panels (between unit variance). Intraclass correlation coefficient was an indication of how strongly units in the same group (firm) resembled each other. Therefore the intraclass correlation coefficient of 17.83 % was an indication of low level of serial dependence.

The t-value in table 3 was used to test the hypothesis that the coefficient of current ratio was not different from zero and the test hypothesis was to be rejected in case the t-values turned out to be higher than 1.96 (for 95% confidence level). However since the t-values turned out to be less than 1.96 (i.e. CR; t = -0.57) null hypothesis was not rejected. Current ratio was found not to have significant influence on AROC in market price of shares listed at the NSE. This was also supported by the fact that p =0.567 for current ratio was greater than 0.05 set for this study.

According to Oscar (2007) a high t-value is an indication of higher statistical significance of an independent variable in influencing the dependent variable.

5.0 Conclusions and Recommendations

5.1 Conclusions

The current ratio had a statistically insignificant negative effect on AROC in market price of shares of non financial firms listed at the NSE as indicated by its coefficient value of -0.000623 and p= 0.567. For every additional unit of AROC in market price of shares of non financial firms listed at the NSE, the estimated average effect of CR on AROC increased by 0.004354-0.000623 units. Therefore current ratio did not provide information that was statistically significant in influencing investment decisions of shareholders of listed non-financial firms in Kenya.

5.2 Recommendations

It was recommended that investors be provided with financial education on the basics of financial statement analysis concepts. The study further recommended that research be conducted on effect of financial statement analysis models on market price of shares for each of the industry sectors of firms listed at the Nairobi Securities Exchange.

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