ARE STOCK PRICES INDICATIVE OF COMPANY FINANCIAL PERFORMANCE? A CASE STUDY OF LISTED BANKS ON THE GHANA STOCK EXCHANGE

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ABSTRACT

Stock market analysts require relevant and timely information to make informed investment decisions. These industry players require stock market analytical approaches such as the fundamental analysis and the technical analysis. The basis of these approaches and especially with the fundamental analysis is that stock prices (returns) reflect the financial performance of the companies or vice-versa. This study examines the assertion that stock prices are indicative of the financial performance of companies listed on stock exchanges, using Ghana as a case study. The research sampling technique employed is the purposive technique. Using SPSS version 21, the data was analyzed using multiple linear regression at 0.05 significance level. The results suggested that liquidity, Asset Quality, Net Interest Margin, Return on Assets and Capital Adequacy Ratio have no effect on the stock prices/stock returns.

Keywords: Asymmetry Information**,** Stock Market, Financial Performance, Profitability, Fundamental Analysis.

INTRODUCTION

Generally, it is perceived that as the financial performance of a company gets stronger, so must its listed shares reflect in the price of the company's shares. However, this is not always the case, and shares of companies listed on the Ghana Stock Exchange (GSE) are no exception. Currently, there are eleven banks listed on the Ghana Stock Exchange. With the continuous posting of impressive financial performance results by most listed banks on the Ghana Stock Exchange, their corresponding stock prices register mixed results and even if they do attempt to synchronize, it is only marginal. Thus, the current research seeks to understand this phenomenon. The main objective of the research is to assess the relationship, if any, between banks' financial performance and stock prices for listed banks on the Ghana Stock Exchange (GSE). This research objective is grounded on the following research question: *"Are stock prices indicative of company performance? A case study of listed Commercial Banks on the Ghana Stock Exchange."*

The following hypotheses were drawn from the research question:

Null Hypothesis

***H_0**: Stock prices of a company's stocks are influenced by its Return on Assets*

Alternate Hypothesis

***H_1**: Stock prices of a company's stocks are not influenced by its Return on Assets*

Null Hypothesis

***H_0**: Stock prices of a company's stocks are influenced by its Liquidity*

Alternate Hypothesis

***H_1**: Stock prices of a company's stocks are not influenced by its Liquidity*

Null Hypothesis

***H_0**: Stock prices of a company's stocks are influenced by its Net Interest Margin*

Alternate Hypothesis

***H_1**: Stock prices of a company's stocks are not influenced by its Net Interest Margin*

Null Hypothesis

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***H_0**: Stock prices of a company's stocks are influenced by its Earnings Per Share*

Alternate Hypothesis

***H_1**: Stock prices of a company's stocks are not influenced by its Earnings Per Share.*

LITERATURE REVIEW

This research is carried out against the background of several theories aimed at establishing the relationship between stock price and company performance.

Theoretical Framework

These theorical frameworks are briefly discussed: (1) the Asymmetry information theory, (2) Agency Theory (3) Empirical Evidence of Agency Costs (4) Stakeholder Theory (5) The Market timing theory (6) Empirical evidence of Market Timing theory, and (7) Separation Theorem/Liquidity Preference Theory.

The Asymmetry information theory

In simple terms, asymmetrical information occurs when one party to an economic transaction possesses greater material knowledge than the other party (Investopedia). Research on information asymmetry was carried out by Modigliani and Miller (1963) in the finance domain. The researchers argued that issuing new stocks reduces stock prices if debt-level is reduced. Additionally, there is an assertion that issuing new stocks reduces financial leverage because the tax-shield advantage of using debt financing, which ultimately decreases the financial leverage results in stock prices.

Again, Garcia and Hackbarth (2013) showed that equity can dominate debt if both the asset in place and the growth option are subject to the type of asymmetry information. Furthermore, Garcia and Hackbarth (2013) investigated the optimal security design problem under more general distribution of firm values, although information asymmetry in their model is not time varying. On the issue of information asymmetry and announcement, Rouhi et al. (2010) found that information asymmetry is not significantly changed post seasonal profit announcement compared to pre-seasonal profit announcement.

Agency Theory

This theory discusses the problems that confront firms due to separation of owners (principals) and managers (agents) and emphasizes on the need to reduce this problem. In a joint stock company, the ownership is held by individuals or groups in the form of stock and these shareholders (principals) delegate the authority to the managers (agents) to run the business on their behalf (Corporate Finance Institute (CFI-2022). The major issue is whether these managers are performing for the owners or themselves. To work in the interest of the principal, some incentives are allocated to the agent and monitoring costs introduced to limit the agent's desire to misappropriate funds and mitigate unnecessary activities. Agency costs could be classified into monitoring expenses by shareholders, bonding expenses by the agent and then, residual loss. Agency costs are the costs associated with the differences between the intentions of an agent and a principal, where the principal does not have complete control over the situation (Corporate Finance Institute (CFI) 2022).

Empirical Evidence of Agency Costs

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Wang (2010) conducted a study to investigate the relationship between agency costs and cashflow and how such responsibility could affect company performance. The study was carried out on Taiwan publicly listed companies, focusing on two main issues – whether there was a significant effect of free cash flow on agency costs and whether agency costs affect company performance. Hastori, H. S., Sembel, R. Manlara (2015). The study revealed that there was no significant effect of agency cost on company performance.

Stakeholder Theory

The traditional definition of stakeholder is "a group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman 1984). Friedman (2006) states that the organization itself should be thought of as grouping of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. It is the managers of the firm that must fulfill the stakeholder management duties.

The Market timing theory

The market timing theory discusses how firms and corporations in the economy decide whether to finance their investment with equity or with debt instruments. There are two versions of equity market timing that lead to similar capital structure dynamics. The basic underlying assumptions are that one, economic agents are rational so that companies are assumed to issue equity directly after a positive information release, which reduces the asymmetry problem between the firm's management and stockholders. Secondly, it assumes that economic agents are irrational.

Empirical evidence of Market Timing theory

On the issue of market inefficiency at the market and industry levels, Loughran, Ritter, and Rydqvist (1994) documented IPO in 15 countries and found that IPO volume is positively correlated with the inflation-adjusted level of the stock market in 14 countries. Pagano, Panetta, and Zingales (1998) also see mispricing and growth opportunities for firms using market-to-book ratio as the determinant factor for Italian firms going Initial Public Offer. A Hovakimian (2004), confirmed the existence of market timing for securities issuance, though this was in sharp contrast with Baker and Wurgler (2002) in terms of the effect of market timing on capital structure.

Separation Theorem/Liquidity Preference Theory

The Separation Theorem states that, two investment decisions made by individuals are independent and separate. Saito, Savoia, & Fama (2013) posit that these decisions consist of determining the most efficient risky asset portfolio and defining the proportion of resources to be allocated to risk-free assets and risky assets.

Stock Pricing techniques and Conceptual Framework

Stock pricing techniques

Basically, investors in stocks may have different motives in their purchase or sell decisions. It is common to find such investors purchasing their shares either on their own or primarily through the advisory services of portfolio managers/investment bankers.

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How then do these investment bankers make such investment decisions for the investor? There are two schools of thought in the evaluation of the purchase of companies whose shares are to be purchased or sold. First, the fundamentals analysis, which requires analysis of the financial statements of the company. The second one is the technical analysis, which involves identifying some models in predicting future stock prices from historical prices. However, some analysts may employ both approaches in their analysis. The securities markets are extremely efficient in reflecting information about individual stocks and about the stock markets as a whole. The researcher's assertion is that when information arises about a company, the news spreads speedily and impact the prices of securities derivative. Analysts may conduct technical analysis by studying past stock prices in an attempt to predict future prices. Alternatively, analysts may use financial information about companies such as earnings, profitability, liquidity, asset utilization to assist investors to select stocks that are undervalued or sell shares that are deemed overvalued. All these are an attempt to achieve relatively higher returns that would be achieved by holding a randomly selected portfolio of individual stocks.

Conceptual framework

This research is based on the concept that stock price of a company cannot be computed only from fundamental analysis or technical analysis, but by using key company financial indicators that influence stock pricing. Fundamental analysis involves valuing the company using projected cash flows to assess the Free Cash Flow of the company and applying the Discount Dividend Model, whereas technical analysis employs models such as Black Scholes/Merton approach. This research evaluated the financial statements of four listed banks on the Ghana Stock Exchange to derive key performance indicators such as Profitability (Return on Assets), Net Interest Margin (NIM), and Liquidity.

Profitability and Company financial performance

Gibson (1998) defines the profitability of a firm as "*the ability of firms to generate earnings*". Brigham, Gapenski , Ehrhardt, (1999) also consider that "profitability is the net result of various policies and managerial decisions, and the profitability rates represent the net operating result of the combined effects of liquidity, asset management and debt management. Greuning (2005), making some interpretation about International Financial reporting Standards (IFRS), considers that the profitability indicators generally mean "*an indication of how a company's profit margins are associated with sales, average capital and own average capital*". Profitability can be further analyzed by using the analysis of Du Pont. "Huang and Song (2006); Roman and Tomuleasa, (2013). Analysis of Profitability Determinants: Empirical considers Profitability as Earnings Before Interest and Tax (EBIT) scaled by total assets. Roman and Tomuleasa, (2013) further assert that tax-based models suggest that more profitable firms will use more debt, as they have greater need to shield the income from corporate taxes. In the above existing literature, none of the research carried out considered the use of Net Interest Margin, Liquidity, and Return on Assets as regressors to assess the impact of company financial performance on the stock price of a listed company in Ghana.

Pecking order Theory and Company performance

The pecking order theory also puts more retained earnings as first choice of funding an investment, followed by the use of bonds and last, issuing new equity. Parlakkaya,

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Akten,& Kahraman (2020), conducted a study on Islamic banks in Turkey by analyzing data set between the years 2008-2018 to determine the degree of explanation of stock prices with firms' accounting information. In the research, Earnings per share and Book value per share were selected as independent variables and share price, the dependent variable. Using a panel data regression analysis, they indicated that stock price movements are directly proportional to profitability ratios (Parlakkaya et al., (2020). In other words, accounting information obtained from the company's balance sheet and income statements have a role in explaining stock prices of the firm. Cengiz and Püskül (2016) revealed the positive relationship between profitability and stock returns, having identified that increase in profitability of equity and gross sales margin lead to increase in stock returns whereas increase in operating profit margin result in decrease in stock prices. Arkan (2016) also examined the significance of financial ratios in order to predict stock price trends in emerging markets.

Capital Adequacy Ratio and Bank Performance

Capital Adequacy Ratio (CAR), also known as Capital to Risk Assets Ratio, is the ratio of a bank's capital to its risk. The Central Banks of countries track their banks' CAR to ensure that they can absorb reasonable amount of loss and comply with statutory Capital requirements. The **CAR** promotes financial stability and efficiency in economic systems throughout the world (Ho & Hsu 2010). Under **Basel III**, the minimum **CAR** that banks must maintain is 8%, but in Ghana it is raised to 10%. The CAR directive to banks in Ghana falls under The Capital Requirements Directive (CRD or '*the Directive'*) issued under Section 92(1) of the Banks and Specialised Deposit-taking Institutions Act 2016 (Act 930) ('*the BSDI Act*') and Section 4(d) of the Bank of Ghana Act 2002 (Act 612). The higher the CAR of a bank, the stronger the robustness analysts consider such a bank (Marfo-Yiadom (2018).

Several researches have covered CAR and the performance of banks in various countries. Onaolapo and Olufemi (2012) examined the effects capital adequacy conditionality on the performance of selected banks within the Nigerian banking sector for the period 1999-2008 and found that all the performance indicators tested such as Returns on Assets (ROA), Returns on Capital Employed (ROCE) and Efficiency Ratios (ER) among others do not reflect much on the subject matter. Syafri et al., (2012) also investigated the factors that affect the profit of commercial banks in Indonesia. He used data on all Commercial Banks listed on the Indonesia Bourse from 2002 to 2011. Empirically, they found that loan to total assets ratio, total equity to total assets ratio, and loan loss provision to total loan has positive effect on profitability, while inflation rate, the size of bank and cost-to-income ratio (BOPO) have negative effect on profitability.

Liquidity ratio and company performance

The basic function of the liquidity ratio is to measure a company's capability to settle all current debt with all current available assets. The stability and financial health, or lack thereof, of a company and its efficiency in paying off debt is indicated by liquidity ratios and is of great importance to market analysts, creditors and potential investors. The lower the liquidity ratio, the greater the probability of default by the company in paying its debts. A very high liquidity ratio implies that the company is keeping idle funds on its books, and it is detrimental to the effective use of capital and expansion of the business. Even though liquidity ratio is a good performance indicator, analysts often use additional indicators such as Return on Equity (ROE).

Net Interest Margin and Bank Performance

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Net Interest Margin (NIM) provides a quick assessment of the asset-liability management of an institution. Ho and Saunders (1981) showed that the existence of the interest margin was the result of the transactions uncertainty faced by the bank and that NIM depended on four other factors, namely the degree of managerial risk aversion; the size of transactions undertaken by the bank; market structure in which a given bank had to operate; and the variance of interest rates. Delis and Kouretas (2011) asserted that low-interest rates increase bank risk-taking substantially. Memmel and Schertler (2011) interpret price changes as strategic management decisions by the bank, while weight changes as tactical management decisions.

Asset Quality and bank performance

Asset quality is a key indicator in assessing the overall condition of a bank. The quality of an asset hinges primarily on the loan portfolio and the credit administration program. Banks generate much of their profits by issuing loans and therefore, make up the largest percentage of a bank's assets and so prone to the greatest risks of their capital management. The credit departments of banks spend so much time and resources to ensure that credit analysis of loan applications are carried out in detail to ensure very minimal probability of default of the loan portfolio. Poor asset quality in a bank's loan portfolio has the tendency of derailing the profit of the bank, and in worse cases taking the bank into bankruptcy.

Bank efficiency and stock returns

According to a seminal work of Ball and Brown (2001), earnings reflect some of the information in stock prices. However, this constitutes only a small proportion of price movements (Aka (2019). Recent research has shifted towards the use of additional data such as accruals (Alsharif 2021), to understand how they affect stock prices and returns are determined. Aka (2019) points out that, overall, the results from such studies indicate that performance measures that have evolved voluntarily in an unregulated environment are more likely to be incrementally informative than those mandated by regulation.

RESEARCH METHODOLOGY

Research Design

This study employed descriptive as well as correlation research study. The researcher designed a questionnaire of ten questions as primary data. These questions were handed personally to fifty technical-savvy investment managers in ten investment management companies in Ghana to solicit their stock selection styles. Additionally, secondary data involving financial statements annual reports were randomly sampled from eleven listed banks on the Ghana Stock Exchange out of a population of thirty -seven companies. The responses to the questionnaire were collected in person with 100% response rate. The prices of the stocks of the selected listed banks were sourced from the Ghana Stock Exchange website.

Data Analysis

The study used qualitative data run by multiple linear regression. The linear model is of the form:

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$$\mathbf{Y = a + \beta1(ROA) + \beta2(NIM) + \beta3(AQ) + \beta4(CAR) + \beta5(L) + \alpha}$$

Where

β1, β2. ,,,,,,,,, β5 are the coefficients of the independent variables
Y = stock returns, computed as ln(S(t)-S(t-1)) for the period 2009 to 2018, where
S(t) is the end trading date each year and S(t-1) is the beginning trading date of each year.
ROA = Return on Assets, derived as Profit after Tax/Total Operating Assets
NIM = the Net Interest Margin (Net Interest Income/Average Operating Assets),
L = the Liquidity of the Bank, computed as Cash equivalents + marketable securities + accounts receivables) divided by current liabilities
a= constant
α = the Error term.

The premise to this research is that stock prices are expected to move in tandem with company financial performance in line with the Efficiency Market Theory. The veracity of this assertion was tested by running multiple regression of the natural log of the stock returns of the listed banks on the stated key financial performance indicators and the Analysis of Variance (ANOVA) is discussed with a 95% confidence level and 5% significance level.

DISCUSSION OF RESEARCH FINDINGS

This section discusses the findings of the research. In order to assess the effect of Stock prices on the selected key banks performance indicators of Liquidity, Return on Assets, Asset Quality, Net Interest Margin and Earnings Per Share, the natural log stock returns of the listed banks were regressed on the key performance indicators and the results are shown below.

Regression of GCB Bank Stock Returns on Independent Variables

In running multiple regression of natural log of stock price (dependent variable) on Liquidity (LQ), Net interest margin (NIM), Earning per Share (EPS) and Return on Assets (ROA) as independent variables, the multivariate test used is the standard multiple regression model adopted from Rogg (2000) and stated as:

GCB STOCK RETURNS = -1.486 + 111.24LQ + 12.50NIM + 0.069EPS

Table 1
MODEL SUMMARY[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.903[a]	.815	.668	.3361882	2.079

a. Predictors: (Constant), Earnings per Share, Return on Assets, Liquidity Ratio, Net Interest Margin
b. Dependent Variable: Stock Prices

R-squared is the proportion of variance in the dependent variable (Stock returns), which can be explained or predicted from the independent variables. Also called the Coefficient of Determination, R-squared gives an indication of how good a choice the independent variables are in predicting the dependent variable. It is an overall measure of the strength of association and does not reflect the extent to which any particular independent variable is associated with the dependent variable.

From Table 1, it implies therefore that only 81.5% of the variance in stock prices of GCB Bank stock can be explained or accounted for by the variation in the Return on Assets, Net Interest Income, Earnings Per Share and Liquidity and 18.5% is explained by other factors. The R-squared adjusts for a bias in R as the number of independent variables

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increases. The Standard error of the Estimate is a measure of the variability of the multiple regressions.

From the ANOVA table below, (Table 2), the sig. (p value) = 0.044, which is less than 0.05. That is, the regression line predicted by the independent variables does explain a significant amount of the variance in the dependent variable, [F(4,5)=0.736; p<0.05]. The Durbin Watson (DW) statistic value of 2.079 implies there is no autocorrelation.

Table 2
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.496	4	.624	5.521	.044[b]
	Residual	.565	5	.113		
	Total	3.061	9			

a. Dependent Variable: Stock Prices
b. Predictors: (Constant), Earnings per Share, Return on Assets, Liquidity Ratio, Net Interest Margin

Table 3
COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-1.486	.874		-1.700	.150	-3.733	.761		
	RETURN ON ASSETS	-1.317	5.692	-.057	-.231	.826	-15.950	13.316	.599	1.670
	LIQUIDITY RATIO	111.237	88.416	.324	1.258	.264	-116.043	338.517	.556	1.799
	NET INTEREST MARGIN	12.156	6.274	.685	1.937	.110	-3.973	28.285	.296	3.383
	EARNINGS PER SHARE	.069	.502	.054	.138	.896	-1.222	1.360	.242	4.140

a. Dependent Variable: Stock Prices

The unstandardized coefficients in the B column give the coefficients of the independent variables and inform the contribution that the variables make to the model. The data indicated that unstandardized coefficient beta for Return on Assets is negative (B1= -1.317) and it is not significant since p = 0.826 (two-tailed). Unstandardized coefficient beta of 111.24, 12.156, 0.069 for Liquidity ratio, Net Interest Margin and Earnings per Share consecutively are all not significant as their p-values are greater than 0.05.

Thus, stock performance, measured by stock returns are not influenced by company performance measures such as Return on Assets, Liquidity, Earnings per Share, and Net Interest Margin as far as the listed shares of GCB Bank is concerned.

Also, from Table 3, the VIF value of all the independent variables are below 10, which suggests that there is no multicollinearity in the independent variables. Again, Earnings per Share showed a negative correlation with Return on Assets, Liquidity and Net Interest Margin, not positively correlated with Net Interest Margin (Table 4).

Table 4
COEFFICIENT CORRELATIONS[a]

Model	Earnings Per	Return On	Liquidity	Net Interest

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			Share	Assets	Ratio	Margin
1	Correlations	Earnings Per Share	1.000	-.122	-.512	-.665
		Return On Assets	-.122	1.000	-.007	-.325
		Liquidity Ratio	-.512	-.007	1.000	.107
		Net Interest Margin	-.665	-.325	.107	1.000
	Covariance	Earnings Per Share	.252	-.349	-22.750	-2.096
		Return On Assets	-.349	32.403	-3.299	-11.617
		Liquidity Ratio	-22.750	-3.299	7817.338	59.440
		Net Interest Margin	-2.096	-11.617	59.440	39.368

a. Dependent Variable: Stock Prices

Regression Eco bank stock returns on independent variables

Eco bank Stock Returns = -5.8295-8.295ROA + 0.32EPS + 32.621NIM+3.44LQ

Table 5
MODEL SUMMARY[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.668[a]	.447	.004	.4555744	1.696

a. Predictors: (Constant), Liquidity, Return on Assets, Earnings per share, Net interest margin

b. Dependent Variable: Stock Price

From Table 5, the R-squared of 44.70% indicated that only 44.70% of the variance in stock prices of Eco bank stock can be explained or accounted for by the variation in the Return on Assets, Net Interest Income, Earnings Per Share and Liquidity and 56.30% is explained by other factors.

The R-squared adjusts for a bias in R as the number of independent variables increases. The Standard error of the Estimate is a measure of the variability of the multiple regressions.

From the ANOVA table below, (Table 6), the sig. (p value) = 0.482, which is greater than 0.05 suggests that the regression line predicted by the independent variables does not explain a significant amount of the variance in the dependent variable, [F(4,5)=1.009; p>0.05]. The Durbin Watson (DW) statistic value of 1.696 implies there is no autocorrelation.

Table 6
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.837	4	.209	1.009	.482[b]
	Residual	1.038	5	.208		
	Total	1.875	9			

a. Dependent Variable: Stock Price

b. Predictors: (Constant), Liquidity, Return on Assets, Earnings per share, Net interest margin

Table 7
COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-5.285	3.786		-1.396	.222	-15.017	4.448		

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	RETURN ON ASSETS	-8.295	7.355	-.601	-1.128	.311	-27.202	10.611	.390	2.567
	EARNINGS PER SHARE	.032	.079	.154	.405	.702	-.171	.234	.763	1.310
	NET INTEREST MARGIN	32.621	18.226	1.306	1.790	.133	-14.230	79.472	.208	4.814
	LIQUIDITY	3.446	3.490	.656	.988	.369	-5.524	12.417	.250	3.992

a. Dependent Variable: Stock Price

The unstandardized coefficients in the B column give the coefficients of the independent variables and inform the contribution that the variables make to the model (table 7). The data indicated that unstandardized coefficient beta for Return on Assets is negative (B1= -8.295) and it is not significant since p = 0.222 (two-tailed). Unstandardized coefficient beta of 0.032, 32.6621, 3.446 for Liquidity ratio, Net Interest Margin and Earnings per Share consecutively are all not significant as their p-values are greater than 0.05. Thus, stock performance measured by stock returns are not influenced by company performance measures such as Return on Assets, Liquidity, Earnings per Share, and Net Interest Margin as far as the listed shares of Eco bank is concerned.

Regression of Republic Bank Stock Returns on Independent Variables

Table 8
MODEL SUMMARY[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.762[a]	.580	.244	.4161227	2.261

a. Predictors: (Constant), Earnings per share, Return on assets, Liquidity, Net interest margin
b. Dependent Variable: Stock Returns

From Table 8, the R-squared of 58.0% indicated that only 58.00% of the variance in stock prices of Republic Bank stock can be explained or accounted for by the variation in the Return on Assets, Net Interest Income, Earnings Per Share and Liquidity and 42.00% is explained by other factors. The R-squared adjusts for a bias in R as the number of independent variables increases. The Standard error of the Estimate is a measure of the variability of the multiple regressions.

From the ANOVA table below, (Table 9), the sig. (p value) = 0.280, which is greater than 0.05, suggests that the regression line predicted by the independent variables does not explain a significant amount of the variance in the dependent variable, [F (4, 5)=1.727; p>0.05]. The Durbin Watson (DW) statistic value of 1.696 implies there is no autocorrelation.

Table 9
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.196	4	.299	1.727	.280[b]
	Residual	.866	5	.173		
	Total	2.062	9			

a. Dependent Variable: Stock Returns
b. Predictors: (Constant), Earnings per Share, Return on Assets, Liquidity, Net interest margin

Table 10
COEFFICIENTS[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std.	Beta			Lower	Upper	Tolerance	VIF

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			Error				Bound	Bound		
1	(Constant)	.303	.922		.328	.756	-2.069	2.674		
	RETURN ON ASSETS	2.256	1.298	.629	1.739	.143	-1.080	5.593	.641	1.560
	NET INTEREST MARGIN	-4.641	6.981	-.314	-.665	.536	-22.587	13.305	.377	2.656
	LIQUIDITY	-.604	1.602	-.159	-.377	.722	-4.723	3.515	.471	2.124
	EARNINGS PER SHARE	.219	.101	.944	2.174	.082	-.040	.478	.446	2.244

a. Dependent Variable: STOCK RETURNS

The unstandardized coefficients in the B column give the coefficients of the independent variables and inform the contribution that the variables make to the model. The data indicated that unstandardized coefficient beta for Return on Assets is negative (B1= 2.256) and it is not significant since p = 0.143 (two-tailed). Unstandardized coefficient beta of -4.641, -0.604, 0.219 for Liquidity ratio, Net Interest Margin and Earnings Per Share consecutively are all not significant as their p-values are greater than 0.05 (Table 10).

Thus, stock performance (Alsharif, 2021) measured by stock returns are not influenced by company performance measures such as Return on Assets, Liquidity, Earnings Per Share, and Net Interest Margin as far as the listed shares of Republic Bank is concerned.

Also, from Table 11, the VIF value of all the independent variables are below 10, which suggests that there is no multicollinearity in the independent variables. Also, Earnings per Share had a positive correlation with Return on Assets and a negative correlation with Liquidity and Net Interest Margin (Table 12).

Table 11
COEFFICIENT CORRELATIONS[a]

Model			EARNINGS PER SHARE	RETURN ON ASSETS	LIQUIDITY	NET INTEREST MARGIN
1	Correlations	Earnings per share	1.000	.380	-.220	-.505
		Return on assets	.380	1.000	.339	-.551
		Liquidity	-.220	.339	1.000	-.468
		Net interest margin	-.505	-.551	-.468	1.000
	Covariances	Earnings per share	.010	.050	-.036	-.355
		Return on assets	.050	1.684	.705	-4.996
		Liquidity	-.036	.705	2.568	-5.239
		Net interest margin	-.355	-4.996	-5.239	48.739

a. Dependent Variable: Stock Returns

Regression of stanch art bank stock returns on independent variables

The regression equation in this context could be written as:

Stanch art Stock Price = 5.893 + 0.458ROA + 0.641LQ – 40.831LQ + 0.09EPS

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Table 12
MODEL SUMMARY[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.924[a]	.854	.563	.32756	1.904

a. Predictors: (Constant), Earnings per Share, Liquidity, Return on Assets, Net Interest Margin.
b. Dependent Variable: Stock Prices

From Table 13, the R-squared of 85.40% indicated that only 85.40% of the variance in stock prices of Stanchart Bank stock can be explained or accounted for by the variation in the Return on Assets, Net Interest Income, Earnings Per Share and Liquidity and 14.60% is explained by other factors.

The R-squared adjusts for a bias in R as the number of independent variables increases. The Standard error of the Estimate is a measure of the variability of the multiple regressions.

From the ANOVA table below, (Table 14), the sig. (p value) = 0.203, which is greater than 0.05, suggesting that the regression line predicted by the independent variables does not explain a significant amount of the variance in the dependent variable, [F(6,3)=2.936; p>0.05]. The Durbin Watson (DW) statistic value of 1.904 implies there is no autocorrelation.

Table 13
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.890	6	.315	2.936	.203[b]
	Residual	.322	3	.107		
	Total	2.212	9			

a. Dependent Variable: STOCK PRICES
b. Predictors: (Constant), Earnings per Share, Liquidity, Return on Assets, Net Interest Margin, Capital Adequacy Ratio, Asset Quality

Table 14
COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.893	1.972		2.989	.058
	Return on assets	.458	1.939	.142	.236	.829
	Capital adequacy ratio	5.229	7.533	.515	.694	.538
	Liquidity	.641	1.546	.137	.415	.706
	Asset quality	-.842	4.904	-.147	-.172	.875
	Net interest margin	-40.831	16.240	-1.087	-2.514	.087
	Earnings per share	.009	.259	.013	.036	.973

a. Dependent Variable: Stock Prices

The data indicated (table 15) that unstandardized coefficient beta for Return on Assets is negative (B1= 0.458 and it is not significant since p = 1.939 (two-tailed). Unstandardized coefficient beta of -5.229, 0.641, -40.831 and 0.09 for Liquidity, Net Interest Margin and Earnings Per Share consecutively are all not significant as their p-values are greater than 0.05. Thus, stock price measured by stock returns are not influenced by company performance measures such as Return on Assets, Liquidity, Earnings per Share, and Net Interest Margin as far as the listed shares of Stanchart Bank is concerned. Again, Earnings Per Share showed positive relationship with Liquidity and Return on Assets, but showed negative correlation with NIM, CAR and AQ.

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Table 15
COEFFICIENT CORRELATIONS[a]

Model			Earnings per share	Liquidity	Return on assets	Net interest margin	Capital adequacy ratio	Asset quality
1	Correlations	Earnings per share	1.000	.498	.386	-.099	-.425	.357
		Liquidity	.498	1.000	.540	.406	-.701	.622
		Return on assets	.386	.540	1.000	.376	-.707	.904
		Net interest margin	-.099	.406	.376	1.000	-.662	.420
		Capital adequacy ratio	-.425	-.701	-.707	-.662	1.000	-.842
		Asset quality	.357	.622	.904	.420	-.842	1.000
	Covariances	Earnings per share	.067	.199	.194	-.416	-.828	.453
		Liquidity	.199	2.390	1.619	10.183	-8.163	4.720
		Return on assets	.194	1.619	3.759	11.836	-10.330	8.596
		Net interest margin	-.416	10.183	11.836	263.726	-81.005	33.472
		Capital adequacy ratio	-.828	-8.163	-10.330	-81.005	56.751	-31.114
		Asset quality	.453	4.720	8.596	33.472	-31.114	24.054

a. Dependent Variable: STOCK PRICES

The Hypothesis revisited

To summarize the findings of the multiple regression of stock prices on the key banks' performance indicators, it is important to restate the hypothesis for this research as follows:

Null Hypothesis

***H_0**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are influenced by their Return on Assets.*

Alternate Hypothesis

***H_1**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are not influenced by their Return on Assets.*

Null Hypothesis

***H_0**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are influenced by their Liquidity*.

Alternate Hypothesis

***H_1**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are not influenced by their Liquidity.*

Null Hypothesis,

***H_0**: Stock prices of listed banks on the Ghana Stock Exchange (GSE) are influenced by its Net Interest Margin.*

Alternate Hypothesis

***H_1**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are not influenced by its Net Interest Margin.*

Null Hypothesis

***H_0**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are influenced by its Earnings Per Share.*

Alternate Hypothesis

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***H_1**: Stock prices of listed banks on the Ghana Stock Exchange(GSE) are not influenced by its Earnings Per Share.*

Inference

From the hypothesis 1, it can be stated that the Null hypothesis that posits that stock prices of listed banks on the Ghana Stock Exchange (GSE) are influenced by their Return on Assets is rejected.

Also, from hypothesis 2, it can be stated that the Null hypothesis that states that stock prices of listed banks on the Ghana Stock Exchange (GSE) are influenced by their Liquidity is rejected.

The notion suggested by the Null hypothesis that stock prices of listed banks on the Ghana Stock Exchange (GSE) are influenced by their Net Interest Margin is rejected.

Finally, hypothesis 4 that suggests by the Null hypothesis that Stock prices of listed banks on the Ghana Stock Exchange (GSE) are influenced by their Earnings per Share is rejected. There are therefore other factors that actually influence the stock prices of these banks.

FINDINGS

In the quest to evaluate if stock prices are indicative of company financial performance, data was collected, analyzed and the hypothesis tested for decision making. From the study, the following findings were revealed:

That stock prices of the listed banks on the Ghana Stock Exchange (GSE) are not indicative of the key financial performance indicators of these banks. This is in line with the assertion by Umar and Musa (2013) who studied the relationship between firm's stock prices and Earning per Share and posited that firm's EPS has no relationship or significant impact on stock prices and should not be used to predict the behaviour of stock prices in Nigeria. However, the findings of this research are contrary to the research findings of Menaje (2012) who examined the relationship between firm's financial performance and stock price of the companies listed on the Philipine Stock Exchange using Return on Assets and Earning per Share as independent variables. Again, Ball and Brown, (2001) found that that there is positive significant relationship between firm's stock price and Earnings Per Share Price while the relationship between Return on Asset and share prices showed a weak negative correlation.

This research has revealed that the financial market in Ghana is not efficient. The strong form of the Efficient Market Hypotheses that states that all information – both the information available to the public and any information not publicly known – is completely accounted for in current stock prices does not hold in Ghana.

The results of this research have also shown that even when listed banks have paid out huge dividends or introduced new products that bring in huge income, the stock price movements are not noticeable. The historical prices often remain flat for a considerable period of time and volatility is often absent. The notion of purchasing shares and not trading such shares is very common with large institutional investors. This does not contribute effectively to price movements that are expected to move in sync with the financial performance of the listed companies on the Ghana Stock Exchange (GSE).

Again, as asserted by the Investment bankers and portfolio Managers that were interviewed, most analysts adopt the Free Cash Flow method in the valuation of the stock prices to determine undervalued and overvalued shares in their decision-making process. They do consider the key financial ratios such as Capital Adequacy ratio, Liquidity ratio, Net

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Interest Margin, Return on Assets and Asset Quality when they undertake analysis of company-specific financial strength.

Investors in the listed companies on the Ghana Stock Exchange (GSE) have the tendency to invest in short-term Government of Ghana securities, such as Treasury bills and Notes which are liquid, as against subscribing to the purchase of shares that lack liquidity and to some extent even non-tradable. The spate of companies going Initial Public Offer has dwindled over the years resulting from the demand shift to Treasury securities. These tendencies contribute to the unimpressive stock movements on the Ghana Stock Exchange (GSE).

Finally, the key finding in this study suggests that liquidity, Asset Quality, Net Interest Margin, Return on Assets and Capital Adequacy Ratio have no effect on the stock prices/stock returns.

RECOMMENDATION

In summary, it is recommended that investment bankers and portfolio managers in Ghana continue to use the familiar Free Cash Flow method in analyzing the prices of companies' stocks. As the financial market of Ghana is not efficient and the stock market is hardly active in recent times, the likelihood of synchronizing stock prices movements of the listed banks with their financial performance will be very difficult if not misleading. Additionally, it is recommended that widening and increasing investment literature education in the private sector enhance the understanding of company owners to list their shares on the stock exchange for long-term finance. Market sentiment research must be strongly undertaken to understand investors' investment drive to enhance a bottom-up product design or affinity for a particular stock or otherwise.

Limitations and Future Research

One of the limitation of this study is the few number of listed banks. An increased number of listed banks and length of period of data could enhance the results. Future researchers can carry out research in the following areas (1) The market efficiency of the Ghana Stock Exchange and the presence of random walk in the stock movements of listed banks on the Ghana Stock Exchange to enable asset pricing and risk to be professionally executed. (2) The use of factors such as Dividend yield, bank announcements of new products, bank loan announcement, and social responsibility actions to assess their effect on companies' stock prices. (3) Bank efficiency and stock price relationship on listed banks of the Ghana Stock Exchange (GSE).

CONCLUSION

It is highly possible that most stocks listed on the Ghana Stock Exchange (GSE) are either overvalued or undervalued and so investment analysts must endeavor to re-value these stocks to enable investors undertake meaningful buy/sell decisions. The decision of the investors will be influenced by the stock prices and other determinants. This study concludes that that liquidity, Asset Quality, Net Interest Margin, Return on Assets and Capital Adequacy Ratio have no effect on the stock prices/stock returns examines the assertion that stock prices are indicative of the financial performance of companies listed on stock exchanges, using Ghana as a case study.

The results suggested that liquidity, Asset Quality, Net Interest Margin, Return on Assets and Capital Adequacy Ratio have no effect on the stock prices/stock returns.

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REFERENCE

Alsharif, M. (2021). The efficiency of banks and stock performance: Evidence from Saudi Arabia. *Cogent Economics & Finance*, *9*(1), 1953726.

Arkan, T. (2016). The importance of financial ratios in predicting stock price trends: A case study in emerging markets. *Finanse, Rynki Finansowe, Ubezpieczenia*, *79*, 13-26.

Baker, M., & Wurgler, J. (2002). Market timing and capital structure. *The journal of finance*, *57*(1), 1-32.

Cengiz, H., & Püskül, A. S. Ö. (2016). Hisse Senedi Getirileri ve Karlılık Arasındaki İlişki: Borsa İstanbul Endeksinde İşlem Gören İşletmelerin Analizi. *Yalova Sosyal Bilimler Dergisi*, *6*(12), 295-306.

DeFond, M. L., & Park, C. W. (2001). The reversal of abnormal accruals and the market valuation of earnings surprises. *The accounting review*, *76*(3), 375-404.

Delis, M. D., & Kouretas, G. P. (2011). Interest rates and bank risk-taking. *Journal of Banking & Finance*, *35*(4), 840-855.

Fama, E. F. (1970). Efficient capital markets. *Journal of finance*, *25*(2), 383-417.

Hastori, H., Siregar, H., Sembel, R., & Maulana, A. (2015). Agency costs, corporate governance and ownership concentration: The case of agro-industrial companies in Indonesia. *Asian Social Science*, *11*(18), 311-319.

Ho, S. J., & Hsu, S. C. (2010). Leverage, performance and capital adequacy ratio in Taiwan's banking industry. *Japan and the World Economy*, *22*(4), 264-272.

Hovakimian, A. (2004). The role of target leverage in security issues and repurchases. *The Journal of Business*, *77*(4), 1041-1072.

Kayhan, A., & Titman, S. (2007). Firms' histories and their capital structures. *Journal of financial Economics*, *83*(1), 1-32.

Kemal, A. K. A. (2019). Banka karlılığının belirleyicileri: Türk bankacılık sektöründeki katılım bankaları üzerine ampirik bir uygulama. *Sosyal Bilimler Araştırma Dergisi*, *8*(3), 21-39.

Loughran, T., Ritter, J. R., & Rydqvist, K. (1994). Initial public offerings: International insights. *Pacific-Basin Finance Journal*, *2*(2-3), 165-199.

Memmel, C., & Schertler, A. (2011). Banks' management of the net interest margin: Evidence from Germany.

Menaje Jr, P. M. (2012). Impact of selected financial variables on share price publicly listed firms in the Philippines. *American international journal of Contemporary Research*, *2*(9), 98.

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. *The American economic review*, *53*(3), 433-443.

Pagano, M., Panetta, F., & Zingales, L. (1998). Why do companies go public? An empirical analysis. *The journal of finance*, *53*(1), 27-64.

Parlakkaya, R., Çürük, S. A., Kahraman, Ü., & Şen, G. (2020). Determination of factors affecting the profitability variables by panel data analysis in the Islamic banks: the case of Turkey. *Bilimname*, *2020*(42), 41-61.

Roman, A., & Tomuleasa, I. (2013). Analysis of profitability determinants: Empirical evidence of commercial banks in the new EU member states. *University of Iasi, Romania*.

Wang, G. Y. (2010). The impacts of free cash flows and agency costs on firm performance. *Journal of service science and management*, *3*(04), 408.

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