

Assessing the Impact of Monitoring, Information and Communication on Banks Performance in Ghana

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Authors' contributions

This work was carried out in collaboration among all authors. Author SAEM designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors JDN and MKG managed the analyses of the study. Author RNA managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

The global financial sector is undergoing structural reforms and system improvement in their internal operations and activities. These global reforms in the financial sectors have been occasioned by globalization and technology revolution around the world. In view of the rapid changes, institutions both public and private institutions have experienced various limitations in their quest to reach their objectives. This study therefore formulates three objectives to investigate the effects of internal control systems on financial performance of listed banks in Ghana. In this quantitative study, 300 representatives from twelve listed banks were engaged. Descriptive and regression analysis was performed on the field Data. The study result shows that Information and communication have a weak significant effect on financial performance. There was no significant effect between Monitoring and financial performance. The study therefore recommends that managers of listed Banks must invest more on information and communication in order to improve performance.

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1. INTRODUCTION

Financial institutions have established strategies within and out of their organization including modern way of dealing with customers, provision of service, corporate social responsibilities and successful procedure of control systems [1]. These internal business strategies are aimed at establishing strategic systems and models which have resulted in internal control measures within the company to improve performance [1].

Generally, ICS are described as comprising the coordinated plan of a bank and all the coordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, to prorate operational efficiency and adherence to prescribed managerial policies. Internal controls also consist and describes all the measures taken by the organization for the purpose of; protecting the internal and external resources against wastage, fraud and inefficiency. Internal controls also consist of measures to ensuring accuracy and reliability of accounting and operating data; ensuring compliance with the policies of the organization; evaluating the level of performance in all organizational units of the organization.

Quite profoundly Gonzalez et al. [2] refers to performance as the ability to operate efficiently, profitably, survive, grow and react to the environmental opportunities and threats. In this study, internal controls were interpreted as a process that guides operations to achieve its objectives. These objectives include operational efficiency and effectiveness, reliability of financial reporting and compliance with relevant laws and regulations. Financial performance was considered in terms of measures or indicators like profit growth, revenue growth and return on capital employed [3].

This study therefore investigated the influence of two internal control systems (information and communication and monitoring) on financial performance of listed Banks on the Ghana Stock Exchange. Information and Communication is about understanding of management's information technology, accounting and communication systems and processes. Monitoring as a control system also involves understanding how management monitors its controls and how effective the monitoring is [4].

This research is important owing the fact that the Financial System Stability Update on Ghana by International Monetary Fund (IMF) asserts to the fact that as at 2011, though, the banking system in Ghana was liquid, profitable and highly capitalized in aggregate, but failures of internal and external systems have resulted in operational challenges leading to nonperforming loans, thus creating a fragile banking industry [5]. This study will therefore espouse on some recommendations to help improve the internal systems of financial institutions to improve performance.

1.1 Research Hypothesis

The researcher seeks to postulate hypotheses in the conduct of this study. They are:

H1: There is positive significant effect of Information and communication on financial performance of listed banks in Ghana.

H2: There is positive significant effect of Monitoring on financial performance of listed banks in Ghana.

1.2 Information and Communication

In all businesses especially, publicly held (listed bank), there is the need to identify, capture and communicate important information to enable all elements in the organization to carry out their responsibilities [6]. Information and communication are essential to effecting control; information about an organization's plans, control environment, risks, control activities, and performance must be communicated up, down and across an organization. In doing this there is a Reliable and relevant information from both internal and external sources which will be identified, captured, processed and communicated to the people who need such information are the appropriate time, manner and format that is useful.

Information and communication systems can be formal or informal. Formal information and communication systems range from sophisticated computer technology to simple staff meetings which provide input and feedback data regarding the operations, financial reporting, and compliance objectives of the organization. Such systems are vital to an organization's success. Just the same, informal conversations with

faculty, students, customers, suppliers, regulators and employees often provide some of the most critical information needed to identify risks and opportunities in the organization.

Nevertheless, communicating with people and getting information to people in a form and timeframe that is useful to them is a constant challenge for most organization, basically due to the issue of confidentiality and ethical concerns. Organization's information systems produce reports, containing operational, financial and compliance-related information that makes it possible to run and control an organization. This system is imperative for entity to obtain and exchange the information in order to conduct, manage and control its operation while the control activities are implemented. Again, information system is also imperative to guide in organization operation process [7] and better performance through analyzing, evaluating and recording sufficient information to achieve desired objectives [8].

1.3 Monitoring

According to Shabri et al. [6] monitoring is the fifth component of internal control system, the help banks to continue operating efficiently [9,10] Monitoring is the assessment of internal control performance over time [11] it is accomplished by ongoing monitoring activities and by separate evaluations of internal control such as self-assessments, peer reviews, and internal audits. The purpose of monitoring is to determine whether internal control is adequately designed, properly executed, and effective. Internal control is adequately designed and properly executed if all five internal control components (control environment, risk assessment, control activities, information and communication, and monitoring).

While internal control is a process, its effectiveness is an assessment of the condition of the process at one or more points in time [12]. Just as control activities help to ensure that actions to manage risks are carried out, monitoring helps to ensure that control activities and other planned actions to effect internal control are carried out properly and in a timely manner and that the end result is effective internal control [13]. Ongoing monitoring activities include various management and supervisory activities that evaluate and improve the design, execution, and effectiveness of internal control [12]. Ngugi [12] further added that separate evaluations, on the other hand, such as

self-assessments and internal audits, are periodic evaluations of internal control components resulting in a formal report on internal control.

Regarding monitoring as a component of internal control, periodic assessments of the effectiveness of internal controls by managers, internal auditors, and external auditors is one of the monitoring activities [14]. Studies by Wardiwiyono [7] found that monitoring in financing system should be implemented from the beginning to the end of process. For example, supervision mechanism can be done by appointing external auditor to monitor the customer's activities in use fund. Therefore, monitoring components must be implemented in both corporate and cooperative boards to monitor the performance of management, to form long-term strategic plans, to evaluate proposals presented by management and to observe the financial and strategic actions undertaken by them. The checking on performance of overall internal control systems can be followed-up by implementing monitoring components because it plays as a circle that improved control activities, information systems as well as control environment [15].

1.4 Performance Measures

Performance refers to the ability to operate efficiently, profitability, survive growth and react to the environmental opportunities and threats [16]. Thus, performance is measured by how efficient an organization is in use of resources in achieving its objectives. It is the measure of attainment achieved by an individual, teams, institutions or process. Hoskisson, Hitt, Johnson, and Grossman [17] believes that many banks low performance is the result of poorly performing assets.

However, appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives. However, mentioned other financial measures and include value of long term investment, financial soundness and use of corporate assets. He also talks of non-financial performance measures and include; innovation, ability to attract, develop and keep talented people, quality of management, quality of products or services and community and environmental responsibility. Hoskisson et al. [17] mention accounting based performance using three indicators; Return on Assets (ROA),

Return on Equity (ROE) and Return on Sales (ROS). Each measure was computed by dividing net income by total assets, total common (ordinary) equity and total net sales, respectively. Mawanda [16] also identified other measures of financial performance to include;

Reporting: Pany and Whittington [18], talk about the comprehensiveness of internal controls in addressing the achievement of objectives in the areas of financial reporting, operations and compliance with laws and regulations. They further noted that, internal control also includes the program for preparing, verifying and distributing to the various levels of management those current reports and analyses that enable executive management to maintain control over the variety of activities and functions that are performed in an organization. They mentioned internal control devices to include; use of budgetary techniques, production standards, employee training, among others. According to Morris [19] enterprise resource planning systems provide a mechanism to deliver fast, accurate financial reporting with built-in controls that are designed to ensure the accuracy and reliability of the financial information being reported to owners.

Accountability: Bakibinga [20] believed that corporate law requires a divorce between ownership and managements of an entity. Owners normally entrust their resources in the hands of managers. Managers are required to use the resources entrusted to them in the furtherance of the entity's objectives. Managers normally report to the owners on the result of their stewardship for the resources entrusted to them through a medium called financial statement which reveals the financial performance of an entity. According to Ejoh and Ejom [21] accountability can be political, social or financial accountability.

1.5 Theory of the Bank

In simplified terms, the theory of the bank aims to answer these questions about existence, boundaries, organization and why are banks structured in such a specific way. For example, as to hierarchy or decentralization, heterogeneity of bank actions and performances, what drives different actions and performances of banks, and lastly, the evidence, what tests are there for the respective theories of the bank.

The theory of the bank consists of a number of economic theories that describe, explain and predict the nature of the bank, company, or corporation, including its existence, behavior, structure and relationship to the market. This theory of banks that, a bank is a "black box" operated so as to meet the relevant marginal conditions with respect to inputs and outputs, thereby maximizing profits, or more accurately, present value.

The theory helps to explain why an entrepreneur or manager in a bank which has a mixed financial structure containing both debt and outside equity claims will choose a set of activities for the bank such that the total value of the bank is less than it would be if he were the sole owner and why this result is independent of whether the bank operates in monopolistic or competitive product or factor markets.

This study is thus guided by three theories namely; agency theory, contingency theory and the theory of the bank. Agency theory shows the relationship between the principal and agent and the agent's responsibilities which include financial reporting, budgeting and providing any other additional information to the principal. The contingency theory on the other hand explains that organizations' behavior and functions are dependent on factors such as technology, culture and the external environment that the organizations operate in while the theory of the bank asserts that, a bank is operated so as to meet the relevant marginal conditions with respect to inputs and outputs, thereby maximizing profits, or more accurately, present value.

1.6 Conceptual Framework

Based on the theoretical and empirical analysis the study presents a conceptual Framework (Fig. 1). The conceptual framework presents two internal control systems (Information and Communication and monitoring) being independent variables and Performance being the dependent variable.

1.7 Chapter Summary and Lessons Learnt

From the literature reviews done it has been found out that realization of positive financial performance and value for money depends on whether banks have Internal Controls. Non-compliance to the internal controls is one of the

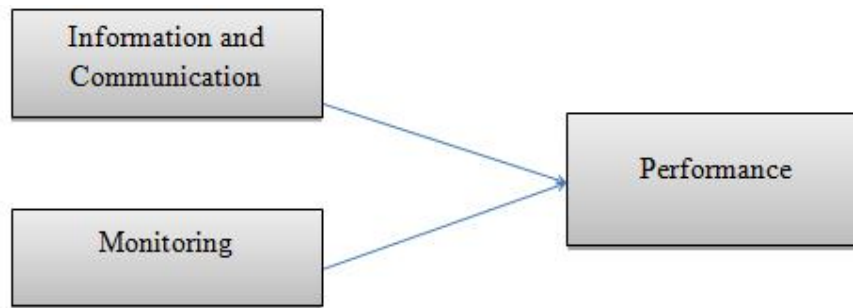


Fig. 1. Conceptual framework for internal control and performance

major hindrances to the attainment of positive financial performance in manufacturing banks. Whereas a lot has been done on control environment and control activities there is little done about internal audit in relation to value for money; what is greatly studied is value for money audits. Weak, non-compliance, non-existent or absent public financial management functions (Internal Control Systems) are likely to negate any advantages that might be inherent in achieving positive Financial Performance of a bank. Therefore, there is need to establish the relationship between the internal control systems and financial performance of listed banking banks in Ghana. It can be concluded from the literature that control environment, control activities, risk assessment, information and communication and monitoring are significant predictors of financial performance.

2. RESEARCH METHODS

2.1 Research Approach

The research approach used is quantitative approach. This design is also considered appropriate because it enables the researcher to generate data through the standardized collection procedures based on structured research instrument(s) and well defined study concepts and variables.

2.2 Research Design

The researcher made use of descriptive research design to determine the influence of monitoring, information and communication on financial performance of listed banks in Ghana.

2.3 Study Area

The study area for the research work was the Ghana Stock Exchange (GSE). GSE because

the study or research involved only listed banks in Ghana and they can only be found on the stock exchange.

2.4 Population

The population for the study was all bank listed on the Ghana Stock Exchange. The GSE is the principal stock exchange of Ghana. The exchange was incorporated in July 1989 with trading commencing in 1990.

2.5 Sample and Sampling Procedure

In this study, a sample of twelve financial institutions comprising 300 representatives was used for the study. This size was informed by Hair, Sarstedt, Ringle, and Mena [22] who advocated that, in a survey study a sample of 100 is enough to generate the statistical strength of the study. Again, the sample size chosen was based on recognized sample sizes required for a given population size. The study adopted a purposive sampling technique in selecting the banks for the study. The respondents included Managers, Account officers, Auditors and Chief Executive officers of the respective Banks.

2.6 Data Collection

Primary and secondary data were used for the study. The researcher obtained data from primary sources from the population using the structured questionnaire. A self-administered, structured questionnaire was used to collect data from respondents [23]. The questionnaire investigated the internal control measures from representatives of the twelve listed banks. The secondary data on the other hand was obtained from the financial statements of the 12 banks.

Table 1. Measurement of variables

Variables	Description	Measurements
Financial Performance	Ability to operate efficiently, profitable, survive, grow and react to environmental opportunities and threats	Will be measured using Ratio of the following financial indicators; Return on Assets (ROA); Net Income/Assets, profitability and Sales
Information and Communication	This involves good identification of and proper capturing of pertinent information. Also it entails proper flow of information across and up within all the sections of the organization	This will be measures based on how information is identified, captured and communicated in the appropriate form and within stipulated time frame
Monitoring	This is the process of assessing the quality of the internal control structure over time	Frequency of quality and effectiveness of internal control assessed overtime

2.7 Instrument Design

In this study, a structured questionnaire was used to collect primary data from the respondents. Structured questionnaire was considered appropriate because in a survey research a large sample/data is required to yield the desired level of data precision, accuracy and reliability [24]. The questionnaire was divided into two (2) distinct sections labelled (A) and (B). Section A of the questionnaire sought information on demographic characteristics of the representatives from the listed banks including: gender, age, education level, years of existence with the bank. Section ‘B’ solicited information on the internal control systems of listed banks in Ghana. The assessment of internal control measures were based on the two basic objectives of the study.

Likert scale interval rating scale with options ranging from strongly agree (5), agree (4), Neutral (3), disagree (2) and strongly disagree (1) were used as the response patterns on the construct items. Financial performance was assessed from the financial statements of the banks. The researcher therefore made use of ratio scale from financial statements of the banks.

2.8 Data Preparation and Analysis

Completed semi-questionnaires are edited coded and entered into SPSS version 20 for analysis. This statistical software is recommended for us in studies in social sciences. The data is analyzed and interpreted with descriptive statistics such as the use of mean and frequency and Analysis of variance (ANOVA), regression coefficient.

Before performing the actual analysis of the main data, preliminary data analysis was done. During the preliminary data analysis (PDA), datasets and variables were cleaned and cleansed to eliminate unengaged responses, outliers and replace missing data. During PDA, 300 research questionnaires were considered valid and usable for the study.

3. ANALYSIS AND DISCUSSION OF FINDINGS

3.1 Descriptive Statistics of Measurement Statements

The descriptive statistics reveals average scores of the measurement statements on internal control systems and performance measures. In Table 2, the findings revealed that the majority of the indicators have modest to high mean value and standard deviation (SD). The highest mean score recorded was 4.10 (Management has a criterion for ascertainment of which fraud-related risks to the organization are most critical), while the lowest mean value recorded was 2.66 (There is an effective Internal audit system in the bank). The high mean score means that means that listed banks in Ghana, management of the banks have effective mechanism to detect fraud-related risk. On the other hand, the least mean value shows that there are weak internal audit systems in the internal control measures of listed Banks in Ghana.

3.2 Exploratory Factor Analysis

Exploratory factor analysis (EFA) involves assessment of the measurement model through rigorous tests to explore the data for Adequacy, Reliability and Validity. These tests are important

Table 2. Descriptive statistics of measurement statements (Item code, mean, SE mean and Std. deviation)

Questionnaire measurements items	Items code	Mean	Std. dev.	Skewness	Kurtosis
		Statistic	Statistic	Statistic	Statistic
Management has a strict supervisory role over operations	Mnt1	3.98	1.06	-.799	-.264
There is constant control of effectiveness of all operations	Mnt2	4.12	1.29	-.274	-.532
There is effective internal audit of controls in the Bank	Mnt3	3.19	1.34	.104	-.661
There is an effective external audit systems in the bank	Mnt4	2.66	1.26	.313	-.894
Management constantly follow up on all operations	Mnt5	4.39	1.04	-.724	.902
Management has identified individuals who are responsible for coordinating the various activities within the entity	Inf_cm4	3.24	1.21	-.552	-.737
All employees understand the concept and importance of internal controls including the division of responsibility	Inf_cm4	3.18	1.17	-.289	-.604
Our communication system helps to evaluate how well guidelines and policies of the organization are working and being implemented	Inf_cm4	3.18	1.05	-.254	-.450
The reporting system on organizational structures spells out all the responsibilities of each section/unit in the bank	Inf_cm4	3.18	1.21	-.319	-.712
Return on Assets Ratio	FP1	3.63	.98	-.502	-.030
Sales Turnover Ratio	FP2	3.39	.99	-.385	-.033
Profitability Ratio	FP3	3.49	1.05	-.383	-.374
Efficiency Ration	FP4	3.47	1.03	-.401	-.172
Valid N (listwise)	0				

Table 3. Test of adequacy

KMO measure of sampling adequacy		.884
Bartlett's Test of Sphericity	Approx. Chi-Square	5104.736
	Df	496
	Sig.	.000

because the general construct may not give accurate and preferred meaning unless it is well established that the statement holds [25].

3.3 Test for Adequacy

In this study, adequacy tests were done based on four main criteria: Kaiser-Meyer-Olkin Measure of Sampling Adequacy, Bartlett's test of sphericity, Goodness-of-fit Test and Total variance explained (AVE). Table 2 therefore present the composite results of adequacy tests.

From Table 3. KMO Measure of Sampling Adequacy recorded of .884>.70 which indicates that the factors are suitable for the study. Bartlett's Test of Sphericity recorded a chi-square of 2671 at a significant value of .000 depicting a suitable factor analysis. Table 4. presents the result of Average Variance Explained.

Table 5 shows the result of two main variables which show strongsignificant explanation of phenomenon understudy with a score of 72.8.

Table 4. Total variance explained for all constructs (Internal control systems and performance)

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumul. %	Total	% of variance	Cumul. %	Total	% of variance	Cuml %
1	10.801	33.753	33.753	10.801	33.753	33.753	5.458	17.056	17.056
2	2.653	8.291	42.044	2.653	8.291	42.044	3.947	12.335	29.391
3	2.311	7.221	49.264	2.311	7.221	49.264	3.144	9.824	39.216
4	1.839	5.746	55.011	1.839	5.746	55.011	3.130	9.782	48.998
5	1.776	5.549	60.560	1.776	5.549	60.560	2.483	7.760	56.758
6	1.466	4.582	65.142	1.466	4.582	65.142	2.187	6.833	63.591
7	1.397	4.365	69.507	1.397	4.365	69.507	1.808	5.651	69.242
8	1.060	3.313	72.820	1.060	3.313	72.820	1.145	3.578	72.820
9	.876	2.738	75.558						
10	.660	2.063	77.621						
11	.625	1.952	79.573						
12	.582	1.819	81.392						
13	.553	1.729	83.121						
14	.498	1.557	84.677						
15	.484	1.511	86.189						
16	.464	1.449	87.638						
17	.443	1.383	89.021						
18	.395	1.235	90.256						
19	.385	1.203	91.459						
20	.355	1.108	92.568						
21	.331	1.035	93.602						
22	.306	.955	94.557						
23	.272	.849	95.406						
24	.253	.791	96.197						
25	.226	.705	96.902						
26	.198	.618	97.520						
27	.188	.586	98.106						
28	.153	.478	98.584						
29	.142	.444	99.028						
30	.125	.389	99.418						
31	.100	.312	99.729						
32	.087	.271	100.000						

*Extraction Method: Principal Component Analysis***Table 5. Validity and reliability test result**

Construct	Factor loadings	Cronbach alpha
Information and communications		0.854
Inf_cm ¹	0.736	
Inf_cm ²	0.774	
Inf_cm ³	0.748	
Inf_cm ⁴	0.766	
Monitoring		0.674
Mnt1	0.779	
Mnt2	0.782	
Mnt3	0.803	
Mnt4	0.755	
Financial performance		0.741
PF_2	0.862	
PF_3	0.590	
PF_4	0.764	

3.4 Test for Validity and Reliability

After achieving a fairly good test results for adequacy test with five variables (dependent and independent). The next CFA critical step was Reliability and Validity tests. Reliability test involved Cronbach alpha (CA) [26].

Table 5 revealed that, among the modified measurement model, the reliability measures in the study are above the satisfactory levels (Cronbach's alphas >.70) as recommended by scholars [22]. With exception of few of the variables which recorded Cronbach alpha of < 0.70. However, 70 is acceptable but lower thresholds can be used in literature. The implication of CA is that the internal consistency of our constructs is perfect and reliable for the study.

Having conbanked the dependents and independent variable statistically fit for the study, the study next discusses the findings of the study based on the research objectives and study hypotheses.

3.5 Analysis of Study Objectives

The study formulated three main objectives to investigate the effect of internal control systems

on performance of listed Banks in Ghana. Objective/Hypotheses (H1 and H2) sought to investigate the effect of two internal control systems (information and communication and monitoring) on Performance. Objective three therefore sought to investigate the combined effect of internal control systems and Performance.

3.5.1 Objective one: Information and communication and performance of listed banks in Ghana?

The study objective four sought to investigate the effect of information and communication on financial performance of listed banks in Ghana. Consequently, Tables 6-8 shows the result from the study analysis.

Table 6 shows the result for the regression analysis, there was a fairly strong and positive relationship between information and communication and financial performance as shown by the R figure of 0.431 while Adjusted R2 = 0.186. The result shows that information and communication and information a weak variation of Information and communication. This implied that, there was a weak significant variation of 18.3 percent of financial performance of listed Banks at a confidence level of 95%.

Table 6. Model summary for information and communication and performance

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.431 ^a	.186	.183	2.36882

a. Predictors: (Constant), Info and Comm

Table 7. ANOVA table for information and communication and performance

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	306.381	1	306.381	54.601	.000 ^b
	Residual	1341.300	239	5.611		
	Total	1647.481	240			

a. Dependent Variable: Organizational_Perf

b. Predictors: (Constant), Info and Comm

Table 8. Coefficients for information and communication and performance

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.
	B	Std. error	Beta		
1 (Constant)	7.699	.522		14.752	.000
Info and Comm	.355	.048	.431	7.389	.000

a. Dependent Variable: Organizational_Perf

Table 9. Model summary for monitoring and performance

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.024 ^a	.001	-.004	2.62474

a. Predictors: (Constant), Monitoring

Table 10. ANOVA table for monitoring and performance

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	.952	1	.952	.138	.710 ^b
	Residual	1646.530	239	6.889		
	Total	1647.481	240			

a. Dependent Variable: Organizational_Perf

b. Predictors: (Constant), Monitoring

Table 11. Coefficients table for monitoring and performance

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. error	Beta		
1	(Constant)	11.679	.803		14.551	.000
	Monitoring	-.079	.214	-.024	-.372	.710

a. Dependent variable: Organizational_perf

Again, ANOVA analysis was extracted to determine the significance or other wise of the effect on Information and communication and financial performance. From Table 7. (ANOVA table) the result shows a significant effect (F=54.601, P<0.000) of Information and communication and performance at a 5% significance level ($\alpha = 0.05$). The result here however implies that our first hypothesis (H1) has been conbanked. It was also observed that the coefficients in Table 8. shows a strong significant effect between information and communication and monitoring.

3.5.2 Objective two: Monitoring and financial performance of listed banks in Ghana?

The second objective of the study sought to investigate the effect of Monitoring as an internal control measure on financial performance of listed bank in Ghana's stock Exchange market. Tables 9-11 shows the result regarding study objective 2 and hypothesis (H2).

From Table 9 explains the model summary regarding monitoring as an internal control measure and bank performance. Table 9 shows there was a very weak and negative relationship between the monitoring and performance variable as shown by the R figure of 0.024. Again, Adjusted R2 =-0.004 which shows that there is a negative variation between monitoring and bank performance. This implied that, there was a negative variation of -0.04 percent of

performance as explained by the monitoring systems at confidence level of 95%.

The study ANOVA (Table 10) result found that insignificant relationship (F = 0,138, P=0.710>P0.05) monitoring system and financial performance at a 5% significance level ($\alpha = 0.05$). The result in Hypothesis one (H1) therefore mean that our study hypothesis one (H1) has being conbanked. Coefficient Table 11 shows an insignificant effect of Monitoring and Bank performance (H3: t= 7.697, $\beta = .0446$, p=0.000<0.001). This however implies that our study hypothesis two (H2) was not conbanked.

3.5.3 Objective three: Internal control system and financial performance

The last study objective of this study sought to investigate the combined effect of internal control systems and financial performance of listed banks in Ghana. Tables 12 and 13 shows the result of the relationship between internal control systems and bank performance.

Table 12 shows that internal systems generally show a strong R figure of 0.593. Again, Adjusted R2 =0.352 which shows that there is a fairly strong variation and predictability in the two internal control systems of listed banks. This implied that, 33.8 percent variations of financial performance were explained by the internal control systems of the bank at confidence level of 95%.

Table 12. Model summary for internal control systems and performance

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.593 ^a	.352	.338	2.13112

a. Predictors: (Constant), Control_Environment, Monitoring, Control_Activities, Info and Comm, Risk_Assessment

Table 13. ANOVA table for internal control and financial performance

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	580.190	5	116.038	25.550	.000 ^b
	Residual	1067.291	235	4.542		
	Total	1647.481	240			

a. Dependent Variable: Organizational_Perf

b. Predictors: (Constant), Control_Environment, Monitoring, Control_Activities, Info and Comm, Risk_Assessment

Furthermore, the study ANOVA (Table 13) result found that significant effect (F = 25.550, P<0.001) of internal control systems and financial performance at a 5% significance level ($\alpha = 0.05$).

This section therefore presents the summary of the two hypotheses tested. It is recalled that the prime purpose of this study was to test effect of monitoring, information and communication on financial performance. The summary result shows that while hypotheses H1 was supported, hypothesis H2 was not supported based on the p-values and alpha values ($\alpha = 0.05$).

3.6 Discussion of Findings

The objective one of this study sought to find out whether information and communication as an internal control system has any effect on financial performance of listed Banks in Ghana. A regression model was employed which showed that effecting information flow and coordination, proper reporting channels among units, sections and department of listed companies have a positive effect on performance. The result in objective one conbanking hypothesis one conbanks previous studies [27,28] who found a direct positive relationship between information and communication and bank performance.

Regarding study objective two, the study sought to find out the effect of monitoring as a monitoring measure on financial performance of listed banks in Ghana. The result indicates that monitoring does not necessarily translate in financial performance. The study result therefore contradicts previous studies that found a significant effect of monitoring on financial performance [16].

Regarding objective three, the study result shows that there is a significant effect of internal control systems (monitoring, information and communication) on financial performance of listed banks in Ghana. This result therefore conbanks previous studies who found a significant effect of internal control on financial performance [29,21].

4. SUMMARY

This study examined the effect of internal control systems on financial performance. The study reviewed literature on two internal control systems which included Information and communication and monitoring.

The methodology of the research was made up of the research design which was descriptive and quantitative data was collected using closed ended questionnaires. The target population was 300representatives of 12 listed banks in Ghana. The data analysis made use of regression table.

Objective one reveled that there is a significant effect of information and communication systems on financial performance of listed banks in Ghana. The result showed a weak predictability of information and communication and financial performance.

Study objective two showed that there is an insignificant effect of monitoring on financial performance of listed banks in Ghana. The study result showed a negative level of predictability between monitoring and financial performance.

The last objective of the study showed that there is a significant effect of internal control systems (monitoring, information and communication) on

financial performance of listed banks in Ghana. The result under this objective shows a strong predictability of internal control system to financial performance of listed banks in Ghana.

5. CONCLUSIONS

From the analyses made on the data collected, it can be concluded that there is a positive significant effect of internal control system on financial performance of listed banks in Ghana. This conclusion is being arrived on the bases of the following:

5.1 Objective One

Regarding objective one, the study concludes that there is a positive significant effect of information and communication systems on financial performance of listed banks in Ghana.

5.2 Objective Two

Based on Objective two, the study concludes that monitoring as a control system does not directly affect financial performance of listed banks in Ghana.

5.3 Objective Three

Objective three concludes that there is a direct positive effect of internal control system on financial performance of listed banks in Ghana.

6. RECOMMENDATIONS

In view of the findings that evolved from the study, the following recommendations have been made for policy considerations in improving financial performance through internal controls.

Management of listed banks in Ghana's Stock Exchange must improve their investment in ensuring effective information and communication system implementation since they have strong significant effect on financial performance of listed banks in Ghana.

Again, management must be cautious of their investment in direct monitoring of activities in the companies. This is because direct monitoring does not translate into financial performance of listed banks in Ghana.

To industry regulators, the study recommends that industry regulators such as Bank of Ghana,

Ministry of finance, Security and Exchange Commission and GSE among should be awakened to take pragmatic steps to ensure that listed banks have strong internal measures. This will help protect investment of that move in and out of the market. Again it will improve the integrity of the Exchange and encourage more investors to boost national economy.

SUGGESTIONS FOR FUTURE RESEARCH

Findings of this study and the implications discussed above provide some future research direction. This study used purposive sampling technique for collecting data from representative of listed banks. Future studies may explore other sampling techniques such as simple random sampling techniques to sample respondents. Again, the sample size can be increased to expand the statistical power of the study result.

Again, the study was context in Banks listed on GSE. The study therefore recommends that future studies may consider other listed banks and also undertake a comparison effect of listed and non-listed banks.

CONSENT AND ETHICAL APPROVAL

Nevertheless, communicating with people and getting information to people in a form and timeframe that is useful to them is a constant challenge for most organization, basically due to the issue of confidentiality and ethical concerns.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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