

# Effect of Financial Performance Indicators on Market Price of Shares in Commercial Banks of Kenya

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## Abstract

The key objective of this study was to establish whether financial performance indicators of listed banks in Kenya influence the market price of shares measured by use of the annual average market price of shares while financial performance indicators used were; total assets, net advances, total liabilities, deposits and profit before tax. Secondary data was used for the period 2004 to 2011 for all the variables. The study found that a single financial indicator is not enough to influence the market price of shares. The second key finding is that key financial indicators have a significant combined influence and effect on market price of shares. Arising from the findings of the study it would be advisable to extend this study by including additional financial performance variables like risk weighting of the banks, dividend per share and earnings per share.

## Keywords

Financial Performance Indicators, Market Price of Shares, Commercial Banks

## I. Introduction

With the increasing global competition, companies are focusing their efforts on creating shareholder value in order to survive the intense competition. In view of this, it is becoming important for companies to measure the value they create for their shareholders. Keeping track of the value created year-on-year enables companies to evaluate past decisions and make decisions that will improve shareholder value [1] Investors and market analysts resort to financial statement analysis when it comes to share investing. The information on Earnings Per Share (EPS) is presented on the Income Statement while Return on Assets (ROA), which is one of the profitability ratios, is computed using relevant numbers from the Income Statement and Balance Sheet. The broad area of financial accounting and reporting offers a number of fundamental measures of a firm's performance for a particular accounting period. One of these financial measures is the Earnings Per Share (EPS). Previous studies on EPS as a predictor of share price generated mixed results. Some research works concluded that EPS is a significant predictor when the firm consistently increases its EPS over a longer period of time.

[2] Analyzed 478 firms in USA during 1982-1998 and concluded that big sized and profitable firms with high level advertising expenditure have better performance in terms of those three measurements. [3] Studied the correlation between financial indicators and firm's performance of listed firms in USA for 19 years period by using 17 financial indicators and three variables to measure firm's performance, namely market performance (stock market value), cash flow performance (dividend per share), and profitability (ROI). The result shows that firms with low book to market ratio, efficient working capital management, low liquidity, more equity and less liabilities, and high retained earnings have high profitability based on ROI. Firms with unqualified opinion from auditor, more liabilities and less equity, low total assets and retained earnings have better cash flow performance (measured by cash dividend).

[4] Showed that cash flow from investing activities, gross profit, and company size significantly affect expected return on shares. The research period is 1995-2002, where 1998 is considered as crisis period. The paper used seven fundamental variables: inventory, accounts receivable, gross profit, marketing and administrative expense, allowance for doubtful account relative to sales, effective tax rate, and audit qualifications. During crisis period, only gross profit affects abnormal return significantly, while in non-crisis period inventory, financial reports, and audit qualifications have significant influence on abnormal return. The important thing is the low adjusted-R<sup>2</sup> which is only 0.5% (for crisis period) and 0.8% (for non-crisis period). This indicates the low ability of fundamental signals to explain the return variability in capital market.

[5] Noted that earnings per share, dividend yield and the price earnings ratio in were not the only variables that affect the share price. There are other factors like the interest rates, inflation rate, government regulation and the investor's behaviors that could have been considered. The study recommends further research on these factors to see how sector yet affect the share price. Also the study did only cover the finance and investment sector yet there are other sectors that are listed in the Nairobi Stock Exchange. These sectors include the Agricultural, Commercial and Industrial sector. The findings showed that there is a relationship between share price and accounting earnings. Then it means that whenever there is a change in accounting earnings then it would be expected that the share price will also change in the same direction. This is so because share price is the present value of the expected cash flows. The findings also showed that there is a relationship between the accounting earnings and the information used the stock exchange. This is so because the information used is past trend that are used to predict the future. Therefore it is true to conclude that the investors follow the trend of the earnings in order for them to make a decision on what stock to invest in. Also the factors that affect the share price also affect the earnings and they tend to follow the same direction.

[6] Did a study on forecasting ability of valuation ratios (Nairobi Stock Exchange). She did predictive regression model on a small sample of fourteen organizations with a financial year end of 31st Dec, over a period of five years (1996 to 2000). The ratios were then lagged for one quarter in order to see what impact this had on the predictive ability of the valuation model. She concluded that price earnings ratio explains future stock returns. She also concluded that price earnings ratio have predictive ability in majority of samples observed and are again determinant of future stock returns.

## II. Overview of Kenyan Commercial Banks

There are currently 43 commercial banks in the country, 1 mortgage finance company, 6 deposit taking microfinance institutions, 4 representative offices of foreign banks, 112 foreign exchange bureaus and 2 credit reference bureaus.

The banking environment in Kenya has, for the past decade, undergone many regulatory and financial reforms. These reforms have brought about many structural changes in the sector and

have also encouraged foreign banks to enter and expand their operations in the country.

[7] Kenya's financial sector is largely bank-based as the capital market is still considered narrow and shallow. Banks dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on commercial banks. [8] Describes the banking sector in Kenya as the bond that holds the country's economy together. Sectors such as the agricultural and manufacturing virtually depend on the banking sector for their very survival and growth. The performance of the banking industry in the Kenya has improved tremendously over the last ten years, as only two banks have been put under CBK statutory management during this period compared to 37 bank-failures between 1986 and 1998 [9].

### III. Problem Statement

Empirical results show that markets generally react when financial information is available to investors. [10] Notes that there is always a change in the market on announcement of financial information and the only difference is the path such change or reaction takes. Sometimes the reaction is positive which is indicated by a significant increase in the value of shares or in the volume of shares traded; while at other times it is negative, indicated by a reduction in the value and volume of shares traded [11]. It is important to find out the dynamics that set the pace for the differential between the theory and practice due to various financial performance indicators. There has been no consensus on how markets generally reacted to financial performance indicators and hence the need for study in Kenya to advance contribution in this growing body of literature.

### IV. Objectives

The main objective of this study is to establish Effect of financial performance indicators on market price of shares in commercial banks of Kenya. In furtherance of the general objective this study pursued the following specific objectives

- To find out the effect of total assets (bank size) on market share price of listed commercial banks in Kenya.
- To investigate the influence of net advances on market share price of listed commercial banks in Kenya.
- To establish whether liabilities influence the market share price of listed commercial banks in Kenya.

### V. Significance of the Study

This study adds value to various parties specifically and mutually as discussed below.

- The first beneficiaries of this study will be the management arms of the various commercial banks that will get new insights on the determinants of market share prices within their organizations. They will be able to structure and implement strategies aimed at improving profitability in an informed manner and avoid obvious pitfalls thus enhancing maximum profitability and the image of the bank through better market share prices.
- To the scholars this study provides area for further research which can be used to add value in this area of study. The study will also be available in the University repository system for access to future researchers.
- Finance managers of various banks and market analysts across the world will be able to appreciate the importance of the recommendations of this study in terms of the strategies that can be taken to improve bank signaling using various financial indicators.

## VI. Theoretical Literature

This section reviews theoretical foundations that discuss and explain stock market behavior. The theories assist in discussing the study and determining how financial indicators affect the share values and trading volumes in the stock market, especially in the Nairobi Securities Exchange. The theory discussed is the Signaling Theory.

### A. Signaling Theory

The signaling hypothesis suggests that an announcement of a stock dividend conveys new information to the market [12] examines Foster and Vickrey's 1978 paper of daily returns around announcement dates. The primary motive of the paper was to determine whether stock dividend announcements caused investors to change their expectations concerning future firm prospects. They analyzed daily market model residuals around announcement day for 82 stock dividend announcements over the period 1972–74. The sample was controlled for news announcements and cash dividend announcements within three days of the declaration date. They hypothesized that the mean of the declaration day residuals would be greater than zero due to information content of stock dividend and their results are in-line with the hypothesis.

[11] studied samples of 46 stocks listed on the NSE and BSE of India and analyzed them by employing event study using 180-day event window. They found that stocks show abnormal return before eight or nine days of announcement, thereby supporting the evidence that the Indian Stock market is efficient in its semi-strong form. [13] documents the market behaviour around the bonus issue announcement date for the forty-six stocks listed in the National Stock Exchange of India over the period from 1994 to 2004 using standard market model event study methodology covering a period of twenty days before and after the event. One of the interesting findings was that on an average, the stock starts showing positive abnormal returns eight to nine days before the announcement date.

## VII. Conceptual Framework

Below is a figurative representation of the variables to be explored by this study.

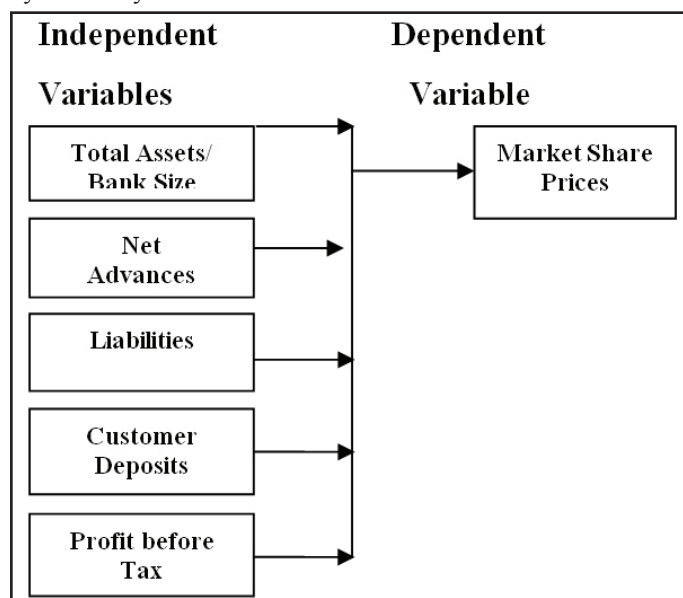


Fig. 1:

**VIII. Methodology**

A descriptive survey design was utilized in this study. The population for this study was ten commercial banks listed in the Nairobi Securities Exchange (NSE). This study utilized secondary data of the listed commercial banks gathered from the financial statements of the banks while the market share prices were collected from the NSE manual for the year 2011 which includes past trends. After data was obtained through secondary sources, it was prepared in readiness for analysis by editing, coding, categorizing and keyed into SPSS (Statistical Package for Social Sciences) computer software for analysis for production of inferential statistics which were the key analysis statistics. The information generated by the SPSS was used to make generalizations and conclusions of the study. The multiple regression models is as laid below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where:

- Y = the value of the dependent variable
- {β i; i=1,2,3,4,5} = The coefficients representing the various independent variables.
- {Xi; i=1,2,3,4,5} = Values of the various independent (covariates) variables.
- e is the error term which is assumed to be normally distributed with mean zero and constant variance.

Y = Market share price of Commercial banks in Kenya

X<sub>1</sub> = Total assets; X<sub>2</sub> = Net Advances; X<sub>3</sub> = Liabilities; X<sub>4</sub> = Customer Deposits and X<sub>5</sub> = Profit Before Tax

**IX. Results and Discussion**

The key objective of this study was to establish whether financial performance indicators of listed banks in Kenya influence the market price of shares. The market share price was measured by use of the annual average market price of shares while financial performance indicators used were; total assets, net advances, total liabilities, deposits and profit before tax. Secondary data was used for the period 2004 to 2011 for all the variables.

Table 1 shows the bivariate correlation between the dependent variable (average market price per share) and the independent variables of total assets, net advances, total liabilities, deposits and profit before tax. The correlations between market price of shares and the performance indicators are weak. This can be supported by the fact that there are other factors that influence share prices in the market other than the financial performance indicators used in this study. Results show that total assets and net advances have a positive high correlation of 0.698 due to the fact that in commercial banks the biggest component of assets is loans and advances. Profit before tax has high correlations with the other independent variables and have statistically significant relationships. This is supported by the fact that profit is a function or is a by-product of the financial indicators of total assets, net advances, total liabilities and deposits.

The study used a regression model to analyse the relationship between dependent variable and the independent variables. The first step carried out was to test the fitness of the model in explaining the relationships between the study variables. The R coefficient or the correlation is at a positive of 0.916. This shows a high and positive correlation between the market price of shares and the financial performance indicators. The R square which is also called coefficient of determination is 0.839. This indicates that the financial performance indicators used in the study can explain the variations in market price of share to the extent of 83.9%.

Table 1: Bi-variate Pearson's Correlation

Variable	Indicator	Market Price Per Share	Total Assets	Net Advances	Total Liabilities	Deposits	Profit Before Tax
Market Price Per Share	Pearson Correlation						
	Sig. (2-tailed)						
Total Assets	Pearson Correlation	.52					
	Sig. (2-tailed)	.13					
Net Advances	Pearson Correlation	.33	.698				
	Sig. (2-tailed)	.35	.025				
Liabilities	Pearson Correlation	.17	.614	.838			
	Sig. (2-tailed)	.64	.059	.002			
Deposits	Pearson Correlation	.38	.722	.98	.906		
	Sig. (2-tailed)	.28	.018	0	0		
Profit Before Tax	Pearson Correlation	.46	.829	.892	.771	.893	
	Sig. (2-tailed)	.18	.003	.001	.009	.001	

This shows that the combined effects of total assets, net advances, total liabilities, deposits and profit before tax have a big influence on the market price of listed commercial banks in Kenya. The adjusted R of 67.8% is a drop of 16.1% from 83.9%. This is an indication that there are other factors in the market that influence market share prices of commercial banks and hence the reduction. Such factors could be quality of management, perception on the bank by shareholders and management signaling strategies.

Table 2: Model Fitness Test

Indicator	Coefficient
R	0.916
R Square	0.839
Adjusted R Square	0.678
Std. Error of the Estimate	46.61058

Table 3, presents the ANOVA of the study variables. The independent variables have a combined F-score of 5.208 which have a p-value of 0.047 which is a statistically significant coefficient. Compared to the acceptable level of significance of 0.05 the ANOVA results show that the combined effect of financial performance indicators has a statistically significant influence on market price of shares of commercial banks in Kenya.

The results showed that there is a significant positive relationship between the market price per share with the ratios of net profits to equity, net profits to total assets, and dividends to net profits as a total.

Table 3: Analysis of Variance (ANOVA)

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	56568.748	5	11314	5.208	0.047
Residual	10862.73	2172.5			
Total	67431.479				

Table 4 displays the respective influence of financial performance indicators on market price of shares. It can be noted that the beta coefficients for each variable are weak which shows that one financial performance indicator on its own has minimal influence on the price of shares. The t-test values also lead to non-significant p-values which are all greater than 0.05. This means that on their

own, the financial performance indicators do not yield statistically significant influence on price of shares. This finding is supported by the way share market analysts combine many factors and indicators when advising customers on which shares to buy. These findings are corroborated by those of [14] who asserted that a person or entity invests in equity securities (shares) of companies for a host of reasons. It may be for safety cushion, cyclical cash needs, investment for a return, investment for influence, or purchase for control.

Table 4: Regression Coefficient

Variable	Beta	Std. Error	t	Sig.
Total Assets	0.001	0	1.137	0.307
Net Advances	-0.005	0	-1.318	0.245
Liabilities	-0.001	0	-1.302	0.250
Deposits	0.006	0	1.504	0.193
Profit Before Tax	-0.001	0.02	-0.091	0.931

## X. Conclusion

Based on the findings the two key conclusions have been arrived at. First the study found that a single financial indicator is not enough to influence the market price of shares. It can therefore be concluded that there is a multiplicity of factors that analysts and investors refer to before they can make a decision on buying shares. The second key finding is that key financial indicators have a significant combined influence and effect on market price of shares. This leads to the conclusion that financial indicators have a single most significant input in share buying decisions.

## XI. Recommendation

Brokers and market analysts should include key financial indicators in their advice to customers because financial performance has a statistically significant influence on share prices. It is also recommended to the management of listed commercial banks to ensure that financial disclosures be made more public and accessible by the mass market. Most share buying and selling public rely on word of mouth which sometimes is misleading in making key share trading decisions.

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