Does Board Size Mediate the Relationship Between Accounting Information and Stock Market Return? Evidence From Listed Financial Firms in Ghana

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The study examined the relationship between accounting information and stock market returns of listed financial entities on the Ghana Stock Exchange using board size as a mediating variable. The population of the study was 13 listed financial entities from 2007-2019 with 169 firm-year observations. This study applied a panel regression model that takes unobserved individual heterogeneity and distributional heterogeneity into consideration. In addition, the study employed cross-section dependence test; Levin-Lin-Chu (LLC), ImPesaran, Pesaran, Kao, and Larsson cointegration test; Fully Modified Ordinary Least Square (FMOLS) and Dynamic Ordinary Least Square (DOLS). The results of the unit root test showed that all the variables were integrated at first difference. Moreover, the results of cointegration test revealed that accounting information variables were cointegrated in the long run. The result of FMOLS and DOLS revealed that all the accounting information variables with the exception of operating cash flow per share (OCFPS) and net tangible assets (NTA) have a direct insignificant relationship with the stock market return of listed financial entities. The study revealed that board size strengthens the relationship between OCFPS and NTA, and stock market return at 5% significant level under FMOLS and DOLS of listed financial entities.

**Keywords:** accounting information, board size, stock market return

**Introduction**

Currently, the economic environment and foreign investments in Ghana have improved as a result of the political and economic stability in the country. However, investments are made in stocks if such stocks have the potential for long-term capital growth, dividend yield, and attractive valuations. Hence, the government of Ghana is encouraging both local and foreign investors to come and invest in the Ghanaian economy. Moreover, the stock market in Ghana is trading at a lower long-term average forward price and offers an attractive dividend yield (Salami & Acquah-Sam, 2013). Konijn, Kraussl, and Lucas (2011) opined that the
relationship between accounting information and stock market return could be conducted in different countries. However, an extended study is required in emerging economies like Ghana. Salami and Acquah-Sam (2013) mentioned that non-reflection of available accounting information on stock market returns is an issue which needs to be addressed in Ghana. Salami and Acquah-Sam (2013) further recommended that the influence of accounting information on stock market returns needs to be studied.

The literature review has shown that results from previous studies on the relationship between accounting information variables and stock market returns end inconclusively. In some cases, studies have indicated factors that cause conflicts in a single area, such as earnings per share (EPS) and operating cash flow per share (OCFPS) (Ewereoke, 2018; Agyemang, Bardai, & Ntoah-Boadi, 2020). Also, a number of prior studies on accounting information and stock market returns concentrated on specific sector such as Moshavegh and Montazerhojat (2016) concentrated on minerals sector, Allozi and Obeidat (2016) concentrated on manufacturing sector, Wijaya (2015) concentrated on manufacturing sector. Furthermore, the prior studies failed to use any corporate governance variable as a mediating variable on the relationship between accounting information and stock market return. For this reason, the final results of prior studies cannot be justifiable as a result of lack of a mediating variable.

Agyemang and Bardai (2022) expressed that investors’ confidence in Ghana Stock Exchange is low due to lack of information on how accounting information variables affect stock market return. The authors indicated that accounting information should be made available to investors so that they will know whether their invested capital is yielding returns or not. Anwaar (2016) also indicated that availability of information on how board size strengthens the relationship between accounting information variables and stock market return will help investors to make investment decisions and predict future stock market returns.

Additionally, prior studies have established a relationship between accounting information and stock market performance (Krab, 2018; Winful, Sarpong, & Ageye-ntiamoah, 2016) and revealed that accounting information is necessary for the development of the stock market (Krab, 2018; Gani & Ngassam, 2008). The question of whether board size strengthens the association between the stock market returns and the accounting information measures remains unsolved. To the best of the researchers’ knowledge and the literature review, no prior studies have established whether board size mediates the relationship between accounting information and stock market return. With reference to the above discussions, the research problem was formulated as: Notwithstanding the presence of stock market in Ghana, adequate accounting information is not accessible to investors and thus, how board size can strengthen the relationship between accounting information measures and stock market return of listed financial entities in Ghana remains questionable and needs to be studied.

**Theoretical Foundation**

The study was grounded on both agency and signaling theories’ perspective to provide more explanations to the mediating effect of board size on the relationship between accounting information and stock market return. The agency theory provides implications of board size and accounting information on financial performance thereby helping shareholders to make meaning financial decisions (Agyemang & Bardai, 2022). According to agency relationship, listed entities face agency problems as a result of asymmetric information between the shareholders who serve as principals and the managers who also serve agents in the decision-making process. This information asymmetry may result in an incomplete contract as a result of random disturbances on the outcome of their decisions, such as inefficient behavior of all parties (i.e. shareholders and managers) in satisfying their own interests (Agyemang & Bardai, 2022; Schroeck, 2002).
The use of financial accounting information in developing financial strategies for financial entities must be accompanied by other key elements of financial management, such as attracting firm resources, liquidity and capital management, risk management, and asset-liability management, in order for the entities to achieve efficient allocation and management of financial resources necessary for their survival and growth (Agyemang & Bardai, 2022; Agyemang, Kankam-Kwarteng, Kyekyeku, & Mogunde, 2020; Van Greuning & Bratanovic, 2009).

According to Scott (2015), because accounting reports provide observable and verifiable information about managers’ performance, the agency theory argues that accounting reports are critical in monitoring and controlling managers’ actions; thus, the incentive contract must be linked with accounting data. As a result, accounting information serves as an important intermediate between managers and shareholders for communicating the company’s financial situation and performance, decreasing agency and information asymmetry issues (Agyemang & Bardai, 2022; Drever, Stanton, & McGowan, 2007; Scott, 2015). According to agency theory, management’s responsibility to stakeholders is a tool for decision-making because financial performance is disclosed in financial reports provided by the company.

In agency theory, an agent plays an important role in determining the policies within the company in order to give a sign and a good signal to investors to invest. Signaling theory explains why entities provide financial statement information to external parties. However, good corporate growth will give a signal (signaling theory) or information to stakeholders that the entity has been able to maintain its viability and able to grow. Brigham and Houston (2012) explained signaling theory as an action taken by entities to give information for investors about how management views the prospects of the entity. Information issued by an entity is important, because it affects the investment decisions outside the entity. The higher total asset turnover then the greater the possibility of the company will gain a profit. That the more effective entity uses its assets to generate sales is expected to provide greater profits for the entity (Agyemang & Bardai, 2022). Therefore, this study intended to provide information relating to various accounting ratios to shareholders in order to avoid information asymmetry. The study provided information on how board size and accounting information variables support the stock market return of listed financial entities. The study posited that board size could strengthen the relationship between accounting information variables and stock market return.

**Empirical Studies and Hypotheses Development**

Zaheri and Barkhordary (2015) investigated the relationship between accounting information measures such as return on equity (ROE), return on assets, price to earnings ratio, book to market equity ratio, and net profit margin ratio with market stock return using a panel data of listed entities on the Tehran Stock Exchange from 2004 to 2011. The book-to-market equity ratio, return on assets, and return on equity were all found to be highly related to stock market performance in the study. The research also found that net margin profit is unrelated to market stock returns.

Arkan (2016) used a data sample of 15 firms divided across three sectors of the Kuwaiti financial market from 2005 to 2014 to evaluate the most important financial ratios generated from financial statements in predicting stock return. Some accounting ratios have significant positive associations with stock market returns (Arkan, 2016). Return on equity, return on assets, and net profit margin ratio were found to be the most effective ratios in predicting stock market return in the industrial sector. Return on equity, return on assets, price to earnings ratio, and earnings per share ratio are the most effective ratios in predicting stock market return.
return in the service and investment sectors, according to the study. Furthermore, the researchers reported that some financial ratios for each industry might be used to predict stock market return.

Anwaar (2016) investigated the relationship between market stock return and return on equity, net profit margin, return on assets, and earnings per share using all firms listed on the London Stock Exchange from 2005 to 2014. The findings of the panel regression model revealed a positive link between net profit margin and return on assets and stock market return, implying that if the firm keeps more cash and the net profit margin rises, the stock market return will rise as well. However, as net profit rises, so does return on assets, which boosts market stock returns. The findings, on the other hand, revealed a negative association between earnings per share and stock returns.

Enow and Brijlal (2016) studied the share prices determinants in South Africa. The study employed 14 listed entities on the Johannesburg Stock Exchange from 2009-2013. The study used multiple regression to analyse data. The study found that dividend per share (DPS), earnings per share, and price earnings ratio account for 57.8% of share price movements. The study further showed that earnings per share and price earnings ratio have significant relationships with share prices. Dividend per share has no significant relationship with share prices.

Menike and Prabath (2014) examined the effect of variables of accounting information on stock price of listed entities on Colombo Stock Exchange (CSE), Sri Lanka. The study employed dividend per share, earnings per share, and net book value per share (NBVPS) as independent variables and share price as dependent variable. The study sampled 100 listed entities on the CSE from 2008 to 2012. The study used a single and multiple regression model for data analysis. The study revealed that EPS, DPS, and NBVPS have significant effect on share price.

Return on assets, on the other hand, has a negative and significant effect on stock returns, according to Bukit and Anggono (2013). Earnings per share have a positive and significant effect on stock return, according to Bukit and Anggono (2013) and Purwaningrat and Suaryana (2015). Khan et al. (2013) found that earnings per share had a significant impact on stock returns in their analysis.

Susilowati and Turyanto (2011), Arista and Astohar (2012), Budialim (2013), and Zulaikha (2013), on the other hand, found no significant effect of earnings per share on stock returns. Nguyen (2011) conducted a research to establish the association existing between the accounting information and stock returns using book values, earnings per share (EPS), return on equity (ROE), and leverage. The results indicated that only EPS and ROE have a positive relationship to the stock prices. Tran et al. (2015) also conducted a similar study in Vietnam. The outcome of the study indicated that there is a relationship between accounting information and stock returns in Vietnam, but this correlation is slightly weak. In other words, the accounting information is less useful for investors to make decisions in Vietnam stock market (Tran et al., 2015). Therefore, on the basis of foregoing, the following hypotheses were formulated and tested:

Previous studies related to accounting information and stock market returns ended inconclusively. The inconclusive results were related to the measurement of variables, data differences, financial performance measurement differences, different methodologies, differences in firm-year observations, and lack of mediating variable. Prior studies were conducted in other countries which were focused mainly on listed manufacturing and mineral sectors. This study extended the existing literature by establishing how board size and accounting information variables determine stock market returns of listed financial firms. The existing literature has provided evidence that, due to omitted variables from econometric models, a number of the findings from the
prior studies reported spurious relationships. Therefore, on the basis of the above prior studies, the following hypotheses were formulated:

H1: There is a significant relationship between dividends per share and stock market return of listed financial firms.

H2: There is a significant relationship between earnings per share and stock market return of listed financial firms.

H3: There is a significant relationship between net book value per share and stock market return of listed financial firms.

H4: There is a significant relationship between net profits margin and stock market return of listed financial firms.

H5: There is a significant relationship between net tangible assets per share and stock market return of listed financial firms.

H6: There is a significant relationship between operating cash flow per share and stock market return of listed financial firms.

H7: There is a significant relationship between price earnings ratio and stock market return of listed entities in Ghana.

H8: There is a significant relationship between return on equity and stock market return of listed financial firms.

H9: There is a significant relationship between total assets turnover and stock market return of listed financial firms.

**Board Size as a Mediating Variable**

Agyemang and Bardai (2022) indicated that a mediator variable is introduced to determine the strength or weakness of this relationship which can both be measured qualitatively and quantitatively. It was therefore expected that board size can strengthen the relationship between accounting information variables and stock market return of the listed financial entities.

Ali and Abdelfettat (2016) analysed 435 large capitalization firms in Australian from 2001 to 2008. The study revealed that there is a significant association between board size and stock market returns. Abdulazeez, Baba, Fatima, and Abdulrahman (2018) investigated the impact of board size on the financial performance of all Nigerian listed deposit money institutions (after consolidation). The study discovered that a large board size has significant impact on deposit money bank financial performance. The study did, however, recommend that banks increase the size of their boards of directors while staying within the maximum limit specified by the code of corporate governance.

Njenga (2017) examined the effect of board size on financial performance of listed commercial and services entities on the Nairobi Security Exchange. The study indicated that large board size has significant effect on financial performance. Saha (2018) explored the relationship between board size and firm. The results of the study showed that board size was not statistically significant and had a negative relationship with financial performance of entities.

Empirical evidence on the effect of board size on firm performance provided mixed results. While Ahmadu et al. (2005), Chan and Li (2008), and De Andres et al. (2005) found that larger board results in poor financial performance, Beiner et al. (2004) and Bhagat and Black (2002) found no significant relationship
between board size and financial performance of entities. Some studies also suggested that a large board size strengthens the board of directors’ effectiveness (Akhtaruddin et al., 2009; Alghamdi, 2012). On the other hand, other studies revealed that small boards’ size enhances board effectiveness (Marashdeh, 2014; Bathula, 2008; Ozkan, 2007; Ranti, 2011). The authors argued that if a board size is small it helps to reach a unified decision on essential issues (Al-Ebel, 2013), enhances communication and coordination (Lipton & Lorsch, 1992; Abbott et al., 2004), provides quality information (Vafeas, 2000), and increases the disclosure levels (Al-Shaer et al., 2017).

Wu (2003) and Pablo, Valentin, and Felix (2005) argued that smaller board size is more efficient to monitor the executive management and disseminate information to shareholders. These authors indicated that large boards encounter more problems such as cost of coordination and social loafing. The authors further argued that large boards are ineffective in disseminating information to shareholders. Board size of eight to nine is said to be effective (Lipton & Lorsch, 1992). This number is also supported by an agency theorist (Huse, 2007).

Agyemang and Bardai (2022) and Wu (2003) indicated that the size of the board of directors has a considerable impact on financial performance. From the agency theory perspective, a larger board is more cautious when it comes to agency issues because a larger number of people will be examining management actions (Nicholson & Kiel, 2003). From the signal theory perspective, a larger board provides more information (signal) to the stakeholders concerning the financial performance of firms (Agyemang & Bardai, 2022). Mak and Li (2001) discovered that there is a significant relationship between board size and financial performance. Sanda, Garba, and Mikailu (2011) also uncovered that there is a significant relationship between small board size and financial performance. The authors argued that small board size is efficient as compared to large board size. Huse (2007) argued that larger boards can be manipulated easily as compared to the smaller boards. On the basis of agency and signal theory as well as the inconclusive results in the literature, the following hypotheses were formulated and tested:

- **H10**: Board size significantly mediates the relationship between dividends per share and stock market return of listed financial firms.
- **H11**: Board size significantly mediates the relationship between earnings per share and stock market return of listed financial firms.
- **H12**: Board size significantly mediates the relationship between net book value per share and stock market return.
- **H13**: Board size significantly mediates the relationship between net profit margin and stock market return listed financial firms.
- **H14**: Board size significantly mediates the relationship between net tangible assets per share and stock market return of listed financial firms.
- **H15**: Board size significantly mediates the relationship between net profits margin and stock market return of listed financial firms.
- **H16**: Board size mediates the relationship between operating cash flow per share and stock market return of listed financial firms.
- **H17**: Board size significantly mediates the relationship between price earnings ratio and stock market return of listed financial firms.
H$_{18}$: Board size significantly mediates the relationship between total assets turnover and stock market return of listed financial firms.

H$_{19}$: Board size significantly mediates the relationship between accounting information and stock market return of listed financial firms.

**Methodology**

The study adopted a quantitative research approach. Descriptive research design was also used. The descriptive research design helped to obtain information on stock market returns of listed financial entities. The study purposely opted for the use of census methodology to select all the 13 listed financial entities from 2007-2019. Therefore, the sample size of this study was 13 listed financial entities from 2007 to 2019 with 169 observations. The study sourced secondary data from the published financial reports of the listed financial entities which entailed the annual financial reports and statistics. The secondary data for this study were the annual time series data for the period from 2007 to 2019, collected from annual financial statements of listed financial entities. Data relating to accounting measures were obtained from the websites of the listed entities. The study used the GSE website to source data on stock market return which is represented by all share indexes for each entity from the year 2007-2019. The study also used the *GSE Handbook* (2007-2019) and the annual financial reports downloaded from the entities’ website to obtain data on various accounting measures.

**Operational Definitions and Measurement of Study Variables**

| Variable                  | Nature of variable | Measurement                                                                 |
|---------------------------|--------------------|-----------------------------------------------------------------------------|
| Stock market return       | Dependent          | Current market value of equity minus the opening market value of equity plus the current dividend all divided by the opening market value of equity (Malhotra & Tandon, 2013) |
| Earnings per share (EPS)  | Independent        | Net profit after tax—preference dividend/number of outstanding shares (Kabajeh, 2012) |
| Return on equity (ROE)    | Independent        | Net profit after taxes/total shareholders’ equity (Kabajeh, 2012)           |
| Net book value per share (NBVPS) | Independent | Equity share capital + shareholders reserves/total no. of equity shares outstanding (Srinivasan, 2012) |
| Operating cash flow per share (OCFPS) | Independent | Operating cash flow—dividends on preferred shares/number of shares in circulation (Cheng & Shamsher, 2008) |
| Total assets turnover (TAT) | Independent | Net sales/total assets (Purwanto & Bina, 2016) |
| Price earnings ratio (PER) | Independent | Share price/earnings per share (Arkan, 2016) |
| Net profits margin (NPM)  | Independent        | Operating profit after tax/operating revenue (Bastian, 2006)               |
| Dividend per share        | Independent        | Dividend/current share price$\times$100 (Irala, 2005)                      |
| Net tangible assets per share | Independent | Net tangible assets/total number of shares outstanding (Piralanasih & Mustafa, 2018) |
| Board size                | Mediating          | Dummy variables coded 0 if the boards’ number is not between 7-13, 1 if otherwise |

**Model Specification**

For the purpose of testing the mediating effect of board size on the relationship between accounting information and stock market return, the study designs a general panel data regression model to combine time series for several cross-sections. The regression equation helped to analyse repeated observations on fixed units.
Consequently, the regression model will aid the study to combine cross-sectional data on the 42 listed entities in Ghana (N) and the five year time period from 2007 to 2019 (T) so as to produce a dataset of N*T observations. This means that, instead of testing a cross-section model for the 13 listed financial entities at one point in time or testing a time series model for one entity using time series data, the panel data regression model is tested for all entities through time. From the general regression model, the study designed a panel data regression for stock market return. Since this study incorporated a mediating variable, according to Baron and Kenny (1986), an equation that regresses the independent variables against the dependent variable while controlling for mediating variable board size is designed so as to ascertain the mediating effect. Similarly, the study by Ongore et al. (2015) incorporated the mediating variable in the regression model in order to determine the mediation effect on the association between the dependent and independent variables. Therefore, given this preamble, this study designs the panel data regression model to help test for moderation effect of board size. This regression model helped this study in combining both cross-section data and time series data. The mediating effect of board size on stock market return is investigated using multiple regressions analysis. Agyemang and Bardai (2022) indicated that a mediating relationship can be represented by the use of a three-variables of which one variable is a dependent variable, another is an independent variable, and the third is a mediator variable. The independent variable is predicted to influence the dependent variable in this system, and a mediating connection exists when the independent variable’s influence on the dependent variable varies depending on the value of the mediating variable (Agyemang & Bardai, 2022). Therefore, the model for this study is:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \ldots + \beta_n X_n + \mu \]  

where,

- \( Y \) = independent variable,
- \( \beta_0 \) = intercept of \( Y \),
- \( \beta \) = parameter of the dependent variables, and
- \( u \) = error term.

By substituting the accounting measures on stock market return into equation, the following stock market return function will be obtained:

**Direct Effect**

\[ \text{SMR} = \beta_0 + \beta_1 \text{EPS} + \beta_2 \text{NBVPS} + \beta_3 \text{ROE} + \beta_4 \text{OCFPS} + \beta_5 \text{TAT} + \beta_6 \text{PER} + \beta_7 \text{NTA} + \beta_8 \text{NPM} + \beta_9 \text{DPS} + \mu \]  

where:

- \( \text{SMR} \) = Stock market return (the stock market return is the return on share price measured as the current market value of equity minus the opening market value of equity plus the current dividend all divided by the opening market value of equity),
- \( \beta_0 \) = Constant term,
- \( \beta_i = \beta_{18} \) Parameters of accounting information and mediating variable,
- \( \mu \) = Error term,
- \( \text{EPS} \) = Earnings per share,
- \( \text{NBVPS} \) = Net book value per share,
- \( \text{ROE} \) = Return on equity,
- \( \text{OCFPS} \) = Operating cash flow per share,
- \( \text{TAT} \) = Total assets turnover,
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NTA = Net tangible assets per share,
PER = Price earnings ratio,
NPM = Net profits margin,
DPS = Dividends per share.

Mediating Effect

\[ SMR = \beta_0 + \beta_{10}EPS + CG + \beta_{11}NBVPS + CG + \beta_{12}ROE + CG + \beta_{13}OCFPS + CG + \]
\[ \beta_{14}TAT + CG + \beta_{15}PER + GC + \beta_{16}NTA + CG + \beta_{17}NPM + CG + \beta_{18}DPS + CG + \mu \]  \hspace{1cm} (3)

The data obtained were compiled and edited in Excel spreadsheet. The data were then transferred from Excel to STATA econometric software for analysis. The researchers analysed the descriptive statistics for each of the study variables so as to get their mean, standard deviation, minimum and maximum values for each of the sectors. The researchers thereafter run the Modified Ordinary Least Squares (FMOLS) and Dynamic Ordinary Least Squares (DOLS) regression models with stock market return as the dependent variable, for both the direct effect and the moderation effect, so as to test the fitness of the models by use of the F-statistics. The results for the F-statistics were used to gauge whether the models were fit for analysis. Thereafter, the study carried out diagnostic tests for each of the FMOLS and DOLS regression models so as to test whether the econometric assumptions relating to the FMOLS and DOLS regression were met. The study tested for multicollinearity and normality. The problem of heteroskedasticity in the multiple regression models was dealt with by use of the panel cointegration tests. The multiple regression models for both the direct effect and moderation effect were estimated and their results presented in tables for interpretation. Finally, the study used the results obtained from the estimated multiple regression models to test the research hypothesis of the study. The hypotheses were tested for both the direct and mediated multiple regression models so as to determine the strength of the relationship between the study variables. Afterward, a comprehensive summary of the estimated regression results was given in a table form for easy interpretation of the findings.

Empirical Results and Analysis

Table 2

| SMR | BSIZE | DPS | EPS | NBVPS | NPM | NTA | OCFPS | PER | ROE | TAT |
|-----|-------|-----|-----|-------|-----|-----|-------|-----|-----|-----|
| Mean | 4.6001 | 1.0000 | 0.6699 | 1.3240 | 23.050 | 23.450 | 0.4242 | 0.5581 | 11.0893 | 23.480 | 0.2216 |
| Median | 0.0950 | 1.0000 | 0.2200 | 0.3300 | 22.150 | 22.500 | 0.4150 | 0.5700 | 10.2000 | 23.000 | 0.2200 |
| Maximum | 58.160 | 1.0000 | 4.0200 | 18.280 | 62.400 | 62.400 | 0.9100 | 0.9900 | 34.5000 | 51.000 | 0.5500 |
| Minimum | -0.4568 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1100 | 0.1200 | 2.0000 | 0.1400 | 0.0300 |
| Std. Dev. | 15.560 | 0.0000 | 0.9815 | 2.9850 | 8.8614 | 9.4755 | 0.1978 | 0.1964 | 6.2303 | 10.666 | 0.0960 |
| Skewness | 3.1611 | NA | 1.6877 | 3.9321 | 1.4894 | 1.1577 | 0.5266 | -0.4197 | 1.6626 | -0.3471 | 0.1918 |
| Kurtosis | 10.998 | NA | 4.4663 | 18.742 | 8.2113 | 6.6836 | 2.4519 | 2.7120 | 6.1630 | 3.4747 | 2.8873 |
| J-Bera | 727.61 | NA | 94.813 | 2167.7 | 252.22 | 132.51 | 9.8686 | 5.5141 | 147.436 | 4.9517 | 1.1192 |
| Prob. | 0.0000 | NA | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0071 | 0.0634 | 0.0000 | 0.0840 | 0.5714 |

The average value of BSIZE was 1.000000, with a maximum of 1.000000 and a minimum of 1.000000. The standard deviation of BSIZE’s natural logarithm was 0.000000. This means there was 0.000000 dispersion or variances around the mean of BSIZE. The BSIZE distribution was strongly positively skewed, with a skewness value of 0.000000. The kurtosis value of 0.000000 indicates that the BSIZE distribution was not normally distributed (excess [K] = 0.000000 - 0.000000 = 0.000000).
The mean value of DPS of the sampled financial firms was 0.669964, with a maximum of 4.020000 and a minimum of 0.000000. The standard deviation of DPS’s natural logarithm was 0.981536. This indicates that there was 0.981536 variance of the mean of DPS. The DPS distribution was strongly positively skewed, with a skewness value of 1.687796. The DPS distribution was not normally distributed, as indicated by the kurtosis coefficient of 4.466345.

The average value of EPS of the financial firms studied was 1.324000, with a high of 18.28000 and a minimum of 0.000000. The standard deviation of EPS’s natural logarithm was 2.985043. This indicates that there was variation of 2.985043 from the mean of EPS. The EPS distribution was strongly positively skewed, with a skewness score of 3.932111 for DPS. The EPS distribution was not normally distributed, as indicated by the kurtosis coefficient of 18.74278.

The mean value of NBVPS of the sampled financial firms was 23.05000, with a maximum of 62.40000 and a minimum of 0.000000. The standard deviation of NBVPS’ natural logarithm was 8.861455. This indicates that there was a variation of 8.861455 from the mean. The NBVPS distribution was strongly positively skewed, with a skewness score of 1.489493. The NBVPS distribution was not normally distributed, as indicated by the kurtosis coefficient of 8.211330.

The mean of NTA of the sampled financial entities was 0.424226, with a maximum of 0.910000 and a minimum of 0.110000. The standard deviation of NTA’s natural logarithm was 9.475578. This indicates that there was a skewness value of 0.526644 for NTA. The NTA distribution was not normally distributed, as indicated by the kurtosis coefficient of 6.683652.

The mean of ROE of the sampled financial firms was 23.48054, with a maximum of 51.00000 and a minimum of 0.140000. The standard deviation of ROE’s natural logarithm was 10.66607. This indicates that there was a variation of 10.66607. The ROE distribution was negatively skewed, with a skewness value of -0.347143. The ROE distribution was not normally distributed, as indicated by the kurtosis coefficient of 3.474727.
The mean value of TAT of the sampled financial firms was 0.221637, with a maximum of 0.550000 and a minimum of 0.030000. The standard deviation of TAT’s natural logarithm was 0.096059. This indicates that there was variation of 0.096059. The TAT distribution was strongly positively skewed, with a skewness value of 0.191832. The TAT distribution was not normally distributed, as indicated by the kurtosis coefficient of 2.887331.

**Multicollinearity Test**

The Variance Inflation Factor and Tolerance Statistics were used to test for multicollinearity. A Variance Inflation Factor Greater than 10 (VIF \( > 10 \)) or Tolerance Statistics less than 0.10 (\( 1/\text{VIF} < 0.10 \)) indicates trouble with multicollinearity. The results of the tests are shown by the Table 3.

**Table 3**

| Variable | VIF          | 1/VIF       |
|----------|--------------|-------------|
| DPS      | 1.08         | 0.928638    |
| EPS      | 1.36         | 0.732975    |
| NBVPS    | 5.47         | 0.182796    |
| NPM      | 5.56         | 0.179996    |
| NTA      | 1.06         | 0.947221    |
| OCFPS    | 1.07         | 0.937443    |
| PER      | 1.15         | 0.870500    |
| ROE      | 1.39         | 0.721960    |
| TAT      | 1.08         | 0.923180    |
| Board size | 2.45     | 0.634231   |
| Mean VIF | 21.67        |             |

**Table 4**

| Test                  | Statistic | d.f. | Prob. |
|-----------------------|-----------|------|-------|
| Breusch-Pagan LM      | 911.5156  | 78   | 0.512 |
| Pesaran Scaled LM     | 66.73466  |      | 0.763 |
| Pesaran CD            | 30.18319  |      | 0.869 |

*Notes. Null hypothesis: No cross-section dependence (correlation) in residuals; Equation: Untitled; Periods included: 13; Cross-sections included: 40; Total panel (unbalanced) observations: 516; Non-zero cross-section means detected in data; Test employs centered correlations computed from pairwise samples.*

**Unit Root Tests**

Many time-dependent data utilized in econometric analysis are non-stationary, which means that they tend to rise or decrease over time. Such data, according to Engle and Granger (1987), might lead to erroneous results or inferences if utilized for regression analysis. This claim is backed up by Hegwood and Papell (2007), who claim that unit root causes erroneous behavior because the analysis assumptions are not accurate (for instance, t ratios will not follow a t distribution). As a result, it was critical to analyze the input variables’ stability before conducting a co-integration test to see if there was a long-term relationship between the explained and explanatory variables.
Because multiple unit root tests exist, it was required to confirm that all variables are integrated in Order I before defining a long-term relationship between the variables. As a result, ADF File Chi Square, Levin, Lin, and Chu Version (LLC), Im, Pesaran, and Shin (1997 IPS), and PP-Chi Fisher square were employed in the study. These tests are based on the Dickey-Fuller method. Although the test Levin, Lin, and Chu (LLC) has a homogeneity restriction, the Im, Shin, and Pesaran (IPS) test eliminates this problem by assuming heterogeneity between units in a dynamic panel data frame. After these tests, the study presented the unit root test of ADF Fisher Chi Square for the analysis.

Table 5
Unit Root Tests Results

| Variables | ADF Fisher Chi Square |
|-----------|-----------------------|
|           | At level               | At first difference |
|           | Statistic   | Prob. | Statistic   | Prob. |
| SMR       | 239.469     | 0.786 (1) | 239.469     | 0.0000* (0) |
| BSIZE     | 73.5638     | 0.781 (1) | 33.8913     | 0.0005* (0) |
| DPS       | 27.5959     | 0.3786 (1) | 51.2776     | 0.0022* (0) |
| EPS       | 63.3131     | 0.781 (1) | 113.579     | 0.0000* (0) |
| NBVPS     | 44.3741     | 0.138 (1) | 69.4720     | 0.0000* (0) |
| NPM       | 41.0012     | 0.310 (1) | 62.0758     | 0.0001* (0) |
| NTA       | 45.6685     | 0.899 (1) | 81.3507     | 0.0000* (0) |
| OCFPS     | 49.3527     | 0.238 (1) | 61.3133     | 0.0001* (0) |
| PER       | 42.0464     | 0.243 (1) | 72.3788     | 0.0000* (0) |
| ROE       | 44.0188     | 0.150 (1) | 79.9388     | 0.0000* (0) |
| TAT       | 43.5832     | 0.168 (1) | 97.8519     | 0.0000* (0) |

Notes: * indicates significant level at 5%.

Because the Pesaran’s test revealed cross-sectional independence in the panel, first-generation unit root tests such as the LL & C t test, the Im, Pesaran, and Shin W-stat (IPS) test, the Augmented Dickey Fuller Fisher (ADF-Fisher) test, and the PP-Fisher test were used to diagnose the unit root. The examined variables were not stable at levels, as shown in Table 5, resulting in the failure to reject the null hypothesis of non-stability. However, because the variables did not achieve stability, the study supports the null hypothesis at first difference. Therefore, all the lagged independent and mediating variables can jointly influence stock market return and there is a causal link running from the independent variables to stock market return in the short-run at 5% level of significance.

Cointegration Test

The FMOLS and DOLS estimators were used to estimate the cointegrating connection between accounting information variables and SMR. The deterministic trend was incorporated in the cointegrating relationship for the FMOLS; however the trend was suppressed in the DOLS estimation due to the specification of the regression in dynamic terms. The FMOLS and DOLS estimators were pooled and aggregated in both situations, with grouped mean estimations computing the cross-section average of the individual cross-section estimates.

Since the first differences of the variables were stationary using the ADF unit root test, the study further went ahead to establish the co-integration among the variables. The study established long-run relationships between the variables. The Table 6 and Table 7 show the co-integration results of the variables in the study. The Pedroni (1999) panel cointegration tests results are shown in Table 6 above. As indicated in the Table 6
and the Table 7 above, the study went further to determine whether the variables were co-integrated in the long run or not because all the variables were stationary at first difference. In this study, Pedroni and Kao cointegration tests were used for that purpose. In the Pedroni and Kao cointegration tests, Bartlett Kernel method and the bandwidth are determined by the Newey-West method. As a result of the results of seven of Kao’s test statistics as shown in Table 6, three of the seven tests of the null hypothesis of that there is no co-integration amongst the variables were not supported at 5% significant level. Therefore, it is concluded that there is a long-run cointegration between accounting information variables and stock market return. The result of Pedroni displayed in Table 6 does not support this conclusion. This means that board size mediates the relationship between all the accounting information variables and stock market return.

Table 6

| Pedroni Residual Cointegration Test |
|------------------------------------|
| Alternative hypothesis: Common AR coefs. (within-dimension) |
| Weighted                      | Statistic | Prob. | Statistic | Prob. |
| Panel v-statistic              | -2.687723 | 0.9964 | -3.101237 | 0.9990 |
| Panel rho-statistic            | 3.335581  | 0.9996 | 3.617154  | 0.9999 |
| Panel PP-statistic             | -3.991373 | *0.0000 | -2.403901 | *0.0081 |
| Panel ADF-statistic            | -4.594548 | *0.0000 | -3.321789 | *0.0004 |
| Alternative hypothesis: Individual AR coefs. (between-dimension) |
| Group rho-statistic            | 4.811464  | 1.0000 |
| Group PP-statistic             | -5.936079 | *0.0000 |
| Group ADF-statistic            | -4.104845 | *0.0000 |

Notes: * indicates significance at 5% level.

Table 7

| Kao Residual Cointegration Test |
|---------------------------------|
| t-statistic                  | Prob. |
| ADF                           | -9.402599 | *0.0000 |
| Residual variance            | 539.2953 |
| HAC variance                  | 88.76376 |

Notes: * indicates significance at 5% level.

Discussion of Results (Direct Effect)

Diagnostic testing for the residual normality distribution and the serial correlation has been discussed. Now, panel FMOLS and panel DOLS estimation results are presented in Table 8 and Table 9 below. The Table 8 and Table 9 show a summarised FMOLS and DOLS results of panel of nine accounting information variables over the period of 2007-2019.

Table 8

| Model Summary of Direct Effect |
|--------------------------------|
| Panel FMOLS                | Panel DOLS |
| R-squared                  | Adjusted R-squared | F-statistic | R-squared | Adjusted R-squared | F-statistic |
| 0.84536                    | 0.80352         | 140.8177   | 0.93059   | 0.890528           | 146.8613   |
The Table 8 above indicated the direct association between the accounting information variables and the stock market return of listed entities. As per Table 8 above, the coefficient of determination R-squared of FMOLS results gave a value of 0.84536. This means that 84.536% of the variation in \( p \) as measure by SMR can be explained by changes in DPS, EPS, NBVPS, NPM, PER, ROE, and TAT while only 15.464% could not be explained. The value of \( F = 140.8177 \) is large enough to conclude that the set of independent variables as a whole were contributing to the variance of SMR. Therefore, the model represents the actual performance of listed financial entities on GSE.

As per Table 8 above, the coefficient of determination R-squared of DOLS results gave a value of 0.93059, which means that 93.059% of the variation in \( p \) as measure by SMR can be explained by changes in DPS, EPS, NBVPS, NPM, PER, ROE, and TAT while only 6.941% could not be explained. The value of \( F = 146.8613 \) is large to draw a conclusion that the set of independent variables as a whole were contributing to the variance of SMR. Therefore, the model represents the actual performance of listed financial firms on GSE.

Table 9

**Summary of Multiple Regression Results of Direct Effect**

| Variables | Beta (\( \beta \)) coefficient | \( t \)-statistic | \( p \)-value | Beta (\( \beta \)) coefficient | \( t \)-statistic | \( p \)-value |
|-----------|--------------------------------|------------------|--------------|--------------------------------|------------------|--------------|
| DPS       | -1.320195                      | -1.002847        | 0.3178*      | -0.545508                      | -0.421016        | 0.6744*      |
| EPS       | -1.032588                      | -1.432061        | 0.1545*      | -0.435152                      | 0.661187         | 0.5095*      |
| NBVPS     | 0.029930                       | 0.112343         | 0.9107*      | -0.036341                      | 0.135083         | 0.8927*      |
| NPM       | -0.161946                      | -0.617257        | 0.5381*      | 0.064493                       | 0.244200         | 0.8074*      |
| NTA       | -28.06700                      | -4.363974        | 0.0000       | -20.80570                      | -3.396897        | 0.0009       |
| OCFPS     | -34.63430                      | -5.283245        | 0.0000       | -15.16397                      | -2.811290        | 0.0056       |
| PER       | -0.400783                      | -1.073492        | 0.2850*      | -0.525220                      | -1.408967        | 0.1610*      |
| ROE       | -0.003244                      | -0.021420        | 0.9829*      | 0.104577                       | 0.700098         | 0.4850*      |
| TAT       | -12.45887                      | -1.042765        | 0.2990*      | -9.236933                      | -0.820098        | 0.4135*      |

*Note.* A * indicates rejection of hypothesis at 5% insignificant level.

With FMOLS results, the \( p \)-values for NTA (0.0000) and OCFPS (0.0000) are less than 0.05, denoting that these two variables are statistically significant in explaining SMR. This finding from the study supports Gupta and Jayadev (2016) and Bhatia and Mwila (2019) whose study revealed a significant positive relationship between NTA and SMR of the listed financial firms. This finding from the study also supports Burke and Wieland (2017) and Ragab and EL-Chaarani (2018) whose study revealed a significant relationship between OCFPS and SMR of listed financial firms. However, the \( p \)-values for DPS (0.3178), EPS (0.1545), NBVPS (0.9107), NPM (0.5381), PER (0.2850), ROE (0.9829), and TAT (0.2990) are greater than 0.05, denoting that these variables are statistically insignificant in explaining SMR. Therefore, the null hypotheses of DPS, EPS, NBVPS, NPM, PER, ROE, and TAT are rejected at 0.05 levels of insignificance. The finding from this study under FMOLS supports Ewereoke (2018) whose study revealed insignificant relationship between accounting information variables and SMR. This finding from the study with the exception of NTA and OCFPS does not support Ewereoke (2018), Zaheri and Barkhordary (2015), Anwaar (2016), Arkan (2016), Mohammed and
With DOLS results, the \( p \)-values for NTA (0.0000) and OCFPS (0.0000) are less than 0.05, denoting that these two variables are statistically significant in explaining SMR. However, the \( p \)-values for DPS (0.3178), EPS (0.1545), NBVPS (0.9107), NPM (0.5381), PER (0.2850), ROE (0.9829), and TAT (0.2990) are greater than 0.05, denoting that these variables are statistically insignificant in explaining SMR. Therefore, the null hypotheses of DPS, EPS, NBVPS, NPM, PER, ROE, and TAT are rejected at 0.05 levels of insignificance. The finding from this study supports Ewereoke (2018) whose study revealed insignificant relationship between accounting information variables and SMR. This finding from the study under DOLS with the exception of NTA also does not support Bhatia and Mwila (2019), Arkan (2016), and Moshavegh and Montazerhojat (2016) whose study revealed a significant positive relationship between EPS and SMR of listed financial firms. This finding supports Zaheri and Barkhordary (2015) and Fun and Basana (2012) whose study revealed that price earnings ratio has insignificant relationship with market stock returns. However, this result contradicts with Arkan (2016) whose study uncovered that price earnings ratio has a significant relationship with stock market return. PER determines the association between share price of the entity and its EPS. The findings from both FMOLS and DOLS indicate that there is an insignificant negative relationship between ROE and SMR of listed financial entities on GSE. Therefore, the null hypothesis is rejected at 0.9829 and 0.4850 level of insignificance. This finding from the study supports Fouzan, Tahtamouni, and Mustafa (2016) whose study revealed insignificant relationship between ROE and SMR. However, the finding does not support Musallam (2018) and Bhatia and Mwila (2019) whose study revealed a significant relationship between ROE and SMR. The findings from both FMOLS and DOLS indicate that there is an insignificant negative relationship between TAT and SMR of listed financial entities on GSE. Therefore, the null hypothesis is rejected at 0.2990 and 0.4135 level of insignificance. This finding from the study does not support Purwanto and Bina (2016) whose study revealed that there is significant relationship between TAT and SMR.

### Summary of Hypotheses Testing of Listed Financial Entities

Table 10 below summarizes the hypothesis testing of direct effect.

| Code | Hypotheses | \( p \)-value FMOLS | \( p \)-value DOLS | Hypotheses results |
|------|-------------|----------------------|-------------------|-------------------|
| \( H_1 \) | Dividends per share (DPS) significantly affects stock market return (SMR) | 0.3178* | 0.6744* | Rejected | Rejected |
| \( H_2 \) | Earnings per share (EPS) significantly affects stock market return (MSR) | 0.1545* | 0.5095* | Rejected | Rejected |
| \( H_3 \) | Net book value per share (NBVPS) significantly affects stock market return (SMR) | 0.9107* | 0.8927* | Rejected | Rejected |
| \( H_4 \) | Net profit margin per share significantly affects stock market return (MSR) | 0.5381* | 0.8074* | Rejected | Rejected |
| \( H_5 \) | Net tangible assets per share (NTA) significantly affects stock market return (SMR) | 0.0000 | 0.0009 | Support | Support |
| \( H_6 \) | Operating cash flow per share (OCFPS) significantly affects stock market return (SMR) | 0.0000 | 0.0056 | Supported | Rejected |
Discussion of Results of Mediating Effect

This study examined the mediating effect of board size on the relationship between DPS, EPS, NBVPS, NPM, PER, ROE, and TAT and SMR for listed financial firms. For this purpose, the study took support from FMOLS and DOLS for two reasons; first, the modeled variables of this study are integrated of Order I and second is that for panel cointegrated regression models, FMOLS provide more promising estimators than OLS because the asymptotic properties of estimators of regression coefficient and statistical test are different among panel cointegrated models than time-series co-integrated models. Board size was introduced in the study as a mediating variable in order to test its mediating effect on SMR. Theoretically, board size has an effect on DPS, EPS, NBVPS, NPM, PER, ROE, and TAT and SMR of listed entities. The summarized results were tabulated in Table 11 below.

Table 11
Model Summary of Mediating Effect

| Panel | FMOLS | | | DOLS | | |
|---|---|---|---|---|---|---|
| R-squared | Adjusted R-squared | F-statistic | R-squared | Adjusted R-squared | F-statistic |
| 0.874536 | 0.83157 | 140.8177 | 0.97232 | 0.92559 | 148.1430 |

With board size introduced as a mediating variable, as per Table 10 above, the regression results of FMOLS had an adjusted R-squared of 0.83157 which means that 83.157% of variations in SMR can be explained by the changes in the independent variables.

With board size introduced as a mediating variable, as per Table 11 above, the regression results of DOLS had an adjusted R-squared of 0.92559 which means that 92.559% of variations in SMR can be explained by the changes in the independent variables.

Table 12
Summary of Regression Results of Mediating Effect

| Panel | FMOLS | | | DOLS | | |
|---|---|---|---|---|---|---|
| Variables | Beta ($\beta$) coefficient | t-statistic | p-value | Beta ($\beta$) coefficient | t-statistic | p-value |
| DPS | -3.420195 | -1.782843 | 0.5189* | -0.554263 | -0.427398 | 0.6697* |
| EPS | -2.062586 | -2.532066 | 0.1675* | -0.424418 | -0.64156 | 0.4531* |
| NBVPS | 0.059438 | 0.612344 | 0.037* | -0.026767 | -0.099547 | 0.4208* |
| NPM | -0.63949 | -0.911358 | 0.8912* | -0.079254 | -0.300891 | 0.7639* |
| NTA | -25.06452 | -5.783956 | 0.0561 | -21.05365 | -3.440635 | 0.0008 |
| OCFPS | -24.63123 | -6.823244 | 0.0452 | -15.38375 | -2.854807 | 0.0049 |
| PER | -2.009888 | -2.063423 | 0.8510* | -0.526704 | -1.411659 | 0.1602* |
| ROE | -0.103664 | -0.051423 | 0.0339 | 0.610302 | 0.689178 | 0.4918* |
| TAT | -43.5277 | -1.073656 | 0.592* | -9.545756 | -0.847457 | 0.3981* |
| BSIZE | 3.351237 | 3.341532 | 0.0343 | 0.231456 | 0.234672 | 0.1267* |

Note. * indicates rejection of hypothesis at 5% insignificant level.
With FMOLS results, only NTA and OCFPS were negatively significant with significance levels of 0.0561 and 0.0452 respectively. This means that board size had a significant effect on the relationship between NTA and OCFPS and SMR of the listed financial entities on GSE. DPS, EPS, NBVPS, NPM, PER, ROE, and TAT had a negative insignificant relationship with SMR with insignificant levels of \( p \)-values 0.5189, 0.1675, 0.1037, 0.8912, 0.8510, 0.3822, and 0.5992 respectively. This means board size strengthens the relationship between DPS, EPS, NBVPS, NPM, PER, ROE, and TAT and SMR of listed financial entities on GSE.

With DOLS results, only NTA and OCFPS were negatively significant with significance levels of 0.000 and 0.004 respectively. This means that board size had a significant effect on the relationship between NTA and OCFPS and SMR of financial entities listed on GSE. DPS, EPS, NBVPS, NPM, PER, ROE, and TAT had a negative insignificant relationship with SMR with insignificant levels of \( p \)-values 0.5189, 0.1675, 0.1037, 0.8912, 0.8510, 0.3822, and 0.5992 respectively. This means board size strengthens the relationship between DPS, EPS, NBVPS, NPM, PER, ROE, and TAT and SMR but its relationship with accounting information variables is not significant of listed financial entities on GSE.

Board size significantly mediates the relationship accounting information and stock market return of listed financial entities in Ghana. The results from this study indicate a statistical significance of board size on accounting information variables and stock market return. It is seen that increasing the size of the board improves stock market return supports Agyemang and Bardai (2022) as well as Anderson et al. (2004) but contrary to Jensen (1993). The findings from this study also support Fama and Jensen (1983) who argued that the role of the board involves monitoring managerial behaviour, which is likely to be more effective with a large board size. In this respect, one can follow Agyemand and Bardai (2022) arguing that stock markets place a high premium on large board size, perceived to have more resources for monitoring.

**Summary of Hypotheses Testing of Mediating Effect**

Table 13 below summarizes the hypothesis testing of mediating effect

| Code | Hypotheses                                                                 | \( p \)-value FMOLS | \( p \)-value DOLS | Hypotheses results |
|------|----------------------------------------------------------------------------|----------------------|--------------------|--------------------|
| H10  | Board size significantly mediates the relationship between dividends per share (DPS) and stock market return (SMR) | 0.5189*              | 0.6697*            | Rejected           |
| H11  | Board size significantly mediates the relationship between earnings per share (EPS) and stock market return (SMR) | 0.1675*              | 0.4531*            | Rejected           |
| H12  | Board size significantly mediates the relationship between net book value per share (NBVPS) and stock market return (SMR) | 0.1037*              | 0.2823*            | Rejected           |
| H13  | Board size significantly mediates the relationship between net profit margin (NPM) and stock market return (SMR) | 0.8912*              | 0.7639*            | Rejected           |
| H14  | Board size significantly mediates the relationship between net tangible assets per share (NTA) and stock market return (SMR) | 0.0561               | 0.0008             | Supported          |
| H15  | Board size significantly mediates the relationship between operating cash flow per share (OCFPS) and stock market return (SMR) | 0.0452               | 0.0049             | Supported          |
| H16  | Board size significantly mediates the relationship between price earnings ratio (PER) and stock market return (SMR) | 0.8510*              | 0.1602*            | Rejected           |
| H17  | Board size significantly mediates the relationship between return on equity (ROE) and stock market return (SMR) | 0.3822*              | 0.4918*            | Supported          |
| H18  | Board size significantly mediates the relationship between total assets turnover (TAT) and stock market return (SMR) | 0.5992*              | 0.3981*            | Rejected           |
| H19  | Board size significantly affects accounting information (AI)                  | 0.0343               | 0.1267*            | Supported          |
Conclusion, Policy Implications, and Limitations

The study investigated the mediating effect of board size on the relationship between accounting information and stock market returns of listed entities on Stock Exchange Market of Ghana. The study used 13 listed financial entities from 2007-2019. The study employed FMOLS and DOLS analysis for the econometric analysis. The outcomes of the study suggest that all the accounting information variables with the exception of NTA and OCFPS have insignificant relationship with the stock market return of listed financial entities. Board size is not significantly connected with stock market return of listed financial entities in Ghana. Board size significantly affects the relationship between NTA and OCFPS of listed financial entities on GSE. Even though board size did not have significant relationship between the other accounting information variables and stock market return but it strengthened their relationship insignificantly. This implies as board size increases the relationship between the accounting information variables also increases. This means large board size could help monitor executive management and disseminate accounting information to shareholders to make investment and financial decisions. It could be concluded that agency and signal theories were used to support the effect of board size on the relationship between accounting information and stock market return of listed financial entities on GSE at five percent level of significance and insignificance. Even though based on the research results, only few accounting information variables had a significant relationship with stock market returns. However, the role of financial indicators in predicting stock market returns cannot be ignored as there is still lack of information on how accounting information variables support stock returns (Agyemang & Bardai 2022). This study has shown that accounting information variables still have a certain degree of explanatory power towards stock market returns.

In terms of the limitation, this study only considered nine financial ratios of listed financial entities on GSE. The study also considered observations from 2007 to 2019. Therefore, it is suggested that number of ratios and the number of observations can be increased in future studies. Another limitation was that the accounting ratios were selected randomly which provided a limited scope to certain selected financial indicators only. Therefore, it is suggested that future studies may classify the accounting ratios into activity ratios, liquidity ratio, debt ratio, profitability ratio, and common stock ratio against stock market returns. This will contribute more towards the literature of discovering the relationship between financial indicators and stock returns. The study used only board size as a mediating variable. It is therefore suggested that future research should use other variables such as board gender diversity, board independence, board competence, audit committee size, audit committee independence, audit committee competence, internal audit size, internal audit independence, and internal audit competence as mediating or moderating variables on the relationship between accounting information and stock market returns.

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