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THE AFFILIATION BETWEEN CASH FLOWS AND THE FINANCIAL PERFORMANCE OF NON-FINANCIAL FIRMS: AN EMPIRICAL EVIDENCE FROM THE GHANA STOCK EXCHANGE (GSE)

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ABSTRACT

This study sought to explore the connection between cash flows and the financial performance of non-financial firms listed on the Ghana Stock Exchange (GSE). Specifically, the study sought to examine the association between cash flows and the firms' financial performance as measured by ROA; explore the connection between cash flows and the firms' financial performance as measured by ROE; and to find out the affiliation between cash flows and the firms' financial performance as measured by ROCE. This study was a quantitative study because, it mainly examined numerically measured variables with the application of statistical techniques. The study was precisely correlational in nature because, it sought to explore the relationship between cash flows and the firms' financial performance. The study was finally panel in nature because, it gathered information on the same study units at different points in time. A balanced secondary panel data sourced from the audited and published annual reports of the Ghana Oil Company Ltd, Total Petroleum Ghana Ltd, Starwin Products Ltd, Camelot Ghana Ltd, Aluworks Ltd, Clydestone Ghana Ltd, African Champion Industries Ltd, Benson Oil Palm Plantation Ltd, Fan Milk Ltd, Guinness Ghana Breweries Ltd, Unilever Ghana Ltd, PZ Cussons Ghana Ltd, Produce Buying Company Ltd, Mechanical Lloyd Company Ltd and Sam Woode Ltd for the period 2008 to 2017 was used for the study. Both the descriptive and inferential techniques of data analysis were employed for the study. In the descriptive technique of data analysis, the mean, standard deviation, variance, minimum and maximum values, range, skewness and kurtosis of the study's variables were analysed, whilst the Pearson Product-Moment Correlation Coefficient technique of data analysis was employed to establish the connection between cash flows and the firms' financial performance (inferential analysis). All the data analysis were conducted through the use of STATA version 15 statistical software package at an alpha (α) level of 5% ($p \leq 0.05$). From the study's Pearson Product-Moment Correlation Coefficient output, cash flows had a significantly positive relationship with the firms' financial performance as measured by ROA. However, an insignificantly positive association between cash flows and the firms' ROE and ROCE was also established. Based on the findings, the study recommended that, since cash flows had a positive affiliation with all the surrogates of the firms' financial performance at the 5% significance level, effective cash flows management techniques should be adopted by the firms to help guide their cash flow levels. This point is raised because, an increase in cash flows led to an increase in the firms' financial performance as evidenced from the study's findings.

KEYWORDS: *Affiliation, Cash Flows, Financial Performance, Non-Financial Firms, Ghana Stock Exchange (GSE).*

1.0 INTRODUCTION

According to Kenton (2019), cash flow is the net amount of cash and cash-equivalents that a firm receives or gives out by way of payment(s). Chris (2019) also viewed cash flow as a measure of an organisation's liquidity that usually consists of net income after taxes plus noncash charges against income. At the most fundamental level, a company's ability to create value for shareholders is determined by its ability to generate positive cash flows, or more specifically, maximize long-term free cash flows (Kenton, 2019). As indicated by Kokemuller (2019), Kenton (2019) and Chris (2019), positive cash flows indicates that, a firm's liquid assets are increasing, enabling it to settle debts, reinvest in its business, return money to shareholders, pay expenses and provide a buffer against future financial challenges. According to Bodie, Alex and Alan (2004), Epstein and Eva (2007) and Watanabe (2007), establishments with strong financial flexibility can take advantage of profitable investments. They also fare better in downturns, by avoiding the costs of financial distress. Understanding the cash flow position of firms, is therefore essential for assessing the firms' liquidity, flexibility and overall financial performance (Bodie, Alex & Alan, 2004; Epstein & Eva, 2007; and Watanabe, 2007).

Numerous studies have shown that, cash flows have an affiliation with firms' financial performance. For instance, Nwyanwu (2015) conducted a study on cash flow and the performance of 45 small and medium enterprises from the Nigerian hospitality and print media sectors. Adopting the Pearson's Product Moment Correlation Coefficient technique of data analysis, the study disclosed a significantly positive association between cash flow position and the firms' net profit. Chikashi (2013) also researched into comprehensive income and the performance of electric appliance firms listed on the Tokyo Stock Exchange. Using a panel data for the period 2009 to 2011, the study discovered a significantly negative link between cash flows and the firms' performance. The study also established that, comprehensive incomes published by the firms were superior to other carryings or cash flow variables used in predicting their future stock returns. Additionally, Vaklifard and Shahmorad (2014) analyzed the influence of stable profitability and free cash flows on stock returns of firms listed on the Tehran Stock Exchange. An eight (8) year data obtained from 84 listed companies was used for the study. From the study's findings, a significantly strong and positive association between free cash flows and the firms' ROE was established.

Khidmat and Mobeen (2014) also explored the effect of free cash flows and agency costs on the performance of firms listed on the Karachi Stock Exchange (KSE). Data from 123 listed companies for

the period 2003 to 2009 was adopted for the study. The study's findings provided evidence of free cash flows having a significantly adverse connection with the firms' performance. Mukthar (2014) further explored the association between free cash flows and the dividend payouts of some Malaysian listed firms. Panel data from 100 listed firms on Bursa Malaysia was employed for the study. From the study's findings, a significantly positive connection between free cash flows and the firms' dividend payouts was established. Cheng, Cullina and Zhang (2014) also researched on free cash flows, growth opportunities and the dividends of cross-listing of shares in China. Data obtained from 1105 firms for the period 2003 to 2011 was used for the study. From the study's findings, the payment of dividends in Chinese cross-listed companies responded more strongly to free cash flows than that of non-cross-listed firms.

Finally, Nimer and Munther (2017) examined the effect of cash flow management on the financial performance of insurance companies in Jordan. Data derived from the annual reports of 23 insurance companies for the period 2009 to 2013 was employed for the study. From the study's findings, operating and investing cash flows had a significantly adverse affiliation with the firms' financial performance. Irrespective of the numerous studies on cash flows and its association with firms' financial performance, there have been limited research that particularly sought to explore the link between cash flows and the financial performance of non-financial firms listed on the Ghana Stock Exchange (GSE). This study was therefore conducted to help fill that gap.

1.1 Purpose of the Study

The main goal of this study was to explore the link between cash flows and the financial performance of non-financial firms listed on the Ghana Stock Exchange (GSE). Finding of this study will be of benefit to the academic community as it will add to the existing pool of literature on the connection between cash flows and firms' financial performance, thereby serving as a reference material for students and researchers who may want to conduct further studies on this current topic. Specifically, the study sought to:

1. Examine the association between cash flows and the firms' financial performance as measured by ROA.
2. Explore the connection between cash flows and the firms' financial performance as measured by ROE.
3. Find out the affiliation between cash flows and the firms' financial performance as measured by ROCE.

1.2 Research Hypothesis

The aim of this study could not be achieved without testing some hypothesis. Therefore, based on the specific objectives of the study, the following hypothesis were formulated for testing:

H₀₁. There is no association between cash flows and the firms' financial performance as measured by ROA.

H₀₂. There is no connection between cash flows and the firms' financial performance as measured by ROE.

H₀₃. There is no affiliation between cash flows and the firms' financial performance as measured by ROCE.

2.0 REVIEW OF RELATED LITERATURE

Mutende, Mwangi, Njihia and Ochieng (2017) examined the moderating role of firm characteristics on the relationship between free cash flows and the financial performance of firms listed on the Nairobi Securities Exchange. The study specifically sought to explore the link between free cash flows and the firms' financial performance; and to examine the influence of firm characteristics on the relationship between free cash flows and the firms' financial performance. A panel data for the period 2006 to 2015 was used for the study. From the study's findings, a significantly positive association between free cash flows and the firms' financial performance was established. Kamran, Zhao and Ambreen (2017) examined the impact of cash flow on the profitability of firms listed on the Karachi Stock Exchange for the period 2010 to 2014. From the study's findings, free cash flow had a significantly positive association with the firms' profitability. Elaine, Ahmed, Ooi and Tong (2017) studied the influence of free cash flow on the performance of firms in Malaysia. Panel data for the period 2008 to 2012 was used for the study. From the study's regression analysis, free cash flow had a significantly inverse effect on the firms' financial performance as measured by ROA and Tobin's Q.

Tonny, Moeljadi, Atim and Kusuma (2016) examined the impact of firm specific variables; free cash flows, leverage and interest rates on stock returns with financial performance as an intervening variable. Data from 51 companies listed on the Indonesian Stock Exchange for the period 2009 to 2013 was employed for the study. From the study's findings, an insignificant influence of free cash flows on the firms' stock returns was established. Muhammad and Aminatu (2018) examined the influence of operating cash flow on the financial performance of five (5) listed conglomerate companies in Nigeria. Secondary data sourced from the firms' annual reports and accounts for the period 2005 to 2014 was used for the study. Adopting descriptive, correlational and panel data regression analysis, the study discovered that, operating cash flow had an insignificantly positive impact on the firms' financial performance as measured by ROA.

Gheshlaghi, Ahamdzadeh and Faal (2014) examined the cash flow statement's component effects on the performance of management in 138 firms listed on the Tehran Stock Exchange for the period 2008 to 2012. From the study's findings, cash flows from

operational activities and that of financing activities had an insignificant association with the firm's financial performance. In Jordan, Yazan, Aminul and Tunku (2017) studied the influence of cash flows on the performance of share prices of firms listed on the Amman Stock Exchange. From the study's findings, cash flows had a significant influence on the performance of the firms' share prices. In Iran, Ali, Alireze and Jalal (2013) studied the association between various earnings and cash flow measures of firm performance and stock returns. Data for the period 2003 to 2011 was used for the study. Through the simple multiple regression analysis, a significantly negative relationship between cash flows and firms' performance was discovered.

Muhammad, Zheng and Sadaf (2017) researched on the influence of free cash flow on the profitability of firms listed on the Karachi Stock Exchange (KSE). Data obtained from the annual reports of 580 listed companies for the period 2010 to 2014 was used for the study. From the study's regression analysis, free cash flow had a significantly positive impact on the firms' profitability as measured by ROCE. Akinyi, Melissa and Kamau (2015) investigated into liquidity and its impact on the dividend pay-outs of firms listed on the Nairobi Securities Exchange (NSE). Secondary data extracted from the annual reports and the financial statements of 30 listed firms for the period 2008 to 2012 was employed for the study. From the study's multiple regression estimates, cash flow had a significantly positive influence on the firms' dividend pay-outs. Novianti (2012) conducted a study on the influence of the changes in cash flow components and accounting profits on stock returns of some listed manufacturing firms on the Indonesian Stock Exchange. Sixty four (64) listed manufacturing companies selected through the judgmental sampling technique was used for the study. From the study's multiple regression output, operating cash flows did not have a significant influence on the firms' stock returns.

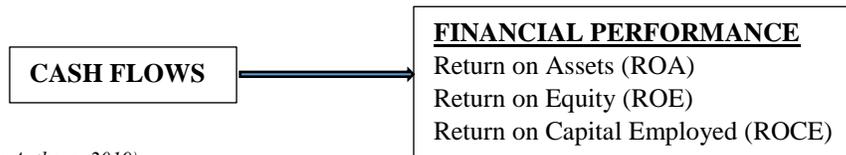
Ibrahim and Ahmad (2015) examined the impact of cash flows on the share prices of listed Jordanian Commercial banks. Data derived from the annual reports of 12 listed commercial banks was used for the study. From the study's findings, cash flows from operations, investment and financing activities had limited association with the banks' share price. Sadaf and Junaid (2016) examined the impact of free cash flows on the profitability of 30 firms listed on the Karachi Stock Exchange. Data for the period 2010 to 2014 was employed for the study. The study's findings provided evidence of free cash flow having a significantly positive influence on the firms' profitability. Ogbeide and Akanji (2018) examined the link between cash flows and the financial performance of insurance companies in Nigeria. Time series data obtained from twenty seven (27) listed insurance

companies for the period 2009 to 2014 was employed for the study. Through the OLS regression analysis, cash flows had a significant influence on the firms' financial performance.

Wang (2010) examined the impact of free cash flow on the financial performance of 505 firms listed on the Taiwan Stock Market for the period 2002 to 2007. From the study's regression analysis, free cash flow had a statistically significant influence on the firms' financial performance. The results were however contradictory. On one hand, high free cash flow escalated imprudent expenditures that consequently lowered financial performance. On the other hand, free cash flow had a positive association with the firms' financial performance since it was generated as a result of management efficiency in operations. Momanyi, Bichanga and Nyangau (2017) examined the effects of cash flows on the financial performance of fifty (50) firms listed on the Nairobi Securities Exchange for the

period 2010 to 2014. From the study's results, cash flows had a statistically significant impact on the firms' financial performance. Duru, Okpe and Okolo (2017) examined the effect of cash flow on the financial performance of selected food and beverages companies in Nigeria. Through the multiple regression analysis, the study disclosed that, operating cash flows had a significantly positive impact on the firms' profit after tax, whilst cash flows from investing activities had a trivially positive influence on the profitability of the firms. The study also discovered an insignificantly positive influence of financing cash flows on the firms' profitability. Muthusi (2014) explored the effects of free cash flows on the profitability of 32 selected five star hotels in Kenya for the period 2011 to 2013. From the study's regression results, free cash flow had a significantly positive influence on the profitability of the hotels.

Figure 1: Conceptual Model



(Source: Authors, 2019)

Figure 1 shows that cash flows had an association with the sampled firms' financial performance as measured by Return on Assets (ROA), Return on Equity (ROE) and Return on Capital Employed (ROCE). Return on assets was calculated as the ratio of net income to total assets of the firms. Return on equity was also calculated as the net income divided by the total equity of the firms, whilst the ratio of net income to capital employed was used to compute the firms' ROCE. On the other hand, cash flows was calculated as the total net cash flows from operations divided by the firms' total current liabilities.

3.0 RESEARCH METHODOLOGY

This study was a quantitative study. According to Bryman and Bell (2015), a quantitative research entails the collection of numerical data exhibiting the view of relationship between theory and research as deductive, a predilection for natural science approach, and as having an objectivist conception of social reality. In other words, quantitative studies mainly examine relationships between numerically measured variables with the application of statistical techniques (Goertzen, 2017; Mesly, 2015; Corrine, 2011; and Hunter & Leahey, 2008). Specifically, the study was correlational in nature because, it sought to explore the relationship between cash flows and the firms' financial performance. The study was finally panel in nature because, it gathered information on the same study units at different points in time.

All non-financial firms that listed and traded their shares on the Ghana Stock Exchange (GSE) as at 31st December, 2017 formed the study's target population. Because the study wanted to deal with a balanced data, a sample was made out of the entire population. The number of years in existence, technical suspension due to one reason or the other, unaudited financial records, non-existence of trend records, incomplete financial statements and the presentation of annual reports in foreign currencies either than that of the Ghana Cedi to major foreign currencies) were the factors or filters that were considered during the sampling process. Considering these factors or filters in making a sample out of the entire population implies, the study adopted the purposive or judgemental sampling technique in its sampling process.

After critically considering the various factors or filters during the sampling process, fifteen (15) firms comprising of the Ghana Oil Company Ltd, Total Petroleum Ghana Ltd, Starwin Products Ltd, Camelot Ghana Ltd, Aluworks Ltd, Clydestone Ghana Ltd, African Champion Industries Ltd, Benson Oil Palm Plantation Ltd, Fan Milk Ltd, Guinness Ghana Breweries Ltd, Unilever Ghana Ltd, PZ Cussons Ghana Ltd, Produce Buying Company Ltd, Mechanical Lloyd Company Ltd and Sam Woode Ltd were selected for the study. This number represented 36.59% of the total number of listed firms or 53.57% of the total number of

non-financial firms listed on the Ghana Stock Exchange (GSE).

A balanced secondary panel data extracted from the audited and published annual reports of the sampled firms for the period 2008 to 2017 was used for the study. The annual reports of the firms comprised of the comprehensive income statement, statement of financial position, statement of cash flows, statement of changes in equity and notes to the accounts. These annual reports were obtained from the official website of the Ghana Stock Exchange (GSE). Both the descriptive and inferential techniques of data analysis were employed for the study. In the descriptive technique of data analysis, the mean, standard deviation, variance, minimum and maximum values, range, skewness and kurtosis of the study's variables were analysed, whilst the *Pearson Product-Moment Correlation Coefficient* technique of data analysis was employed to establish the connection between cash flows and the firms' financial performance (inferential analysis). All the data analysis were conducted through the use of STATA version 15 statistical software package at an alpha (α) level of 5% ($p \leq 0.05$).

4.0 RESULTS OF THE STUDY

In this aspect, the descriptive statistics of the study's variables are first analysed. The second and final aspect of the section presents the correlational analysis. This involves the analysis of statistics on the affiliation between cash flow and the firms' financial performance as measured by Return on Assets (ROA), the association between cash flow and the firms' financial performance as measured by Return on Equity (ROE) and the connection between cash flow and the firms' financial performance as measured by Return on Capital Employed (ROCE).

4.1 Descriptive Analysis

Descriptive statistics of the study variables are shown in Table 1, and from the table, ROA had a mean

value of 0.0052693, a standard deviation of 0.4849762 and a variance of 0.2352019. This implies, data values of ROA were not too widely dispersed from the mean. The ROA of the studied firms had a maximum value of 0.7656 and a minimum value of -5.6487, resulting in a range of 6.4143. The distribution for ROA was negatively skewed with a coefficient of -10.64317. This indicates that, a greater portion of the ROA distribution fell on the right side of the normal curve. The kurtosis coefficient of 124.8778 [excess (K)= 124.8778-3.0=121.8778] implies, the ROA distribution was not of normal shape.

The ROE of the sampled firms also had a mean value of 0.167214, a standard deviation of 1.184918 and a variance of 1.404031. This implies, the data values of ROE were a bit widely dispersed from the mean. The ROE of the studied firms had a maximum value of 12.8951 and a minimum value of -4.5277, resulting in a range of 17.4228. The distribution for ROE was positively skewed with a coefficient of 7.859589. This means, a large portion of the ROE distribution fell on the left side of the normal curve. The kurtosis coefficient of 91.75657 [excess (K)=91.75657-3.0=88.75657] implies, the ROE distribution was abnormally distributed.

A mean value of 0.1945633, a standard deviation of 1.09571 and a variance of 1.20058 was further obtained for the study's ROCE. This implies, the data values of ROCE were a bit widely deviated from the mean. The ROCE of the sampled firms had a maximum value of 12.8951 and a minimum value of -1.5666, resulting in a range of 14.4617. The distribution for ROCE was positively skewed with a coefficient of 10.44939. This infers that, a considerable portion of the ROCE distribution fell on the left side of the normal curve. The kurtosis coefficient of 122.057 [excess (K) = 122.057-3.0=119.057] means, the ROCE distribution was not normally distributed.

Table 1: Descriptive Statistics of Study Variables

Variables	ROA	ROE	ROCE	CFR
Mean	0.0052693	0.167214	0.1945633	0.3265207
Std. Dev.	0.4849762	1.184918	1.09571	0.7158448
Variance	0.2352019	1.404031	1.20058	0.5124337
Minimum	-5.6487	-4.5277	-1.5666	-1.6939
Maximum	0.7656	12.8951	12.8951	4.4039
Range	6.4143	17.4228	14.4617	6.0978
Skewness	-10.64317	7.859589	10.44939	2.787994
Kurtosis	124.8778	91.75657	122.057	15.23229
Obs (N)	150	150	150	150

(Source: STATA Output, 2019)

Finally, CFR of the firms had an average value of 0.3265207, a maximum value of 4.4039 and a minimum value of -1.6939, resulting in a range of 6.0978. The figures 0.7158448 and 0.5124337 being the

standard deviation and the variance for CFR respectively indicate that, the data values of CFR were not too widely dispersed from the mean. The CFR had a skewness value of 2.787994, indicating that, the

distribution for CFR was positively skewed. The kurtosis value of 15.23229 [excess (K)=15.23229-3.0=12.23229] means, the CFR distribution was abnormally distributed.

4.2 Correlational Analysis

The Pearson Product-Moment Correlation Coefficient technique of data analysis was adopted to explore the link between cash flow and the firms’ financial performance. From Table 2, CFR had a significantly positive association with the firms’ ROA at the 95% confidence interval [r=0.2000, (p=0.0142)<0.05]. The positive association between CFR and ROA means, an increase in CFR led to an increase in ROA and vice-versa, and a decrease in CFR also led to a decrease in ROA and vice-versa. The degree of association between CFR and ROA is substantiated by the coefficient of determination (r² =0.04) which indicates that 4.0% of the variations in ROA was accounted for by CFR and 4.0% of the

variations in CFR was explained by ROA. The unexplained variations [96.0% (100-4.0)] may be attributed to other factors that did not form part of the study. The study also discovered an insignificantly positive connection between CFR and ROE at the 5% level of significance [r=0.0356, (p=0.6657)>0.05]. Though the association between CFR and ROE was not statistically significant, the positive correlation between them means, an increase in CFR led to an increase in ROE and vice-versa, and a decrease in CFR also led to a decrease in ROE and vice-versa. The degree of association between CFR and ROE is substantiated by the coefficient of determination (r² =0.0013) which shows that 0.13% of the variations in ROE was accounted for by CFR and 0.13% of the variations in CFR was explained by ROE. The unexplained variations [99.87% (100-0.13)] maybe accounted for by other factors that did not form part of the study.

Table 2: Correlational Matrix of Study Variables

Variable	ROA	ROE	ROCE	CFR
ROA	1.0000			
ROE	0.0037 (0.9642)	1.0000		
ROCE	-0.0156 (0.8498)	0.9516* (0.0000)	1.0000	
CFR	0.2000* (0.0142)	0.0356 (0.6657)	0.0285 (0.7293)	1.000

Note: * implies significance at 5% and values in parenthesis () represent probabilities.
(Source: STATA Output, 2019)

The study finally discovered, an insignificantly positive affiliation between CFR and ROCE at α=5% [r =0.0285, (p=0.7293)>0.05]. Though the correlation between CFR and ROCE was not statistically significant, the positive relationship between them implies, an increase in CFR led to an increase in ROCE and vice-versa, and a decrease in CFR also led to a decrease in ROCE and vice-versa. The strength of association between CFR and ROCE is justified by the coefficient of determination (r² =0.0008) which shows that 0.08% of the variations in ROCE was explained by CFR and 0.08% of the variations in CFR was accounted for by ROCE. The unexplained variations [99.92% (100-0.08)] may be accounted for by other variables that were not included in the study.

5.0 DISCUSSIONS AND TESTS OF HYPOTHESIS

In this section of the study, discussions in relation to the study’s findings are presented. The discussions are conducted taken into consideration the review of relevant literature that supported the topic understudy, and are outlined in the order of; the association between CFR and the firms’ financial performance as measured by ROA, the connection between CFR and the firms’ financial performance as

measured by ROE and the affiliation between CFR and the firms’ financial performance as measured by ROCE. Each sub-section ends with its test of hypothesis.

5.1 The Association between Cash Flows and the Firms’ Financial Performance (ROA)

The study discovered a significantly positive association between CFR and the firms’ ROA at the 95% confidence interval [r=0.2000, (p=0.0142)<0.05]. This finding was in tandem with that of Mutende, Mwangi, Njihia and Ochieng (2017) whose research on listed firms on the Nairobi Securities Exchange, found a significantly positive association between free cash flows and the firms’ financial performance. The finding also supported that of Kamran, Zhao and Ambreen (2017) whose study on listed firms on the Karachi Stock Exchange, established a significantly positive association between free cash flows and the firms’ profitability. The finding was however not consistent with that of Elaine, Ahmed, Ooi and Tong (2017) whose research in Malaysia, uncovered a significantly inverse affiliation between free cash flows and the firms’ financial performance. The finding was also not consistent with that of Tonny, Moeljadi, Atim and

Kusuma (2016) whose study on 51 companies listed on the Indonesian Stock Exchange, found an insignificant association between free cash flows and the firms' stock returns.

Test of Hypothesis One: A significantly positive association between CFR and the firms' ROA was discovered at the 95% confidence interval [$r=0.2000$, ($p=0.0142$) <0.05]. The study therefore failed to accept the null hypothesis (H_{01}) that, there was no significant association between cash flows and the firms' financial performance as measured by ROA, and concluded that, there was a significantly positive affiliation between cash flows and the firms' financial performance as measured by ROA.

5.2 The Relationship between Cash Flows and the Firms' Financial Performance (ROE)

The study also discovered an insignificantly positive relationship between CFR and ROE at the 5% level of significance [$r=0.0356$, ($p=0.6657$) >0.05]. This finding was in agreement with that of Muhammad and Aminatu (2018) whose research on five (5) listed conglomerate companies in Nigeria, established an insignificantly positive link between operating cash flows and the firms' financial performance. The study was also consistent with that of Gheshlaghi, Ahamdzadeh and Faal (2014) whose research on 138 firms listed on the Tehran Stock Exchange, found an insignificant association between cash flows and firms' financial performance. The finding did not support that of Yazan, Aminul and Tunku (2017) whose study on firms listed on the Amman Stock Exchange, uncovered a significant relationship between cash flows and the firms' share price performance. The finding was also not consistent with that of Muhammad, Zheng and Sadaf (2017) whose research on 580 listed firms on the Karachi Stock Exchange (KSE), disclosed a significantly positive connection between cash flows and the firms' profitability.

Test of Hypothesis Two: An insignificantly positive relationship between CFR and ROE was discovered at the 5% level of significance [$r=0.0356$,

($p=0.6657$) >0.05]. The study therefore failed to reject the null hypothesis (H_{02}) that, there was no significant relationship between cash flows and the firms' financial performance as measured by ROE, and concluded that, there was an insignificantly positive connection between cash flows and the firms' financial performance as measured by ROE.

5.3 The Connection between Cash Flows and the Firms' Financial Performance (ROCE)

An insignificantly positive affiliation between CFR and the firms' ROCE was established at $\alpha=5%$ [$r =0.0285$, ($p=0.7293$) >0.05]. This finding supported that of Novianti (2012) whose study on sixty four (64) listed manufacturing firms on the Indonesian Stock Exchange, found an insignificant relationship between operating cash flows and the firms' stock returns. The finding also supported that of Ibrahim and Ahmad (2015) whose research on 12 listed Jordanian commercial banks, uncovered a limited association between cash flows and the banks' share price. The finding was however inconsistent with that of Sadaf and Junaid (2016), whose study on 30 listed firms on the Karachi Stock Exchange, discovered a significantly positive connection between free cash flows and the firms' profitability. The finding did not also agree with that of Ogbeide and Akanji (2018) whose research on twenty seven (27) listed insurance companies in Nigeria, established a significant association between cash flows and the firms' financial performance.

Test of Hypothesis Three: An insignificantly positive relationship between CFR and ROCE was discovered at $\alpha=5%$ [$r =0.0285$, ($p=0.7293$) >0.05]. The study therefore failed to reject the null hypothesis (H_{03}) that, there was no significant affiliation between cash flows and the firms' financial performance as measured by ROCE, and concluded that, CFR of the sampled firms had an insignificantly positive association with the firms' financial performance as measured by ROCE.

Table 3: Summary of the Test of Hypothesis

Hypothesis	Analytical Tool	Result
H_{01} . There is no association between cash flows and the firms' financial performance as measured by ROA.	Correlation	Rejected
H_{02} . There is no connection between cash flows and the firms' financial performance as measured by ROE.	Correlation	Accepted
H_{03} . There is no affiliation between cash flows and the firms' financial performance as measured by ROCE.	Correlation	Accepted

(Source: Authors, 2019)

6.0 CONCLUSION AND RECOMMENDATIONS

This study sought to explore the connection between cash flows and the financial performance of non-financial firms listed on the Ghana Stock Exchange (GSE). Secondary panel data obtained from the audited and published annual reports of the Ghana Oil Company Ltd, Total Petroleum Ghana Ltd, Starwin Products Ltd, Camelot Ghana Ltd, Aluworks Ltd, Clydestone Ghana Ltd, African Champion Industries Ltd, Benson Oil Palm Plantation Ltd, Fan Milk Ltd, Guinness Ghana Breweries Ltd, Unilever Ghana Ltd, PZ Cussons Ghana Ltd, Produce Buying Company Ltd, Mechanical Lloyd Company Ltd and Sam Woode Ltd for the period 2008 to 2017 was used for the study. From the study's Pearson Product-Moment Correlation Coefficient output, cash flows had a significantly positive relationship with the firms' financial performance as measured by ROA. However, an insignificantly positive association between cash flows and the firms' ROE and ROCE was also discovered at the 95% confidence interval. Based on the findings, the study recommends that, since cash flows had a positive affiliation with all the surrogates of the firms' financial performance at the 5% significance level, effective cash flows management techniques should be adopted by the firms to help guide their cash flows' levels. This point is raised because, an increase in cash flows led to an increase in the firms' financial performance as evidenced from the study's findings.

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