Determinants of Quality Accounting Information: Evidence from the Banking Sector of Senegal

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Abstract: Quality accounting information is essential in the achievement of every organization, most especially the expectation of stakeholders with vested interest in the organization. From the perspective of a developing country like Senegal, this study examines certain key determinants of quality accounting information quoting interesting outcomes with the use of five explanatory variables deployed to support the quantitative study on some selected banks from the highly volatile financial sector of Senegal. The analysis of 290 valid questionnaires provided evidence that internal controls, internal audit, risk assessment, compliance and channels of communication are strong determinants of quality accounting information in Senegal. The study also observed that availability and use of quality and timely information within the banks significantly influenced the quality of accounting information provided to users. Further studies on the subject, especially future research may focus more on the role of the board of directors, audit committees and how their independence and qualification adds to the quality of accounting information.

1. Introduction

The quality of accounting practice can be described as the degree of accuracy associated with material information available to users. This can be attributed to several factors that goes in to influence the performance, operation, tools and techniques used by the organization to build its accounting system (Ahluwalia, Ferrell, Ferrell, & Rittenburg, 2016). The relevance of quality accounting systems and information, does not shed light on accuracy but it indicates how reliable the information is to assist various stakeholders to make future projections, financial estimates and make budget towards future investments. Archer (2016), this is also termed as economic decisions. In real life, the purpose of quality accounting is mostly associated with reducing fraud and irregularities as well as maintaining high rate of reliability for the purposes of keeping a good reputation in the face of shareholders. However, this goes beyond to examine other factors that may not have been assessed in previous studies. Factors, that could help improve the quality of accounting and accounting information in the banking sector of Senegal (Basu, 2016). The Central banks maintain the authorized intuition in charge of monitoring, directing and supervising operations of all commercial banks in Senegal. In addition to that, the banks comply with international financial and banking operations and ethical practices. This ethical practices includes issues of good governance, material disclosures in final reporting, independent auditing and strengthening internal control mechanisms (Dong, Girardone, & Kuo, 2017). It can be observed the most of these guiding principles include bother internal characteristics and those from the external corporate environment. Therefore, this study is determined to measures some internal characteristics including the Performance, Leverage and Internal Audit. The study conducts an empirical analysis on these variables and determine how they could influence banks to produce quality accounting information. There are several theoretical concepts supporting this study and that includes the agency theory. The accuracy of accounting information being reported does not guarantee absolute quality and financial reporting. Fiala and Havranek (2017), observed it is much dependent on the determinants and transparent processes being followed and documented by the firm and consistently being practiced. The accounting information is also subject to rigorous evaluation and scrutiny by various users for different purposes, therefore the rate of quality differs across all users.

1.1.1 Research Problem

Increasingly, stakeholders and users of accounting information such as creditors, customers, traders, businesses and even governments and individuals who in one way or the other patronize the services of commercial banks, express doubt on the quality of accounting practices and the published financial statement, due to the increasing corporate scandals and increasing collapse and bankruptcy cases involving most banking and financial institutions in recent time (Adhikari & Gärseth-Nesbakk, 2016). Prior to this, the collapse of major corporates in the US between the periods of 1992 to 2002, were the major sources of reference to many concerned stakeholders. This
is compelling them to demand for more transparent system of disclosing information relating to quality accounting( Florio & Leoni, 2017). This study will assess the operations of the banks to determine whether the operations follow efficient and transparent manner. This study is also motivated by the recent closure of 5 commercial banks due to non-compliance to various domestic and internal standards. By this end, the main objective is to examine which factors influence accounting quality among Senegalese banks internal audit, leverage and performance influence quality accounting information.

2. Empirical Review

2.1 quality accounting information

The main objectives of ensuring that a firm improves the quality of its financial reporting includes details such as provide substantial information about the true and fair financial position in a particular accounting year(Arlsanalp & Liao, 2014). The same objective also ensures that at any point in time, the books of accounts are up to date and devoid of errors, omissions, mistakes and irregularities (Briciu, Dănescu, Dănescu, & Prozan, 2014). Major studies have looked into quality accounting information from the perspective of fraud detection and correctness. Barton and Bruder (2014), defines quality accounting information as the details of a firms historical transactions that can be relied on to inform important economic decisions by the users and stakeholders. Caratas and Spatariu (2014), stated that the level of firm performance may change over time, during a particular period therefore it is prudent to plan future and immediate investment plans accordance with these changes to avoid risk. These changes could bring negative or positive implications, but the most common are market and business risk, decline in profitability, financial scandals, internal control weaknesses and bad governance. Porter, Simon, and Hatherly (2014), in some cases, the absence of information technology and computerized accounting systems also account for the risks. Therefore quality accounting information is essential in order to plan and arrive at useful economic choices which is often associated with financial implications. Weber (2014), failure on the part of the firm to make quality accounting disclosure does not only affect their reputation but the results in a big loss for suppliers , creditors employees , debtors governments in terms of taxes , lenders depositors and the general public . The inconvenience that comes with poor quality of accounting information cannot be over emphasized. In order to avoid the reoccurrence of some of the past biggest financial scandals this subject has received a lot of attentions in recent time, in all sectors, both public and private corporations(Afiah & Azwari, 2015). But this is more essential for the banking and financial institutions since the majority of the stakeholders constitute members of the general public who deposit their money for safe keeping. There are international accounting standards that supports and protect the interest of the general public when it comes to quality reporting, and one of such regulations in the Sarbanes Oxley Act of 2002 and the International Accounting Standard Board (IASB), the Basel Accord and many other guidelines that regulates the operations of financial institutions to ensure quality reporting . For example according to (Li, Raman, Sun, and Wu (2015)), the Basel Accord and prescribes transparency in accounting reporting , while the Sarbanes Oxley Act 2002 prescribes a set of rules for corporations to enhance accountability, ethical practices , internal control and good governance . Dănescu, Prozan, and Diana Prozan (2015), some sections of the SOX Act 113, 104 directs managements of public corporations for the purposes of transparency, to voluntarily disclose all material information relating to operations with details supporting information. Additionally, 114 directs corporations to have in place a strong internal control structure that will enhance efficiency, compliance and reliability of accounting. Because the organization by itself cannot guarantee transparency by evaluating itself, the agency theory proposes that the services of external auditors be regularly resorted to ensure compliance and consistency to due diligence(Terdpaopong & Trimek, 2015). The agency theory also supports good governance principles, in the sense that, it prescribes the independence of the board of directors with the help of the audit committee to serve the interest of owners and all stakeholders. By this, the definition of quality accounting information has always focused towards the interest of stakeholders. Bromiley, McShane, Nair, and Rustambekov (2015), defines quality accounting information as the accuracy with which accounting reports carry essential details of business and financial information to users of different categories, who are associated with the company and rely on such information for decisions . Apergis, Fafalou, and Stefanitis (2016), also thinks the extent to which information can be of high quality is determined by the level of reliability that will bring assurance to investors.

2.1.1 factors affecting quality accounting information

Accounting information serves multiple purposes ranging from management decision on profitability and cost strategies as well as investment decisions(Beirne & Friedrich, 2017). Every category of user’s ranges from
business clients, corporate entities, employees, governments and the civil society have specific requirement or expectations towards every available information. While many of such users are concerned about transparency, employees are concerned about profitability and sustainability of business (Arslanalp & Liao, 2014). Governments are concerned about compliance to laws. These informed our choice of variables meant to analyze the level of quality or the possibility of banks producing the most reliable accounting that will support economic decisions. Below are the variables and hypothesis developed for the study.

2.1.2 quality accounting Information and Performance of Banks
There is evidence in some exiting literature point to a very significant relationship between quality of accounting information and firm profitability, efficiency and quality operations (Bellavite Pellegrini, Meoli, & Urga, 2017). A few have also disagreed on the grounds that, firm profitability may not necessarily reflect the quality of the accounting system because it’s hard to discover fraudulent and unethical business practices in firms that are impressively doing well in terms of higher profits margin, unless there is a good internal control system to expose any fraud related activity or even cases where collusion may exist to undermine existing control structures. Therefore, in cases where performance is measured entirely based on profit margin, quality accounting may not be guaranteed. Studies conducted by Dong et al. (2017), supports this relationship but stated that it is possible only when the audit committee is effective enough to discharge its duties. On the other hand Fiala and Havranek (2017), found a significant relationship but related it to the board effectiveness and level of independence of management. This implies that the board has a big role to play when it comes to ensuring accountability, because they give approval to all management policies. This study uses the bank performance bases on effective board independence, audit committee and internal control effectiveness.

2.2 Hypotheses Development on determinants of Quality Accounting Information
2.2.1 Risk Assessment
Risk assessment lays a solid foundation for management to deliver good leadership based on Enterprise Risk management (ERM). Risk assessment is a support mechanism for evaluating performance and monitoring. The study proposes that risk assessment activities using internal control variables are good enough to provide reasonable assurance of quality accounting practices. From management perspective, commitment to risk assessment is influenced by control environment variables: integrity, ethical standard, core values and organizational culture. The management sets a good example by demonstrating commitment to risk programs. Due to the emergence of new risks management must prioritize risk and be prepared in terms of resources, policies and programs to response appropriately using internal control activities. In responding to risk, they can modify objectives and priorities to suit the current internal control programs. Several empirical studies proposes that risk assessment programs must be aligned with basic requirements such as accountability, transparency, reliability of financial accounting standards and operational efficiency in the use of resources. Enterprise risk management should not be implemented in isolation of internal controls. A combination of risk assessment and internal control as a support mechanism to the board will ensure the board initiate logical steps to address organizational challenges, and also ensure that everyone think alike. It bridges the gap between the board and the people in the organization. It brings the board closer to the people and encourages opposing views that will expose management to alternative methods, particularly on evaluating and passing good judgment on performance of the entire organization and how information is processed
Hypothesis 1: risk assessment enhances the quality of accounting information

2.2.2 effective internal audit
In every organization, the internal audit plays a vital role in ensuring compliance. They support good governance, transparency and reliability of bookkeeping in many ways. At the same not every researcher who has studied the contribution of internal audit, agrees that internal audit is absolutely effective and reliable in their functions. Alzeban and Gwilliam (2014), internal audit is a key player in restoring transparency in every accounting system, however the issue of independence often cast doubt on their eligibility as the main custodians of internal controls . Several factors also goes in to strengthen the work of the internal audit, and that includes the external auditors and the board of directors through the audit committee. It is said that Asiedu and Deffor (2017), an efficient internal audit can influence the quality of accounting information without doubts because they ensure due process , verification, approval and in some cases access to the organizations accounting database has to be approved by the internal audit, for the purposes of preventing fraud . However, the same cannot be said of very
large companies where external auditors are very regular and efficient. Caratas and Spatariu (2014), for the purposes of quality accounting information, the large companies rely entirely on external auditors, while relatively smaller firms tend to over rely on internal audit to enforce compliance. Many have also said that Chang, Yen, Chang, and Jan (2014), high audit fees account for this disparity or the choice of one firm over depending on its internal audit to ensure compliance. Well, according to Altamuro and Beatty (2010), it doesn’t really matter whether a firm uses internal audit or frequently engages external auditors, the most important issue is the firm ability to improve the quality of accounting information to avoid corporate scandals and cause damage to the organizational reputation lose the trust of investors and dash the confidence of stakeholders.

Hypothesis 2: Effective internal audit enhances the quality of accounting information

2.2.3 Internal Control

Internal control represents a process established by management and the board of directors to ensure that the organization to move in a particular direction that will guarantee the achievement of the strategic objective, operational objectives, and compliance with laws and regulation (Babatunde & Dandago, 2014). Internal controls ensure supervision to ensure accuracy in terms of accounting records, proper book keeping, constant update of financial records and that will automatically translate into reliable financial reporting to shareholders, owners, creditors, debtors, employees and the broad stakeholders who depend on the financial information to inform their economic decisions (Callahan & Soileau, 2017). The relationship between internal control and quality accounting information is there when there are measures in place to guarantee assurance that fraud and financial irregularities are exposed, detected, and prevent such circumstances from distorting the efficiency of operation. Internal control also ensures that organizational risk management are established (Kong, Larney, Bah, & Biswas, 2018). Internal controls also ensure that all departments and functions of the organization are properly coordinated as well as creating the avenue for the board to assess the organization. Since internal control is a continuous process, management will enforce ethical practices.

Hypothesis 3: Internal control enhances quality accounting information

2.2.4 Compliance

Studies suggest that one of the ways an organization can maintain the quality of accounting information is when directors are granted authority to invite external evaluators to review the internal control processes and to validate the operations of the organizations.

That responsibility should be supported with an independent financial budget controlled by independent management team. This is one of the ways reliability reporting can be achieved and the primary responsibilities of maintaining the quality of accounting information. This will eliminate a common tradition where management hire external evaluators of their choice who cannot do independent review and auditing. Management involvement in such exercise will compromise the work of the supervisory committee and external evaluators which could influence the outcome of audit exercise and overlook possible wrongdoings. In situations where management determines the remuneration, allowances and other financial benefits for the external evaluators, it could raise doubts on the quality and objectivity of review of internal control processes. The top management should have diversity is a necessity for good decisions on internal control effectiveness. Policy makers must ensure that the top management diversity is maintained in terms of knowledge, expertise, industry, educational qualification, political affiliation and mix of different cultural backgrounds must be represented. This will introduce innovation and broaden the total knowledge of the management and incorporate the concerns of every aspect of management.

Hypothesis 4: Compliance to regulations enhances the quality of accounting information

2.2.5 Channels of Communication

The nature, type and quality of within the organization matters when it comes to reporting quality accounting information to users. First, it starts from the existing channels of communication within the organization, the line of communication as well as the mode of communication available within the organization (Hopkin, 2018). According to Collins (2008), the quality of every accounting depends on clarity and timeliness. It means that, management directives, instructions and policies that are being carried out on the directives of the board must be communicated throughout the entire organization timely enough with high degree of accuracy. The existing channels of communication supports the quick feedback to management and the board on the performance and adaptability to policies (COSO, 1992). These feedbacks would then go back into strategy and inform structural
changes. When qualify information is maintained, it improved decision making because the input level received accurate data on transaction and all businesses information that will go into the final accounts that will inform stakeholders about the performance of the organization. This attribute of higher quality of inputs will create a good reputation among users and subsequently make the accounting information valuable to them. Brown, Pott, and Wömpener (2014), the more the quality of information the better the accounting information and the completeness.

Hypothesis 5: channels of communication positively enhances the quality of accounting information

3. Methodology

The study made use of structured questionnaires, administered to 320 bank employees in Dakar Senegal on the basis of non-probability sampling technique. Subsequently, 290 valid answered questionnaires were received and forms a good representation of the study population. The questions were scaled between 1 and 5, following a 5 point Likert. Employees were selected from all departments including administration, internal audit, finance, marketing, transport, logistics, human resource and procurement.

Respondents include senior staff, board members (executive directors), cashiers, internal audit staff and general employees performing various duties who understands the relevance of accounting information and how their duties contribute to the quality of accounting information that the banks publish regularly to the stakeholders and other numerous users. The variables selected for the study were adopted from previous studies which studies the same phenomenon in different jurisdictions (Dănescu et al., 2015). The study applied quantitative method of research to examine the relationship and impact of the independent variables on the dependent variable. Reliability of the data set was done using the Cronbach’s alpha technique while the final analysis was done using regression model as follows:

\[ Y_i = \alpha + \beta_1 x_1 + e \]

\[ QACIF_i = \beta_0 + \beta_1 INTCL_i + \beta_2 INTAU_i + \beta_3 CMPL_i + \beta_4 RISKA_i + \beta_5 CHCM_i + \epsilon \ldots \ldots \ (I) \]

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Coefficients</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Accounting Information</td>
<td>0.890</td>
<td>Meets the threshold</td>
</tr>
<tr>
<td>Internal Audit</td>
<td>0.702</td>
<td>Meets the threshold</td>
</tr>
<tr>
<td>Internal Control</td>
<td>0.760</td>
<td>Meets the threshold</td>
</tr>
<tr>
<td>Channels of Communication</td>
<td>0.701</td>
<td>Meets the threshold</td>
</tr>
<tr>
<td>Compliance</td>
<td>0.820</td>
<td>Meets the threshold</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>0.740</td>
<td>Meets the threshold</td>
</tr>
</tbody>
</table>

Table 1. Reliability test
In table 1, the measurement of the internal consistency shows a positive indication for further analytical test, since all the constructs measured using the Cronbach’s alpha produced positive coefficients a little above the threshold or the measurement criteria of 0.7%.

### 3.1 Empirical Analysis and Results

Table 2 is an illustration of how dispersed the sample data is with the use of four parameters; mean, minimum, maximum and the standard deviation. The difference between the smallest and the largest values in the observation is given by the mean. From table 2, the minimum range value for quality accounting information (QACIF) is 1.000 and the mean of 1.576 which also represent the average of the distance. There is a positive indication that the dataset is usable and reliable based on the positive standard deviation.

The rest of the variables are having approximately positive standard deviation corresponding to the mean or average. The mean values of each variable in the model, as well as its standard deviation, the minimum and the maximum values are clear indications that the distribution shows implies the data set is quite close to the mean. Each variable ranges between greater than 1 and less than 4. It could be concluded that, there isn’t much variation between the minimum and maximum values.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mini</th>
<th>Maxi</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>QACIF</td>
<td>1.000</td>
<td>3.000</td>
<td>1.576</td>
<td>0.067</td>
</tr>
<tr>
<td>INTCL</td>
<td>1.000</td>
<td>3.000</td>
<td>1.037</td>
<td>0.765</td>
</tr>
<tr>
<td>INTAU</td>
<td>1.000</td>
<td>2.000</td>
<td>2.635</td>
<td>2.202</td>
</tr>
<tr>
<td>CMPL</td>
<td>1.000</td>
<td>4.000</td>
<td>1.909</td>
<td>1.902</td>
</tr>
<tr>
<td>RISKA</td>
<td>1.000</td>
<td>4.000</td>
<td>2.097</td>
<td>2.771</td>
</tr>
<tr>
<td>CHCM</td>
<td>1.000</td>
<td>2.000</td>
<td>0.023</td>
<td>0.455</td>
</tr>
</tbody>
</table>

Table 2. Descriptive Analysis

### 3.2 Correlation Coefficient

In table 3, the model illustrates the relationship between the dependent variable and the independent variables with their positive relationships. First, the variables correlate among itself perfectly, with each independent variable having a positive relationship with Quality Accounting information. Internal control and risk assessment are having the strongest correlation coefficients values of 0.508** and 0.632** respectively. It is an indication that among the sections of banks, operational risk assessment and effective internal control policies strongly influence the quality of accounting information. Secondly, the result also shows that effective internal audit also has a strong impact on the quality accounting information. On the other hand, compliance is having negative or no relationship with quality accounting information with the value of -0.214**. This implies that the banks are doing little to enforce compliance of internal banking regulations and best practices. The correlation result also imply that the channels of communication (CHCM) within the company also determines the quality of accounting information by 0.343**.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>QACIF</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTCL</td>
<td>.508**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTAU</td>
<td>.403**</td>
<td>.672**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMPL</td>
<td>-.214**</td>
<td>-.273**</td>
<td>-.413**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RISKA</td>
<td>.632**</td>
<td>.474**</td>
<td>.463**</td>
<td>.471**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHCM</td>
<td>.343**</td>
<td>.343*</td>
<td>.036*</td>
<td>.321</td>
<td>.102</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3. Correlation report
This implies that the internal control systems among these selected banks are very efficient and effective and it influences the banks’ ability to produce quality accounting information. This also includes internal audit, which is quite significant (Aziz, Rahman, Alam, & Said, 2015).

### 3.3 Regression Coefficient

The regression model presents the real size of effect or the portion and percentage of variance caused by the independent variables in the dependent variable represented by each individual p-values, t-test and coefficient beta. These indicates the impact the independent variables will have on the quality accounting information if management should apply the variables accurately.

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Quality Accounting Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>INTCL</td>
<td>.109</td>
</tr>
<tr>
<td>INTAU</td>
<td>.006</td>
</tr>
<tr>
<td>CMPL</td>
<td>.380</td>
</tr>
<tr>
<td>RISKA</td>
<td>.094</td>
</tr>
<tr>
<td>CHCM</td>
<td>.067</td>
</tr>
<tr>
<td>R²</td>
<td>.781</td>
</tr>
<tr>
<td>Adj R²</td>
<td>.790</td>
</tr>
<tr>
<td>P-Value</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. The regression output

From table 4, the regression model presents a convincing variation in the dependent variable at .781% R², while the adjusted R² recorded .790 %. These values are very significant enough to conclude that, the model has done a good job in explaining the quality accounting information at all significant levels less that 0.5 %. Again, looking at the adjusted R square, it could be said that, the model has very minimum error considering the percentage of unexplained variation and the adjusted R square values. It could be observed that, the model produced all positive t-values corresponding to significant p-values minimal coefficient values 0.109, for internal control, 0.006 internal audit, 0.380 for compliance, 0.094 for risk assessment and 0.067 for channels of communication. These values are indications of how much the independent variables will effect a change in the dependent variable in other words it show the percentage improvement the variables will have on quality accounting information. A confirmation of these relationship is shown by the significance level for each construct. The regression model implies that the relationship between quality accounting information and the explanatory variables are strongly reliable and it is an indication that policy makers in the banking sector of Senegal could make decisions based on this findings.

### 4. Conclusion and Discussion

This study explored the factors influencing the quality of accounting information in the banking sector of Senegal using a simple linear regression to estimate the relationship between 5 independent variables and 1 dependent variable (Kong et al., 2018). The outcome of this research adds to existing literature, particularly where the results suggest that internal control, internal audit, channels of communication, compliance and risk assessment are good determinants of quality accounting information (Bhaskar, Schroeder, & Shepardson, 2018). The outcome of the study implied that the presence of this factors is an indication that the process of compliance is properly enforced and accounting practices are properly monitored.

The study further suggest that supervisory committee be equipped with technology infrastructure that will enable it validate a large volume of transactions within a short period of time. This will reduce the occurrence of risks, errors and accounting fraud which is likely to occur between one audit periods to the other. This research also
suggest that, risk assessment programs must be established and communicated to every member of the organization. This will create awareness of various organizational risk weaknesses in internal controls.

Reference


