

## **Impact of Share Pricing On Financial Performance of Rural and Community Banks in Ghana**

**Ernest Ofori Asamoah (PhD)**

Kwame Nkrumah University of Science and Technology (KNUST)  
Department of Business Studies  
Institute of Distance Learning, Kumasi  
Ghana

**Robert Donaldy**

Kwame Nkrumah University of Science and Technology (KNUST)  
Department of Business Studies  
Institute of Distance Learning, Kumasi  
Ghana

**Degraft Owusu Manu (PhD)**

Kwame Nkrumah University of Science and Technology (KNUST)  
Department of Building Technology  
College of Art and Built Environment, Kumasi  
Ghana

### **Abstract**

*Rural and Community Banks concept through the ingenuity of the Central Bank has come to stay in Ghana. Their involvement and contribution to the financial sector and the economy in general are enormous. Most importantly, providing jobs to the youth, financial assistance to farmers, artisans and petty traders in the rural areas who hitherto were denied by the big commercial, investment and development banks in the cities and developing savings and commerce cultures in the rural dwellers cannot be underestimated. The main challenge they face is inadequate share capital. Subscription to the Rural and Community Banks shares is low and the need to promote interest in existing and prospective shareholders will enable them to take advantage of business opportunities and provide improve financial services. The aim of this research therefore was to examine the impact of share price on the financial performance of Rural and Community Banks. Survey questionnaires were administered on directors and senior managers of twenty five (25) Rural and Community Banks with a response rate of 86 percent. The data were tested using Regression Analysis and Statistical Package for Social Sciences (SPSS). Variables comprising Profitability, Liquidity and Economic Value Added were considered to have relationship with RCBs share prices and hence contribute to their financial performance. The study also contributes to knowledge as it addresses the gap in existing literature by focusing on Rural and Community Banks (RCBs) shares unlike those financial institutions whose shares are traded on the Stock Market.*

**Keywords:** Shares, RCBs, Profitability, Liquidity, Economic Value Added, Dividend

### **1.0. Background to the Study**

Investment in Rural and Community Banks (RCB's) as part owner prior to its incorporation and in the course of its life-long journey is of paramount importance to policy makers, development advisors and rural opinion leaders. From policy makers, development advisors, the government and foreign partner organisations, majority of the population live in the rural communities therefore individual investment through acquisition of Rural and Community Banks shares can raise colossal sum of capital for development projects (Adams, 1978). Rural and Community Banks-based capital mobilization improves central government revenue mobilization via taxation and control of currency in circulation to bring local folks aboard the monetary economy (Adams, 1978).

Rural opinion leaders without hesitation are very concerned with opening up and networking their rural communities to the rest of the urban areas and the world at large through rural financial institutions stock financing (World Bank Research Observer, 1994).

Shares are the pillars of modern-day economies especially mobilizing the requisite capital for companies at a reasonably low cost as compared to other sources of funds such as borrowing (Uddin *et al.*, 2013). It provides a means for investment and capital formation and can act as an indicator or predictor of overall business condition (Sharma, 2011). To address short-term cash necessities RCB's lend among themselves or from their mother bank- ARB Apex Bank Limited (Boapeah, 2011). In instances of long term financing RCBs sell shareholding interests in the bank to the public, or borrow from the public by selling shares (Atta-Bronya, 1997). Shares exist to enable Rural and Community Banks (RCBs) in need of long term financing to sell pieces of their business as shares for cash or consideration other than cash. It is therefore appropriate to conduct a study to assess the impact of share pricing on financial performance of RCBs in Ghana.

## **2.0. The Theory of Share Pricing**

Shares signify proprietorship interest in a company (Verwijmeren, 2010). Shares form integral part of portfolio investment for business organizations. The perception of Shares as channel of investment has witnessed astronomical growth. This permits the public to freely invest in shares (Verwijmeren, 2010). Shares offered to members of the public provide them with vested interest in the company's assets, profits, and dividends. This interest in the company provides the investor the incentive and motive to buy and sell shares of a specific firm at a specific price. It also keeps investors concerned with the company's business model, earnings potential, debt structure, product line, and a number of other variables. Along with the company's earnings and assets, each investor is also entitled to a certain voting right that is attached to each share. Ownership of stock is documented in what is called share registry and stock certificate.

### **2.1. Typologies of Shares**

Per the Ghana Companies Code, 1963 (Act 179), Section 48 there are two typologies of shares namely Preference and Ordinary.

#### **Preference Shares:**

Preference share do not enable holders the right to participate beyond a specified distributable amount of money whether by way of dividend, on recovery, in a winding up, or otherwise. According to the Johannesburg Stock Exchange (2014) preference shares are those shares which fulfil both the following two conditions:

- i. They carry preferential share right in respect of dividend at a fixed rate,
- ii. They also carry preferential right in regard to payment of capital on winding up of the company.

#### **Equity Shares**

Equity shares forms part of the share capital which is not a preference share capital and they are the real owners of the company. In other words, shares which are not Preference shares (Ghana Companies Code, 1963, Act 179). Equity shares are also known as Ordinary Shares.

### **2.2. Relationship between Share Prices and Financial performance**

With the increasing global competition, companies are focusing their efforts on creating shareholder value in order to survive the intense competition (Irungu, 2013). 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 (Moncla & Gregory, 2003). Investors and market analysts resort to financial statement analysis when it comes to share investing (Irungu, 2013).

Likewise, Johnson and Soenen (2003) in their work involving 478 firms between 1982 and 1998 concluded big sized and profitable firms with high level advertising expenses have better performance.

Hobarth (2006) studied the connection between financial indicators and firm performance for 19 years using 17 financial gauges and three variables of firm's performance measurement notably market performance (stock market value), cash flow performance (dividend per share), and profitability (ROI).

The work revealed firms have 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 opinions from auditors, more liabilities and less equity, low total assets and retained earnings have better cash flow performance (measured by cash dividend). Furthermore, firms with low book to market ratio, efficient working capital management, more equity and less liabilities, low total assets, and high EBIT margin have better market performance (measured by changes in stock price).

Daniati and Suhairi (2006) demonstrated cash flow from investing activities, gross profit, and company size significantly affects expected return on shares. On the other hand, cash flow from operating activities does not affect expected return significantly. In the work of Meythi (2006) 100 firms during the period of 1999-2002 leading to the suggestion that profit persistence is an intervening variable.

Anggraini *et al.* (2004), tried to learn the effect of fundamental variables on abnormal return during crisis and non-crisis period. 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 effect of financial ratios in connection with shares prices have been variedly studied in different parts of the world as demonstrated in the work of Hobarth (2006). Adding on, within the thinking of Hobarth (2006); (Irungu, 2013) suggested the size of the firm and cash flow have effect on proceeds.

### **3.0. Research Methodology**

The population of this study involved Rural and Community Banks (RCBs) in the Ashanti Region which amount to twenty six (26). The sampling frame therefore consisted of the 26 RCBs in the Ashanti Region. The sampling frame was specifically chosen from the Ashanti Region because of the high concentration of RCBs in the region, highest paid-up capital, profit performance and total assets as compared to all other regions in Ghana. The target population comprised of board of directors in charge of finance and accounts; board of directors in charge of operations; and senior management consisting of senior managers of the RCBs in the region; head of accounts and finance and head of operations. In each RCB in the Ashanti Region, there were two (2) board members in charge of finance and accounts and two (2) board members in charge of operations respectively. Similarly, the management of each RCB in the Region consisted of three (3) management staff which was earlier indicated as senior manager, head of accounts and finance; and head of operations. This means that there are seven (7) officials in each of the RCBs who are involved in the pricing of RCBs shares hence provided the valid information required for this study. It was earlier indicated that the 26 RCBs in the region were involved in the study less one being distressed, hence with 7 officials with responsibility of share pricing in each RCB, the target population for the study was 175.

#### **3.1. Sample and Sampling Techniques**

Sampling provides the researcher an opportunity to select few participants from a group. With regards to this, purposive sampling was adopted to collect data from the target population comprising of board of directors; senior managers; head of accounts and finance; and head of operations. Purposive sampling is judgemental and deliberate technique of obtaining data from a particular area or group of respondents when they are the only particular elements with the required information (Kerlinger, 1986; Rea and Parker, 1997; Struwig *et al.*, 2001). According to Krathwohl (1998) purposive sampling deliberately seeks individuals or situations that have the uttermost potential of explaining the study being studied. Also, Saunders (2009) noted that purposive sampling provides the researcher the room to use his criteria to select cases to answer the research question(s). It is therefore the desire of this study to collect the requisite information from respondents with the most experience and knowledge in the pricing of RCBs shares. Practically, the survey questionnaire was administered to board of directors; and senior management staff of RCBs comprising of 175 respondents of which 150 was retrieved representing the sample size for the study.

#### **3.3. Data Requirements and Data Collection**

Data Collection involves systematic data gathering for an intended purpose from various sources; including questionnaires, interviews, observation, existing records, and electronic devices (Saunders, 2009). Data collection preceded the analysis of the data. The study used data made up of primary and secondary.

Data collected for the first time is referred to as primary data by a researcher and secondary data are data taken by a researcher from documentary sources either internal or external (Saunders, 2009). Types of secondary data include documentary data, survey – based data and multiple – source data (Saunders, 2009). Documentary data include written materials such as notices, correspondence (including emails), and reports to shareholders, meeting minutes, transcripts and administrative and public records. Survey – based secondary data can also be described as data collected using a survey strategy, usually using questionnaires already analysed for their intended purpose. Also, Multiple – source secondary data is entirely based on documentary or on survey secondary data or an amalgam of the two (Saunders, 2009).

The study relied on secondary data that were picked (collected) from annual reports and financial statements of RCBs, Bank of Ghana (BOG), ARB Apex Bank, Ghana Statistical Service (GSS), Registrar General's Department and other research materials on share prices and macroeconomic variables. The primary time series data source covered the period December 2012 to December 2014 yearly data. Data validity and reliability was censured by collecting information only from the source to ensure accuracy as a basis for generalizations.

### 3.4 Data Analysis

Following data collection was data analysis. The term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data-groups (Kothari, 2004). Thus, in the process of analysis, relationships or differences supporting or conflicting with original or revised hypotheses was subjected to statistical tests of significance to determine with what validity data can be said to indicate any conclusions.

Data analysis can be quantitative (exploratory and descriptive), qualitative (inductive and deductive) or both (Saunders, 2009). This study adopted the quantitative analytical approach where both the exploratory and the descriptive approaches to examine the relationship between the independent variables and the dependent variables.

The exploratory data analysis approach emphasised on the use of diagrams to understand the data. Descriptive statistics enabled the researcher to describe (and compare) variables numerically. Data collected from the RCBs were edited, rationalized and collated. The data were coded with each question given a unique code. The field data were also categorised and tabulated to respond to the study objectives. The data collected were analysed using Microsoft Excel (ME) and Statistical Package for Social Sciences (SPSS) software. Multiple regression and correlation analysis were applied to determine the connection between the variables that is dependent and independent.

Research Objective	Data Requirements	Data Collection	Source Of Data	Data Analysis
The impact of share prices on financial performance	Primary and Secondary Data (Quantitative Data)	Libraries, Management, Internet sources, Audit Firms	Financial Statements of RCBs and Survey Questionnaires	Microsoft Excel, Regression Analysis and SPSS
The relationship between share pricing and financial performance of RCBs in Ghana	Primary and Secondary Data (Quantitative Data)	Libraries, Management, Internet sources, Audit Firms	Financial Statements of RCBs and Survey Questionnaires	Microsoft Excel, Regression Analysis and SPSS

## 4.0 Result

### 4.1. Positive Impact of Share Prices on the profit of RCBs

Expectations of high profits especially for future projections of firms has been one of the hallmarks that business entities desire to achieve (Joshi and Hanssens, 2010). As a result of this, it makes sense to explore the positive impact of share prices on the profit of RCBs. From the results presented, 38.0% of the respondents agree that share prices have positive impacts on the profits of RCBs. However, 36.7% of the respondents also disagree strongly that share prices have positive impact on the profits of RCBs.

Considering, the responses in the category of lowly agree; agree and highly agree as against the 36.7% of respondents that disagree that there is a positive linkage between the prices of shares issued by RCBs, it is prudent to suggest that majority of respondents agree that there is a positive impact of share prices on the profit of RCBs.

This therefore implies that the positive prices of RCBs shares would have better impact on profitability and liquidity; this therefore leads to improvement in their operations in instances of venturing into expansion projects. Similarly, as a result of improved performance and expansion they are able to compete effectively with the commercial, development and investment banks which are largely concentrated in the cities and benefiting from scale of economies.

**Table 4.1: Impact of Share Prices on the Profits of RCBs**

Response	Frequency	Percent (%)
1. Disagree	55	36.7
2. Lowly Agree	17	11.3
3. Agree	57	38.0
4. Highly Agree	20	13.4
Missing	1	0.6
<b>Total</b>	<b>150</b>	<b>100</b>

Source: Field Survey, 2015

#### 4.2. Positive Impact of Share Price on the Liquidity of RCBs

Liquidity is important in the management of business organizations like the RCBs. It allows them to meet their routine obligations in their business activities. Previous works like Edmans *et al.* (2013); and Fang *et al.* (2009) have emphasised the benefits of liquidity in relation to share prices of firm. In this direction, the intention was to ascertain the positive effect of share price on the liquidity of RCBs in Ghana. This is because, the previous studies could not focused on RCBs as far as the positive impact of share price on the liquidity is concerned. Drawing on from Table 4.2., share prices were also assessed on the liquidity of RCBs. From the survey results, a majority of 61.4% of the respondents agree that share prices have positive impact on liquidity. Moving forward, 16% of the respondents strongly disagree that high share price has a positive impact on the liquidity of RCBs.

Based on the above analysis of the result of this study, it can be suggested that share prices have positive impact on the liquidity of RCBs. This finding is in consistent with the work of Arian *et al.* (2014) that the liquidity of markets is linked to the liquidity of firms. The fact is that, if the market is liquid, investor confidence will soar which will create investment in diverse areas including RCBs shares. At this point, the prices of shares of RCBs would serve as a vehicle for liquidity in the RCBs. Hence, the nature of the price of RCBs shares would determine the quantum of liquidity that would be realized.

**Table 4.2: Impact of Share price on the liquidity of RCBs**

Response	Frequency	Percent
1. Strongly Disagree	24	16.0
2. Disagree	13	8.7
3. Agree	92	61.4
4. Highly Agree	20	13.3
Missing	1	0.6
<b>Total</b>	<b>150</b>	<b>100</b>

Source: Field Survey, 2015

#### 4.3. Hypotheses Testing

Sykes (2000) indicates that a key fundamental requirement for this study is the formulation of hypotheses regarding the various share pricing variables. The hypotheses were however tested to ascertain the connection between dependent and independent variables. The Pearson Correlation was therefore used to test the hypothesis based on the primary data collected. The decision in accepting or rejecting the hypotheses was based on the nature of the correlation coefficient( $r$ ) whether positive or negative. In addition to this premise, we accept the hypothesis when the direction of the  $r$  confirms the null hypothesis and vice versa. The nature of relationship of the variables is ascertained when  $r$  is between 0 and 0.3 the relationship is considered to be weak. Similarly, when the  $r$  value is in the range of 0.31 to 0.59, the connection between the variables is considered to be average. Finally, correlation coefficient,  $r$  from 0.6 to 1.0 indicates that the relationship between the variables is strong.

**1.  $H_0$ : Liquidity is negatively connected to RCBs share prices**

**$H_A$ : Liquidity is not negatively connected to RCBs share prices**

Regarding Hypothesis 1 above with reference to Table 4.5.1 below, in the case of the independent variable liquidity ( $r = 0.181$ ,  $p = 0.219$ ). Based on the direction of the  $r$  which is positive as far as the null hypothesis is concerned it makes sense to reject the null hypotheses at a significant value of  $p = 0.219$ . Hence it can be concluded that Liquidity is not negatively related to RCBs share prices. In other words, it can be said that liquidity is positively related to RCBs share prices. At this point, it is important to examine the connection between liquidity and RCBs share prices. In this direction since  $r = 0.181$  the relationship is considered weak between liquidity and RCBs share prices however, this relationship is statistically significant.

**2.  $H_0$ : Profitability is positively related to RCBs share prices**

**$H_A$ : Profitability is not positively related to RCBs share price**

The hypothesis 2 above sought to establish a relationship between profitability and RCBs share prices. The independent variable profitability has  $r = 0.487$ ,  $p < 0.001$ . This suggests a positive correlation between profitability and RCBs share prices. Hence the null hypothesis is accepted. However, considering the direction of  $r = 0.487$ , suggest that the strength of the relationship between profitability and RCBs shares is average or mediocre which is still statistically significant. The mediocre relationship between profitability and RCBs share pricing implies that share pricing may not be the only business activity that is responsible for the profitability of RCBs. However, the positive correlation implies that as the RCBs issue shares to the public some level of profit is bound to be made.

**Table 4.2: Pearson Correlation Analysis for Hypotheses Testing**

Independent Variables	Pearson correlation coefficient, $r$	$p$ -value	N (Number of Occurrence)	Decision on null hypotheses
1. Liquidity	0.181	0.219	48	Reject
2. Profitability	0.487	0.000	48	Accept

Source: Survey Data, 2015

### 4.3 Correlations Analysis: Hypotheses Testing

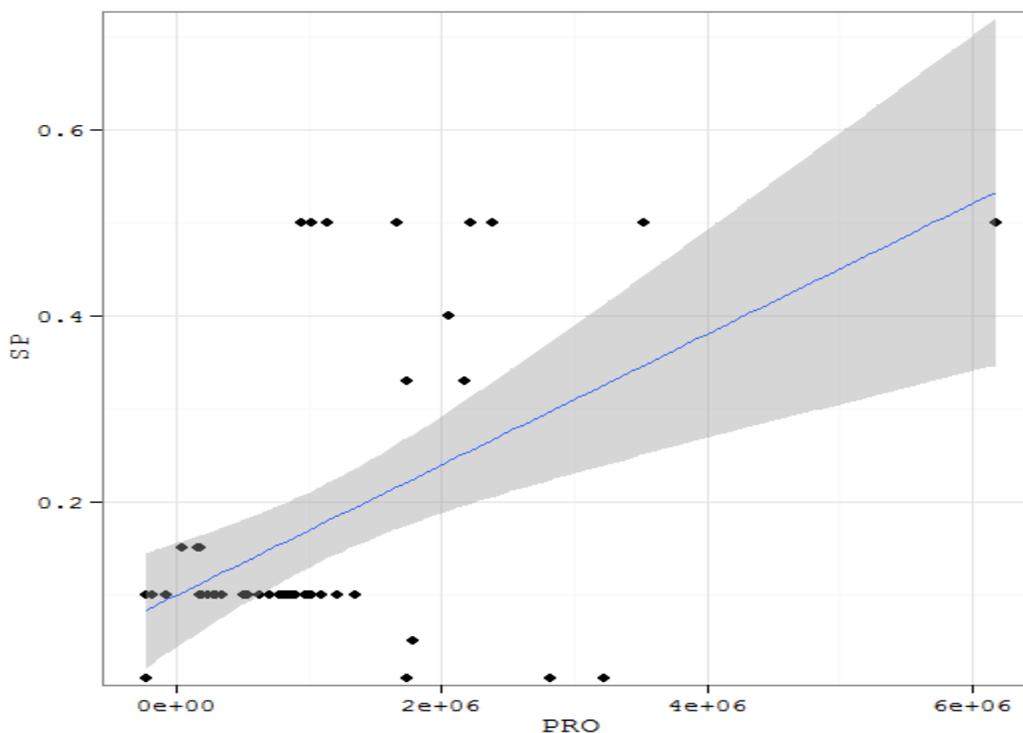
In addition to testing the hypotheses using the primary data, testing the hypotheses using the secondary data collected was also done.

#### 4.3.1. Liquidity and Share Prices

H1 tests the relationship between liquidity and share prices. The Pearson product-moment correlation was applied to ascertain liquidity and share price connection. From the results presented in Table 4.3.1, inference can be made that there is a positive connection between share price and liquidity of the RCBs at correlation coefficient of 0.181 at an insignificant  $p = 0.219$ . As a result, the null hypothesis is rejected. The coefficient of 0.181 indicated a weak positive connection between liquidity and share price.

#### 4.3.2. Profitability and Share Prices

With respect to the association between profitability and share prices, the Pearson product-moment correlation was used. The correlation analysis showed a positive linkage between the profitability of RCBs in Ghana and their prices per share at correlation coefficient of 0.487 at  $p = 0.000$ . The coefficient of 0.487 shows medium positive relationship between the variables at a significant value of 0.000. Therefore, we do not reject the null hypothesis.

**Figure 4.3: Relationship between Profitability and Share Prices**

Source: Field Survey, 2015

Figure 4.3 shows a possible associations or relationships between liquidity and the prices of shares. The fit line indicates a positive relationship exists between the two variables.

### 5.0. Discussion and Summary Results

This section focuses on the discussion of the above results of this study. The analyses of the results were based on the primary and secondary data collected from RCBs which were mainly descriptive and inferential. The inferential analysis focuses on the testing of hypotheses using both primary and secondary data.

#### 5.1. Impact of Share Prices on Financial Performance of RCBs

Share prices are believed to have positive impacts on the profits of RCBs. These positive impacts will reflect mainly in the areas of liquidity, provision of efficient services to the public and expansion in terms of new branches, facilities and products.

#### 5.2. Hypotheses Testing Results

The hypothesis led to the conclusion that liquidity is not negatively related to RCBs share prices. This conclusion is in agreement with the earlier finding of the descriptive analysis that RCBs shares have positive impacts on liquidity of RCBs. Also, the second hypothesis led to the conclusion that positive relationship exists between RCBs share pricing and profitability. However, this relationship is found to be moderate. This implies that irrespective of the share prices same amount of profit would be made by RCBs as a result of the floatation of shares.

RCBs. Results from the testing showed as follows:

- Liquidity is not negatively related to RCBs share prices. However, this relationship is however considered to be weak;
- A moderate relationship exists between Profitability and therefore positively related to RCBs share prices;

## References

- Abdul-Baaki Y., Alhassan B. and Shani B. (2013). Assessing Rural Banks Effectiveness in Ghana, *International Business Research*, Vol. 6, No. 3, pp.140-153.
- Abdul-Baaki Y., Alhassan B. and Shani B. (2013). Assessing Rural Banks Effectiveness in Ghana, *International Business Research*; Vol. 6, No. 3, pp.140-153.
- Abor, J., and Biekpe, N. (2006). The South African Financial Market and Financing Choice of SMEs, *Journal of Business and Society*, Vol. 19 Nos 1/2, pp. 187-201.
- Abor, J., and Biekpe, N. (2006). Small Business Financing Initiatives in Ghana, *Problems and Perspectives in Management*, Vol. 4, No. 3, pp. 69-77.
- Aduda, J. O., Jacinta, M. M. and Onsongo, N. E.. (2012). The Determinants of Stock Market Development in Nairobi. *International Journal of Humanities and Social Sciences*, Vol. 2, No. 9, pp 214-220.
- Agarwal, S., and Mohtadi, H. (2004). Financial Markets and the Financing Choice of Firms: Evidence from Developing Countries, *Global Finance Journal*, Vol. 15, pp. 57-70.
- Akudugu, M.A., Egyir, I.S., and Mensah-Bonsu, A. (2009). Women Farmers' Access to Credit from Rural Banks in Ghana, *Agricultural Finance Review*, Vol. 69 No. 3, 2009, pp. 284-299.
- Al-Tamimi, H.A.H. (2004) Factors Affecting Stock Prices in the UAE Financial Markets, *Singapore Economic Review*, pp.2-4
- Al-Tamimi, H.A.H. (2006). Factors influencing Individual Investor Behaviour: An empirical study of the UAE Financial Markets", *The Business Review, Cambridge*, 5(2), 225-232.
- Amidu, M., and Abor, J. (2006). Determinants of dividend payout ratios in Ghana, *The Journal of Risk Finance*, Vol. 7, No. 2, 136-145.
- Andah, D. O., and Steel. W. F. (2003). Rural and Micro finance Regulation in Ghana: Implications for Development and Performance of the industry. Africa Region Working Paper Series No. 49. Washington, DC: World Bank.
- Arian, O., Galdipur, S., and Kiamehr, J. (2014). Impact of Stock Market Liquidity on Firm Value, *Journal of Educational and Management Studies*, Vol. 4, No. 4, pp. 782-786.
- Asiedu-Mantey, E. (2011). *Rural Banking in Ghana*, Accra New Town: Woeli Publishing Services
- Asness, C. S., Moskowitz, T. J., and Pedersen, L. H. (2013). Value and Momentum Everywhere. *The Journal of Finance*, Vol. 68, No. 3, pp. 929-985.
- Atta-Bronya, K. (1997). Financing Rural and Cottage Industries Through Rural Banks, *The Ghanaian Banker*, Vol. 4(3) 20-28.
- Atta-Bronya, L. (1990). *Banking in Ghana*, Accra: Ghana University Press.
- Ayamga, M., Sarpong, D.B., and Asuming-Brempong, S. (2006). Factors Influencing the Decision to Participate in Microcredit Programmes: An Illustration for Northern Ghana, *Ghana Journal of Development Studies*, Vol. 3 No. 2, pp. 57-65.
- Baah, B.K., Tawiah, R., and Opoku F. E. (2014). Industry Sector Determinants of Dividend Policy and its Effect on Share Prices in Ghana, *International Journal of Economics, Business and Finance* Vol. 2, No. 5, pp. 1 – 19.
- Boapeah, O.A. (2011). Assessing the Effectiveness of ARB – Apex Bank Programmes on the Operations of Rural and Community Banks in Ghana. A Case Study of ARB – Apex Bank, Ashanti Regional Office. Unpublished Master Thesis submitted to the IDL-KNUST, Ghana.
- Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods and Practices*, 2<sup>nd</sup> Edition. Published under the Creative Commons Attribution Non Commercial Share Alike 3.0 Unported License
- Blau, F.D; and Kahn, L.M. (2011). The Feasibility and Importance of Adding Measures of Actual Experience to Cross-Sectional Data Collection. Available via: [www.ftp.iza.org/dp5873.pdf](http://www.ftp.iza.org/dp5873.pdf) [Accessed: July, 2015].
- Booth, L., Aivazian, V., Demirguc-Kunt, A. and Maksimovic, V. (2001), Capital Structures in Developing Countries, *Journal of Finance*, Vol. 56 No. 1, pp. 87-130.
- Bosomtwe Rural Bank Limited. (2011). Annual Reports and Financial Statements for the year ended 31<sup>st</sup> December, 2011.
- Crano, W. D., and Brewer, M.B. (2002). *Principles and methods of social research*, 2<sup>nd</sup> Edition, New Jersey: Lawrence Erlbaum Associates
- Challa, K., and Chalam, G. V. (2015). Equity Share Price Determinants – An Empirical Analysis (An Empirical Analysis on select Steel Companies in India), *Indian Journal of Applied Research*, Vol. 5, No. 1, pp. 79-83.

- Companies Code, Act 179, 1963. , Ghana: Assembly Press.
- Cummins, J. (1988). Asset Pricing Models and Insurance rate making. *Journal of Finance* 43, 823-839.
- Dadzie, K.Q., Winston, E., and Afriyie, K. (2003).The effects of normative social belief systems and customer satisfaction on rural savings programs in Ghana, *Management Decision*, Vol. 41, No. 3 pp. 233-240.
- Darkwah, D. (2012). Financing rural and community banks in Ghana: A look at the option of mergers and acquisitions. Unpublished Undergraduate Project Work submitted to the Department of Business Administration, Ashesi University College.
- Edmans, A., Fang, V., and Zur, E. (2013). The effect of liquidity on governance, *Review of Financial Studies*, Vol. 26, No. 6, pp. 1443-1482.
- Elton, E.J., Gruber, M.J., and Gultekin, M. (1981). *Expectations and Share Prices*, *Management Science*, Vol. 27, No. 9, pp. 975-987.
- Ernst and Young, (2014). Yearly Publication.
- Fang, V., Noe, T., and Tice, S. (2009). Stock market liquidity and firm value, *Journal of Financial Economics*, Vol. 94, No.1, pp. 150-169.
- Frimpong, S.K., and Kalbersonn, N.J.K. (2014).Assessing the Contribution of Microfinance Institutions to Poverty Reduction in Ghana: A Case Study of the Christian Rural Aid Network (CRAN) Hohoe, Ghana, *International Journal of ICT and Management*, Vol. II, No. 2, pp. 116-124.
- Gatua F. (2013). Analysis of Share Price Determinants at Nairobi Securities Exchange, Master of Business Administration Degree, School of Business: University of Nairobi.
- Gerber, H. U., and Shiu, E. S. W. (1994). Option pricing by Esscher transforms (with Discussions), *Transactions of the Society of Actuaries*, Vol. 46, pp.99-191.
- Guo, H., and Whitelaw, R. (2006). Uncovering the Risk Return Relation in the Stock Market, *Journal of Finance*, Vol. 2, No.61, pp.1433-1463.
- Harvey, C. (2001).The specification of conditional expectations, *Journal of Empirical Finance*, Vol. 8, No. 5, pp.573-637.
- Heyvaert, M. and., Bruss, F.T. (2010). The probabilistic method, *Gazette of Mathematicians*, No. 124, pp. 15-29 .
- Hürlimann, W. (2011). An Extension Of The Black-Scholes And Margrabe Formulas to a Multiple Risk Economy, *Applied Mathematics*, Vol. 2, No.4, pp.137-142.
- Hürlimann, W. (2012).The Algebra of Option Pricing: Theory and Application, *International Journal of Algebra and Statistics*, Vol.1, No. 2, pp. 68-88
- Idun, A.A-A., and Aboagye, A.Q.Q. (2014). Bank Competition, Financial Innovations and Economic Growth in Ghana, *African Journal of Economic and Management Studies*, Vol. 5 No. 1,pp. 30-51.
- Institute of Statistical, Social and Economic Research (ISSER) (2013).*The state of the Ghanaian economy, annual report*, Ghana: University of Ghana. International Monetary Fund (IMF). (2011).*Ghana: Financial System Stability Assessment Update*, IMF Country Report No. 11/131
- Javaid, M. U. (2010). Determinants of Equity Prices in the Stock Market, *Paradigms: A Research Journal of Commerce, Economics and Social Sciences*, Vol. 4, No. 1, pp. 98- 114.
- Joshi, A., and Hanssens, D.M. (2010).The Direct and Indirect Effects of Advertising Spending on Firm Value, *Journal of Marketing*, Vol. 74, No. 1, pp. 20-33
- Kerlinger, F. (1986).*Foundations of behavioural research*, Orlando, FL: Harcourt Brace and Company.
- Kokkola, T. (2010).Payments, Securities and derivatives, and the role of the Euro system. European Central Bank.
- Koutsoyiannis A. (2006). *Theory of Econometrics, 2<sup>nd</sup> Edition*. Published by Palgrave, Houndmills, New York, N.Y. 10010.
- Krathwohl, D. R. (1998).*Methods of educational & social science research: An integrated approach* (2nd ed.). White Plains, NY: Addison Wesley Longman, Inc.
- Lee, M-C., and Su, L-E. (2014). Capital Market Line Based on Efficient Frontier of Portfolio with Borrowing and Lending Rate, *Universal Journal of Accounting and Finance*, Vol. 2, No. 4, pp.69-76.
- Lettau, M., Ludvigson, S.C., and Ma, S. (2014). Capital Share Risk and Shareholder Heterogeneity in U.S. Stock Pricing. UC Berkeley, CEPR. Available via: [www.econ.nyu.edu/user/ludvigsons/lbs.pdf](http://www.econ.nyu.edu/user/ludvigsons/lbs.pdf) [Accessed: April, 2015].
- Malhotra N., and Tandon, K. (2013). Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies, *International Journal of Research in Management and Technology (IJRMT)*, Vol. 3, No.3, pp. 86-95.

- Malhotra, V. (1987). Determinants of Equity prices in India, *International Journal of Management Science (IJMS)*, Vol. 1, No.1, pp. 25-30.
- Malhotra N., and Srinivasan, P. (2012). Determinants of Equity Share Prices in India: A Panel Data Approach, *The Romanian Economic Journal*, Vol. 46, pp. 205-228.
- Malhotra N., and Tandon, K. (2013). Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies, *International Journal of Research in Management and Technology (IJRMT)*, Vol. 3, No.3, pp. 86-95.
- Merton, R. (1969). Lifetime Portfolio Selection under Uncertainty: The continuous-time case *Review of Economics and Statistics*, Vol. 51, pp. 247-257.
- Murphy, E.V. (2015). Who Regulates whom and How? An Overview of U.S. Financial Regulatory Policy for Banking and Securities Markets. Available via: <https://www.fas.org/sgp/crs/misc/R43087.pdf>. [Accessed May, 2015].
- Nair, A. and Fissaha, A. (2010). Rural Banking: The Case of Rural and Community Banks in Ghana. The International Bank for Reconstruction and Development/The World Bank, Agriculture and Rural Development Discussion Paper 48
- Nazir, M. S., Muhammad, M, and Waseem A. (2010). Determinants of Stock Price Volatility In Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy, *International Research Journal of Finance and Economics*, No. 55, pp. 100-106
- Nirmala, P. S., Sanju P. S., and Ramachandran, M. (2011). Determinants of Share Prices in India, *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, Vol. 2, No. 2, pp.124-130.
- Obben J. (1992). Performance of the Ghanaian Rural Banks: A Canonical Correlation Analysis, *Oxford Agrarian Studies*, Vol. 20, No. 1, pp. 39.
- Obeng, S.K. (2008). Rural Banking in Ghana: It's Impact on Rural Farmers (A Case Study of Abokobi Rural Area). Samven's Research and Consultancy Unit. Available via: [www.modernghana.com/GhanaHome/download.asp?id=102](http://www.modernghana.com/GhanaHome/download.asp?id=102). [Accessed May, 2015].
- Okorie, A. (1992). Rural banking in Nigeria: Empirical evidence of indicative policy variables from Anambra State, *Agricultural Economics*, Vol. 7, pp.13-23.
- Owusu-Frimpong, N. (2008). An Evaluation of Customers' Perception and Usage of Rural Community Banks (RCBs) in Ghana, *International Journal of Emerging Markets*, Vol. 3, No. 2, pp. 181 – 196.
- Owusu-Frimpong, N. (2001). The Causes and Consequences of a Poor-Performing Emerging Stock Marketing sub-Saharan Africa, *Journal of Financial Services Marketing*, Vol. 6 No. 2, pp. 122-32.
- Phuyal, S. (2004). Strengthening financial stability indicators in the midst of rapid financial innovations: updates and assessments in Nepal. In Yuthika Indraratna (2004). Strengthening financial stability indicators in the midst of rapid financial innovation: updates and assessments. The South East Asian Central Banks, Research and Training Centre, Kuala Lumpur, Malaysia.
- Pomerleau, K. (2015). An Overview of Pass-through Businesses in the United States, Tax Foundation Special Report No. 227. Available via: [www.http://taxfoundation.org/article/overview-pass-through-businesses-united-states](http://taxfoundation.org/article/overview-pass-through-businesses-united-states). [Accessed May, 2015].
- Rea, L. M., and Parker, R. A. (1997). *Designing and Conducting Survey Research: A Comprehensive Guide*. San Francisco: Jossey-Bass.
- Rossi, A., and Timmermann, A. (2014). Modeling Covariance Risk in Merton's ICAPM. University of Maryland. Available via: [www.rady.ucsd.edu/docs/.../Modeling-Covariance-Risk-in-Mertons-ICAPM.pdf](http://www.rady.ucsd.edu/docs/.../Modeling-Covariance-Risk-in-Mertons-ICAPM.pdf). [Accessed: April, 2014].
- Rotheli, T. F. (2010). Causes of the Financial Crisis: Risk Misperception, Policy Mistakes, and Banks Bounded Rationality, *Journal of Socio-Economics*, Vol. 39, No. 2, pp. 119-126.
- Scholes, M. (1973). The Pricing of Options and Corporate Liabilities, *Journal of Political Economy*, Vol. 81, pp. 637-654.
- Schwartz, G. W. (1981). The Adjustment of Stock Prices to Information about Inflation. *Journal of Finance*, Vol. 36, No. 1, pp. 15-29.
- Sharma, S. (2011). Determinants of Equity Share Prices in India, *International Refereed Research Journal, Journal of Arts, Science and Commerce*, Vol. 2, No. 4, pp. 51-60.
- Siddiqi, H. (2011). Does Coarse Thinking Matter for Option Pricing? Evidence from an Experiment, *IUP Journal of Behavioural Finance*, Vol. VIII, No. 2. pp. 58-69.
- Siddiqi, H. (2015). Anchoring Heuristic in Option Pricing. MPRA Paper No. 63218. School of Economics, The University of Queensland.

- Sherris, M. (1992). Reserving for Deferred Capital Gains Tax Option (An Application of Option Pricing Theory), *Journal of the Institute of Actuaries*, Vol. 119, No. 1, pp. 45-67.
- Sloan, C. (2012). Determinants of American Stock Prices on a Firm-Specific Level, *The Park Place Economist*, Vol. 20, No. 1, pp. 85-86
- Srinivasan, P. (2012). Determinants of Equity Share Prices in India: A Panel Data Approach, *The Romanian Economic Journal*, Vol. 5, No. 46, pp. 205-228
- Steel, W. F., and Andah, D. O. (2003). Rural and Micro Finance Regulation in Ghana: Implications for Development and Performance of the industry. Africa Region Working Paper Series, No. 49 pp. 43-44.
- Struwig, M and Struwig, F.W Stead, G.B. (2001). *Planning, reporting and designing research*, South Africa: Pearson.
- Sulaiman, L.A., and Migiro, S.O. (2015). Effect of dividend decision on stock price changes: further Nigerian evidence, *Investment Management and Financial Innovations*, Volume 12, Issue 1, pp. 330-337
- Sykes, A.O. (2000). An Introduction to Regression Analysis, The Inaugural Coase Lecture, Chicago Working Paper in Law & Economics.
- Tease, W. (1993). The Stock Market and Investment. OECD Economic Studies No. 20, Spring 1993. Available via: [www.oecd.org/eco/outlook/33948286.pdf](http://www.oecd.org/eco/outlook/33948286.pdf) [Accessed: July, 2015].
- Uddin, M. B. (2009). Determinants of market price of stock: A study on bank leasing and insurance companies of Bangladesh, *Journal of Modern Accounting and Auditing*, Vol. 5, No. 7 pp. 1-7.
- Uddin R., Rahman Z., and Hossain R. (2013). Determinants of Stock Prices In Financial Sector Companies In Bangladesh- A Study On Dhaka Stock Exchange (Dse), *Interdisciplinary Journal Of Contemporary Research In Business*, Vol. 5, No 3, pp. 471-480.
- Uwuigbe O., and Olusegun G. (2012). An Assessment of the determinants of share price in Nigeria: A Case Study of Selected Listed Firms. *Acta Universitatis Danubius Economica*, Vol. 18, No. 6 pp. 45-62
- Varalakshmi, V; Sundaram, G.G; Indrani, B; Suseela, N and Ezhilarasi, S. (2005). *Statistics*, Higher Secondary, Tamilnadu Textbook Corporation College Road, Chennai- 600 006.
- Yaron, J. (1994). What Makes Rural Finance Institutions Successful? *The World Bank Research Observer*, Vol. 9, No. 1, pp. 49-70.