The effectiveness of Internal Control Systems of banks:  
The case of Ghanaian banks

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Abstract

This study evaluated the control environment and monitoring activities components of Internal Control Systems of Ghanaian Banks using COSO’s principles and attributes of assessing the effectiveness of internal control systems. A five point Likert scale was used to measure respondent’s knowledge and perception of internal controls and the bank’s internal control system effectiveness. Responses ranged from strongly disagree to strongly agree, where 1 represented strongly disagree (SD) and 5 represented strongly agree (SA). Statistical Package for Social Sciences (SPSS) was used to analyse data and presented in the form of means and standard deviations for each question and each section of the questionnaire. The study found out that, strong controls exist in the control environment and monitoring activities components of the internal control systems of banks in Ghana. The two components were highly rated by respondents with average means of 4.72 and 4.66 respectively. The study recommended that boards of banks in Ghana should not be complacent about the findings but should work hard to ensure continuous ongoing and separate internal control monitoring to ascertain that controls really exist and are functioning properly.

Keywords: Internal control, control environment, monitoring, effectiveness, banks.
1. Introduction

The banking industry worldwide has experienced significant bank failures and crises over the years. Bank failures are of great concern to Central banks and governments because of its systematic nature and often exacerbate recessions and act as catalyst for financial crises (Basel, 2004). Internal control problems are a common place in the banking industry, and that allowed rogue traders to cause huge financial losses to these banks. In 2012 HSBC the largest financial institution in Europe, admitted having poor money laundering controls and was consequently fined $ 1.9b after U.S senate investigations (BBC, 2012). The Ghanaian banking industry is not without its share of bank failures. In early 2000’s two banks, Ghana Co-operative Bank and Bank for Housing and Construction failed, which costs the government of Ghana about Ghc1.25 billion in liquidation (Addo, 2000). An effective internal control system is the nerve centre of every organization, the breakdown of which leads to the failure of organizations. Internal control is a crucial aspect of an organization’s governance system and ability to manage risk. It ensures the achievement of an organization’s objectives and creating, enhancing, and protecting stakeholder value (IFAC, 2012). Precipitating the current global financial crises is the high profile corporate failures such as Enron and WorldCom in the USA, Parmalat in Europe, and similar cases of corporate collapse around the world (Amudo & Inanga, 2009). Failure of internal control systems and the eventual circumvention of internal controls by company executives accounted for these corporate scandals. Organisations must ensure that their internal control systems remain relevant in today’s business model. Business models have changed dramatically, including increased use of shared services, outsourced service providers, regulations have also intensified on companies, over reliance on technology, increased stakeholder expectation etc have increased business risks significantly (Mcnally, 2013), which necessitated COSO’s revision of its 1992 framework in 2013. This study evaluated the control environment and monitoring activities components of Internal Control Systems of Ghanaian Banks using COSO’s principles and attributes of assessing the effectiveness of internal control systems. Given the barrage of criticisms labeled against the banking industry world wide for internal control problems, we sought to assess the effectiveness of internal control systems of Ghanaian banks by concentrating on the control environment and monitoring activities components of banks in Ghana.

1.1 The Banking industry in Ghana

In February 2003, BoG introduced the Universal Banking Business Licence (UBBL), which is expected to bring more competition within the industry. Banks in Ghana are categorised under this licensed system: Class I Banking licence-Universal banking; Class II Banking licence- Universal and offshore banking, General Banking - Universal and Universal and off-shore banking and ARB APEX Bank (Bank of Ghana, 2007). There are 28 major banks licensed for Universal banking business and 137 rural and community banks under the ARB Apex banking system. The NBFIs are composed of Finance Companies, Discount Houses, Mortgage Finance Companies, Leasing Companies, and Savings and Loans Companies. All of these are regulated and supervised by the Bank of Ghana (BOG) under the Banking Act 2004 (Act 673) which strengthened the regulatory and supervisory functions of BoG.
PricewaterhouseCoopers, 2012). The new universal banking classifications replaced the activity-based classification of Merchant, Commercial and Development banking that was in operation in the country and was in response to the financial reform initiative which introduced “universal banking”. Dr. Acquah (Governor of the Bank of Ghana) in a keynote address to the Fifth Banking Award Ceremony mentioned among others that universal banking was to foster the entry of new banks, liberalise the choice of banking services, increase branch network and competition for deposit at the retail level (Acquah, 2009).

2. Theory and related literature

2.1 Definition of internal control system

COSO in 1992, defined internal controls as a process, and rightly so because an internal control system is not an end in itself but a means to an end. Internal control is defined as a “process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: Effectiveness and efficiency of operations, Reliability of financial reporting, Compliance with applicable laws and regulations” (COSO, Internal Control - Integrated Framework, 1992). Again the Basel committee on banking supervision defined internal controls “as a process effected by board of directors, senior management and all levels of personnel. It is not solely a procedure or policy that is performed at a certain point in time, but rather it is continually operating at all levels within the bank” (Basel, 1998).

2.2 Systems theory

A system is a set of interrelated and interdependent components that interact in a way to achieve a set goal. These components or sub-systems are inter-dependent and the failure of one component leads to the failure of the whole system. An organization is a complex system which is divided in various sub-systems (Units, divisions, departments, etc) and hence requires a system of controls over units, divisions, departments, etc, for its effectiveness and survival. An effective internal control system is an integrated system with interrelated components, supporting principles and attributes. Harvey and Brown (1998) identified control environment, accounting system and control procedures as the major components of internal controls (Harvey & Brown, 1998). According to Grieves, an internal control system available to a firm consists of: management oversight and the control culture; risk recognition and assessment; control of activities and segregation of duties; information and communication and monitoring activities and correcting deficiencies (Grieves, 2000). The paper adopts COSO’s 1992 integrated internal control framework. The Committee of Sponsoring Organizations’ (COSO), was commissioned in the 1980’s by National Commission on Fraudulent Financial Reporting (the Treadway Commission) to identify factors that caused fraudulent corporate financial reports and make recommendations, and has since developed to become a thought leader in enterprise risk management (ERM), internal control, and fraud deterrence (Amudo & Inanga, 2009). In 1992, COSO published a landmark report on internal control: Internal Control - Integrated Framework, referred to as “COSO”. The framework classifies an organisation’s internal control system in to five integrated
components which must be built into business processes across the entire entity, in its efforts to achieve objectives. The components are; 1. control environment, 2. risk assessment, 3. control activities, 4. information and communication and 5. monitoring activities.

Figure one: Integrated Internal Control Framework for an organisation

Source: Researchers design based on COSO's Internal Control framework

Internal control system is an integrated system, integrated with management processes to achieve overall organizational goals. For an organisation to achieve its organizational objectives, then the five control components of control environment, risk assessment, control environment, information and communication and monitoring must be integrated into management processes over the entire organization (Subsidiaries, divisions, units). Like the body system, the internal control components and business processes must interact ceaselessly for a healthy, effective internal control system. The seamless and collaborative interaction of an internal control system with business processes is a prerequisite for the effectiveness of an internal control system. Control objectives and measures that are derived from the monitoring and assessment of risks must be integrated into operational business units’ business practices (PricewaterhouseCoopers, 2007), through an effective information and communication control component that ensures smooth flow of information to personnel responsible for internal controls across the entity.

2.3 Internal control systems effectiveness

The effectiveness of an internal control system is dependent on how fluid the system interact with itself and how embedded it is into the organizations business processes. Again for an internal control system to be effective and provide that needed assurance to the board, there
should be some “agents of effectiveness”. These are a vibrant board, which does not wait to be informed but a board that understands the business and questions the status quo, and an effective, independent internal audit unit. Internal control is a process, but its effectiveness is a state or a condition at point of the process. Therefore it is important for management and the board to evaluate and assess the effectiveness of the internal control system periodically. According to COSO, an internal control system can be judged to effective on the high level if the board of directors and management have reasonable assurance that: 1. they understand the extent to which the entity’s operations objectives are being achieved, 2. published financial statements are being prepared reliably, and 3. applicable laws and regulations are being complied with (COSO, Internal Control-Integrated Framework, 1992). An internal control framework that places too much emphasis on detailed explanation of the different components of the system and methods for their design but ignore details on how each of the components can be measured to assess their effectiveness is a deficient control system in itself (Amudo & Inanga, 2009). The effectiveness of an internal control system is a function of the workings of the five components of the system. Consequently, assessing effectiveness of internal controls must be done in relation to the components of internal control. Judging whether an internal control system of an organization is effective or not is a subjective verdict resulting from the assessment of the workings of the five components of internal control system across the entire organization (COSO, Internal Control -Integrated Framework, 2011). In assessing internal control effectiveness, the evaluator must understand the operations of the five components, the intent of the principles and assumptions underlying the operations of the control components and how they are applied across the organization. The researchers in assessing the effectiveness of the internal control system of Ghanaian banks, adopts COSO’s 1992 principles and assumptions of assessing the effectiveness of internal control systems.

3. Methodology

Data for the study was gathered from questionnaires administered to managers (including audit managers) of all banks in Ghana. A total of 56 questionnaires were sent out and 30 were received representing response rate of about 54 percent. The questionnaire was divided in to two main sections representing the two control components (control environment and monitoring) of the COSO model chosen for the study. The study targeted managers because, the questions required a good understanding of the internal control system of banks. Responses received from respondents were based on a five (5) point likert scale, ranging from strongly disagree to strongly agree, where 1 represented strongly disagree (SD) and 5 represented strongly agree (SA) . The likert scale was used to measure respondent’s knowledge and perception of internal controls and the bank’s internal control system effectiveness. A likert scale was used because it is easy to read and complete by participants. Statistical Package for Social Sciences (SPSS) was used to analyse data and presented in the form of means and standard deviations for each question and each category or section of the questionnaire. Cronbach’s alpha was also computed to test internal consistency for each section of the questionnaire. The Cronbach’s alpha for control environment and monitoring are as follows; 0.823 and 0.720 respectively. A Cronbach’s alpha of 0.7 is generally accepted, however other researchers consider a 0.6 and above reliability adequate enough (Field, 2000).
The rationale for the choice of the two control components is basically; to manage the scope of the research and again we believe that gaining an understanding of the control environment component and the monitoring activities component of the internal control system will give an indication of the general effectiveness of the whole system.

3.1 Research questions

RQ1: Is the control environment of the internal control system of the banking industry in Ghana effective?

RQ2: Is the monitoring component of the internal control system of the banking industry in Ghana effective?

4. Results and discussions

The control environment and the monitoring activities work in tandem to reinforce the whole system of control in an organization. The control environment is the foundation of all the control components, the Board and senior management should be setting the right tone at the top, giving direction to the rest of the organization on the importance of effective internal controls. The effectiveness of risk assessment, component, control activities component, information and communication component, and the monitoring component will all work to the degree of effectiveness of the control environment. The monitoring component of the internal control system establishes whether controls are present and functioning as intended and if not control deficiencies are reported to the appropriate personnel responsible for such controls. The monitoring activities component ensures that the whole process of internal controls is fluid and not short-circuited. A properly designed and implemented monitoring process will help the organization identify and correct internal control problems on a timely basis, thus ensuring the continuous functioning of the internal control system (Grant Thornton, 2009).

The tables below present the results of data gathered and discussions of results follow the tables.

Table 1: Control environment

<table>
<thead>
<tr>
<th>Internal control systems</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Management demonstrate commitment to integrity and ethical values</td>
<td>4.72</td>
<td>0.59</td>
</tr>
<tr>
<td>2. Top managements’ support for integrity and ethical values</td>
<td>4.83</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>3. Codified standards of conduct to guide behaviour, activities and decisions</td>
<td>4.83</td>
<td>0.54</td>
</tr>
<tr>
<td>4. Board of directors demonstrate independence</td>
<td>4.41</td>
<td>0.82</td>
</tr>
<tr>
<td>5. Roles and responsibilities are clearly stated for all employees</td>
<td>4.66</td>
<td>0.61</td>
</tr>
<tr>
<td>6. Management establishes, with board oversight, structures, reporting lines and appropriate authorities and responsibilities in the pursuit of objectives</td>
<td>4.69</td>
<td>0.60</td>
</tr>
<tr>
<td>7. Your organization has an organizational chart with clear reporting lines and authority</td>
<td>4.55</td>
<td>0.74</td>
</tr>
<tr>
<td>8. Demonstration of commitment to attract, develop, and retain competent individuals in alignment with objectives</td>
<td>4.45</td>
<td>0.63</td>
</tr>
<tr>
<td>9. Human resource function has helped to define competence and staffing levels by jobs roles, facilitating training and development</td>
<td>4.69</td>
<td>0.60</td>
</tr>
<tr>
<td>10. Individuals are held accountable for their internal control responsibilities in the pursuit of objectives</td>
<td>4.76</td>
<td>0.64</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>4.66</strong></td>
<td><strong>0.62</strong></td>
</tr>
</tbody>
</table>

Source: Field survey, 2014. Hints: Mean of 0.00-1.49 = very ineffective; 1.50-2.49 = ineffective; 2.50-3.49 = moderate; 3.50-4.49 = effective; 4.50-5.00 = very effective.
### Reliability Statistics for Table 1.0

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.823</td>
<td>.830</td>
<td>10</td>
</tr>
</tbody>
</table>

### Table 2: Monitoring activities

<table>
<thead>
<tr>
<th>Internal control systems on monitoring activities</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Performance of ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning</td>
<td>4.72</td>
<td>0.45</td>
</tr>
<tr>
<td>20. Independent internal audit unit that objectively evaluates the entity's control system and feedback to management on the functioning of the control system</td>
<td>4.90</td>
<td>0.31</td>
</tr>
<tr>
<td>21. Engagement of external evaluators to objectively evaluate the control system and report to management on the functioning of the other components of the control system</td>
<td>4.83</td>
<td>0.47</td>
</tr>
<tr>
<td>22. Evaluation and communication of internal control deficiencies in a timely manner to those parties responsible for taking corrective action</td>
<td>4.52</td>
<td>0.63</td>
</tr>
<tr>
<td>23. Evaluation and communication of internal control deficiencies in a timely manner to senior management and the board of directors as appropriate</td>
<td>4.62</td>
<td>0.62</td>
</tr>
<tr>
<td>24. Management tracking of whether deficiencies are remediated on a timely manner</td>
<td>4.76</td>
<td>0.44</td>
</tr>
<tr>
<td>25. Internal audit reports to management and the board on unresolved deficiencies.</td>
<td>4.66</td>
<td>0.48</td>
</tr>
</tbody>
</table>

**Average** 4.72 0.49
Source: Field survey, 2014. Hints: Mean of 0.00-1.49 = very ineffective; 1.50-2.49 = ineffective; 2.50-3.49 = moderate; 3.50-4.49 = effective; 4.50-5.00 = very effective.

Reliability Statistics for Table 2

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.720</td>
<td>.725</td>
<td>7</td>
</tr>
</tbody>
</table>

4.1 RQ1: Is the control environment of the internal control system of the banking industry in Ghana effective?

The study sought to assess the effectiveness of the control environment in Ghanaian banks as shown in Table 1. The results showed that the statement that ‘top managements’ support for integrity and ethical values’ and ‘codified standards of conduct to guide behaviour, activities and decisions’ both had the highest mean (M = 4.83). This was followed by ‘organisations hold individuals accountable for their internal control responsibilities in the pursuit of objectives’ (M = 4.76; SD = 0.64); which reported the second highest score. It was further evident that the statements that ‘management establishes with, board oversight, structures, reporting lines and appropriate authorities and responsibilities in the pursuit of objectives’ and ‘human resource function has helped to define competence and staffing levels by job roles, facilitating training and development’ both had same mean score of 4.69 (SD = 0.60). It must be emphasised that all the items reported under the control environment had mean scores more than 3.50. This means that the majority of the respondents were of the view that the control environment component of the internal control systems is effective. The overall control environment score was 4.66 (SD = 0.62). Overall, the results indicated that the majority of the respondents agreed that the control environment component of banks is effective in the Ghanaian banking industry. The effectiveness of the control environments was evident in the top managements’ support for integrity and ethical values; the establishment of codified standards of conduct to guide behaviour, activities and decisions; holding individuals accountable for their internal control responsibilities in the pursuit of objectives. The attitude of the board and senior management determines the level of internal control effectiveness in an organisation. If top management believes that control is important, others in the organisation will sense that and respond by observing the established controls. Similarly, establishing support for the integrity and ethical values are essential elements of the control environment as they affect the design, administration and monitoring of other
internal control components (Arens & Loebbecke, 1997). The results demonstrated that management of the banks have shown strong commitment in promoting internal control environments that is strong enough to receive the support of top management, establish standards and responsibilities, as well as hold people accountable for their successes and failures. The cornerstone of a strong and effective internal control structure is the control environment. Hence, the existing effectiveness of the control environment suggests that the internal control system is very effective in establishing strong internal control structures necessary for preventing material frauds in the banks (Apostolou & Jeffords, 1990). This result is consistent with an inter industry comparative study of internal controls conducted in the USA in 2012, where banking effectiveness for control environment was rated high with mean of over 5.0 on a seven point likert scale (Hermanson, Smith, & Stephens, 2012).

4.2 RQ2: Is the monitoring component of the internal control system of the banking industry in Ghana effective?

The evaluation of the effectiveness of monitoring activities as component of the internal control systems of the banks in preventing material fraud are presented in Table 2. The results showed that the mean scores for all the items were more than 4.00 and ranges from 4.52 (SD = 0.63) to 4.90 (SD = 0.31). The existence of independent internal audit unit that objectively evaluates the entity’s control system and feedback to management on the functioning of the internal control reported the highest mean score (M = 4.90; SD = 0.31). Management periodically engages external evaluators to objectively evaluate the control system and report to management on the functioning of other components of the control system had the second highest mean of (M = 4.83; SD = 0.47). There is also evidence that ‘management tracts whether deficiencies are remediated on a timely manner’ (M = 4.76; SD = 0.44). The mean score for the monitoring activities was 4.72 (SD = 0.49). A control system has to be monitored to ensure that it operates effectively. The results showed that the majority of the respondents were of the view that the existing monitoring activities of the internal control systems were effective in Ghanaian banks. The results indicated that the existing monitoring activities of the banks are focused on independent internal audit unit that objectively evaluates the banks’ control system; periodically engages external evaluators to objectively evaluate the control system; and management’s ability to track whether deficiencies are remediated on a timely manner. It can be inferred that the banks have adopted aggressive mechanisms for assessing the quality of the internal control system's performance over time, which includes ongoing monitoring activities, separate evaluations or a combination of the two (INTOSAI, 2004).

5. Implications for Practice and Academia

This study has contributed to advance the knowledge of internal control effectiveness in the banking industry in Africa. To regulators and practitioners, the research has brought to bear the perceived strength of internal controls in the Ghanaian banking industry using the 1992 COSO framework. Internal and external auditors can pay detailed attention to the risk assessment, control activities, and information and communication components of the internal control system of banks in Ghana, without losing sight of the control environment.
and monitoring activities either. The study has added to the little research on internal control effectiveness of the banking sector in Ghana, and we hope that other researches will leverage on this study and extend further the effectiveness of internal controls of banking organisations in Africa.

5.1 Conclusions and recommendations

The study results indicate that, strong controls exist in the control environment and monitoring activities components of the internal control systems of banks in Ghana. The two components were highly rated by respondents with average means of 4.72 and 4.66 respectively. The study particularly revealed a very strong tone at the top, indicating the board of directors commitment to integrity and ethical values. This is in the right direction in curbing what Roger Steare called a "systemic deficit in ethical values" in the banking industry. In the wake of the fraud scandal at Société Générale in 2008, Roger Steare, professor of organisational ethics at Cass Business School in London asserted that “This latest scandal, on top of the massive losses in credit markets, and the ongoing incidence of mis-selling to retail customers, indicates that there is a systemic deficit in ethical values within the banking industry” (Steare, 2008). Perhaps Ghanaian banks are learning from the collapse of Ghana Co-operative Bank and Bank for Housing and Construction and the experiences of their counterparts in the western world. What has happened in the global banking industry over the years may be the result of “illusions of internal controls”. Banks are secretive and until a scandal hits no one really knows the extent of internal control problems that exist in banks and inactive boards of directors maybe under the impressions of false assurance of internal control effectiveness. This is even more likely in the banking industry with its rapidly changing business model. We recommend that boards of banks in Ghana should be very active and ensure continuous ongoing and separate internal control monitoring to ascertain that controls really exist and are functioning properly. This study looked at only two of the five internal control components, we again recommend further research that will investigate internal control effectiveness involving all control components.

References


