# THE FACTORS INFLUENCING AUDITOR INDEPENDENCE: THE PERCEPTIONS OF AUDITORS IN BAHRAIN

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## Abstract

The aim of this research is to assess the relationship between the presumed AI influencing factors and AI from the standpoint of auditors in Bahrain. Researchers have continuously identified and assessed several factors that are expected to safeguard AI and objectivity to mitigate the potential threats faced by the audit profession worldwide. As a result of the promising Bahrain Economic Vision 2030 that emphasizes on 'fairness' as a one of major principle, the regulators in Bahrain are expected to adopt new measures that enhance the role of auditors in maintaining fairness and transparency. This research hence investigated the subject matter in a way that intended to assess the AI influencing factors in a Bahraini context. The research is quantitative in nature, whereby questionnaires were distributed to a range of auditors representing the audit firms in the Kingdom of Bahrain. Following reliability and validity tests, the responses were analyzed descriptively, along with empirical analysis through using the Multiple Regression Model. The findings signified the substantial role of the audit regulations and related provisions in enhancing AI and impartiality, when compared to other presumed factors. The research recommendations focused on the importance of overseeing the audit firms and accounting professionals through the formation of an independent audit quality board as well as considering the adoption of a joint-audit practice for the listed companies.

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## 1. INTRODUCTION

### 1.1. Research Background

Auditor Independence (AI) has become a debatable issue after many accounting scandals such as Enron, WorldCom, Satyam, and Tesco, which resulted in decreased confidence towards the auditors who were held partly responsible for frauds. While auditors had to detect material misstatements, fraudulent acts and errors to some extent, they deliberately contributed to concealing the illegal and fraudulent acts in those unfortunate occasions which raised deep concerns about their level of ethics and independence. Consequently, regulators all over the world have imposed more complex rules to govern both the audit firms and audit clients.

In Bahrain, the licensure and registration of auditors is the responsibility of the Ministry of Industry & Commerce (MOIC) through the Company Affairs Directorate. It is worth mentioning that auditor integrity and independence is deemed as a critical condition for auditors who wish to apply at the Auditors Registrar. According to Auditors Law (No. 26 of 1996), auditors shall satisfy the criteria of professional ethics, honor, integrity and public morals in order to be officially registered. Such quality standards consist of auditor independence, as it is seen as a key characteristics required for auditors. Currently, there are 22 auditing companies operating in Bahrain including the Big-4. Apart from MOIC, the Central Bank of Bahrain (CBB) has established a special 'Auditors and Accounting Standards Module' as part of its rulebook. The aim of this module is to present the accounting and auditing requirements that need to be met by financial institutions that are governed by CBB. In this regard, CBB obliges all financial institutions (including licensees) to obtain approval before appointing external auditors on annual basis. Whereas, CBB does not specify the basis and criteria for assigning auditing firms, yet it is observed that financial institutions are predominantly audited by the Big-4. Article 61(d) of the CBB Law enforces conditions for external auditors to be regarded independent. Financial institutions are required to take reasonable steps to ensure that the assigned auditor has the needed skills and experience to conduct the audit properly and is independent of the financial institution. Moreover, the rule states that financial institutions must notify CBB about incidents when auditors' independence is impaired. If the CBB believes that independence has not been met within a reasonable time frame, the CBB may require the engagement of a new auditor.

### 1.2. Statement of Problem

Whilst the audit profession is being officially regulated through the MOIC, the audit profession

faces lack of monitoring, as it is in USA by the Public Company Accounting Oversight Board (PCAOB) and/or American Institute of Public Accountants (AICPA). Apart from that, the enforcement of the Amiri Decree (26) of 1996 is lacking due to inexistence of clear mechanisms for ensuring audit quality. It is therefore important to study the audit practices concerning independence and ethical behavior in more depth. Local research is quite limited in this field, which makes it difficult to determine if the present safeguards are sufficient to minimize threats to independence and improve the overall audit quality in Bahrain (Ali, 2014). Although the Auditor Affairs Committee and Auditors Disciplinary Board, appointed by the MOIC is ultimately responsible for the establishment of the auditing standards in Bahrain, the Bahraini law refers to pronouncements of the International Auditing and Assurance Board (IAASB) as the adopted auditing standards in the country.

### 1.3. Research Objectives

It aims to determine the factors that influence the auditors' independence by examining the current audit practices and identifying related strengths and threats. It will, further, evaluate the effectiveness of the present practices, regulations, cultural norms, apart from assessing the influence of such factors on AI. Eventually, the research will try to understand and evaluate the extent of the relationship between the influencing factors and the auditors' independence from their perspective.

### 1.4. Research Questions

The research will answer to the following questions as follows:

- What are the key factors that influence the auditors' independence in Bahrain?
- Do these factors adequately strengthen or constitute threat on AI in Bahrain?
- What is the extent of relationship existing between the AI influencing factors and AI in Bahrain? Which factors are more significant and how?

### 1.5. Significance of the Study

The fluctuating economic setting, financial crisis and political disturbances can have adverse impact on the business environment. It is therefore important to have proper accounting practices to assure stakeholders that financial information are truly and fairly disclosed and free from material misstatements. In order to achieve that, the principle of AI should be continually examined, investigated and updated because it sets the foundation of the audit practice. In other words, the whole audit profession can be regarded as ineffective if the AI principle is impaired or questionable. As a result of the promising Bahrain Economic Vision 2030 that emphasizes on 'fairness' as a one of major principle, the need for maintaining fairness and transparency through providing reliable financial and non-financial information to the public should significantly increase.

## 2. LITERATURE REVIEW

### 2.1. Auditing Significance

Historically, the need of auditing was explained through the Policeman theory that suggests that the auditor plays the role of the police officer by ensuring the accuracy of financial information, preventing and detecting fraud and financial misstatements. Robin and Peggy (1998) believed that the auditors' role is to actually detect fraud and ensure that the financial information is accurate. Ittonen (2010), however, asserts that there is a shift in the theory of auditing leading to more modern perceptions towards the profession.

### 2.2. AI as a Concept

Godfrey *et al.* (2003) stated that many companies are often challenged by the agency problem. While the risk of agency problem may be minimized by involving auditors in the process, Moore et al. (2006) contends that conflict of interest may still exist between auditors and shareholders, if auditors do not act in an independent manner. Mautz (1984) has defined the auditing profession as a special legislative franchise to provide independent financial audits for large organizations, while maintaining professional ethics. It further explains AI as an attitude that includes moral values of integrity, honesty and objectivity in a manner that makes the auditor free from the control of those whose records are being audited (clients). Porter *et al.* (2003) refers to it as the condition in which the auditor refrains from situations that make a reasonable person believe that his/her independent is impaired.

### 2.3. AI as an Audit Quality Tool

Audit quality is defined as "the probability that an auditor will both discover and report a breach in the client's accounting system". Based on this definition, it can be clearly noticed that audit quality does not only depend on the technical ability and accounting knowledge of the auditor, but it also relies on the level of AI through his/her ability to report any material irregularities (i.e. fraud, error). Whilst the International Standard on Quality Control (ISQC) discusses the responsibility of audit firms to maintain and document their internal quality control policies and procedures, the existence of the quality control measures and audit compliance bodies remain limited in in the Arab World. Arens et al., (2013) reveals that such measures are only applied in Saudi Arabia and Egypt, wherein they established a number of government bodies audit practice and quality report centers to ensure that audit firms are maintaining quality standards and consistently adhering to the ISAs, including auditor independence.

### 2.4. Audit Regulations

Moore *et al.* (2006) argue that establishment of new auditing regulations are mostly insufficient. They claim that reforms can be designed and implemented in a way to serve special interests.

Further, it refers to the example of the non-existence of a rule that specifies the maximum period of business between the audit firm and clients. The unlimited engagement period between the auditing firm and clients raises serious concerns about the auditors' independence in several countries, more recently in the case of Tesco's financial misstatement. Nonetheless, Nelson (2006) suggests that reforms need time to be implemented effectively, and that the outcomes of any regulations cannot be judged from single incidents. Many countries addressed this matter in their audit regulations in last couple of years.

### 2.5. Audit Committee as a Corporate Governance Mechanism

It is found in various researches that the establishment of audit committees is regarded as a key mechanism for corporate governance, which gained increasing attention. Joshi and Wakil (2004) inferred that the size of audited company, nature of industry and the audit firm itself have influenced the establishment of audit committees in Bahrain. Further they find that the formations of audit committees have been slow and not well-recognized in Bahrain. Nevertheless, the MOIC has issued a Cooperate Governance Code in 2011, in which it addressed and emphasized the function of audit committees in all operating joint stock companies. As per the code, its main aim is to supplement the existing Bahraini Commercial Companies Law, by incorporating additional corporate governance principles. Despite the fact that the existence of audit committees is currently mandatory in Bahrain, it is observed that some companies do not update their audit committee charter annually, mostly due to ignorance and insufficient legal enforcement mechanism.

### 2.6. Non-audit Services and Related Provisions

Whereas SEC (2003) rules clearly states that it is prohibited for any public accounting firm to perform Non-audit Services (NASs) in conjunction with audit. Law (2008) contends that NASs provisions and rules are inadequate to mitigate threats to AI. Even though performing NASs may impair auditors' independence, in fact, it is observed that analysts' perceptions of AI are not affected by NASs, which means that any *reasonable person* may not necessary deem such activity as a real threat to independence.

### 2.7. Mandatory Audit Rotation (MAR)

Dopuch *et al.* (2001) conducted a research to evaluate the effectiveness of MAR and found that the MAR results in enhancing AI. Moody *et al.* (2006) further assessed the scope of MAR and found that there is a difference between mandatory audit firm rotations compared to partner rotations. In this study, it was concluded that the existing partner rotations is less likely to improve AI. Said and Khasharmeh (2014) found that the majority of auditors agree that the rule of rotating audit partners every five years can safeguard AI. While the study revealed that there is a significant relationship between MAR and AI, the results indicated that the adoption of rotation rules did not receive considerable attention among audit firms in Bahrain.

### 2.8. Socio-cultural and Ethical Influences

Puxty *et al.,* (1997) stressed that laws and regulatory frameworks are insufficient in retaining AI among audit firms. They argue culture and socio-economic factors have significant influence over AI as a concept. Hudaib and Haniffa (2009) concluded that auditors view independence based on their social interactions at three levels consisting of the micro level (auditor's personal self-reflexivity, ethical values and reputation), meso level (the organizational culture of the audit firm itself) as well as the macro level (socio-economic and political structure of the country where the audit firm operates). Fan-Hua and Huang (2013) found that auditors are negatively associated with idealism in ethics. Instead, they are positively associated with relativism, due to the applied nature of the audit profession. They claim that relativist auditors are less likely to condemn wrongful acts of their clients, and hence the AI in theory is not idealistically reflected in practice.

### 2.9. Role of Internal Audit Function

It is found in many researches that firms that engage in greater internal monitoring through internal audit function (IAF) maintain greater level of internal control, financial statement reliability and compliance. Drent (2002) contends that managers perceive internal auditors to work for them; thereby internal auditors do not have to remain independent. Further, it is added that according to management influence theory, management merely perceives the IAF as a formality that satisfies the audit regulations and the corporate governance requirements. Munro and Stewart (2011) found that external auditors rely substantially on the clients' internal audit to assess internal control risks, and therefore may decrease the required level of substantive testing and evidence accumulation. Such dependence on IAF may, therefore, be considered as a threat to independence. Reckers and Lee (1997) noted that the Statement on Auditing Standard (SAS) 9 required external auditors to assess the objectivity and work quality of the internal auditors prior to relying on it. The standard lacked clear guidelines about methods and steps to be followed by external auditors to evaluate the competency of internal auditors, leaving the degree of dependence up to the critical judgment of the auditor. As a result of the debate and criticism, SAS 65 was issued in 1991 to assist external auditors in evaluating the objectivity and work performance of the internal auditors.

### 2.10. Economic Factors and the Influence of the Audit Fee

Al-Ajmi and Saudagaran (2011) revealed that the users of financial statements regarded economic factors as one of the main reasons for impairing AI, which ultimately decreases the reliability of the audit reports. Nevertheless, Ateya and Kukreja (2015) evaluated the perceptions of investment banks on the effectiveness of the audit reports in Bahrain and found that the audit report is still vital

to Bahrain investment environment. Interestingly, Reynolds and Francis (2001) found that competition among audit firms put more pressure on auditors to maintain ethical behaviors, so as to maintain their reputation in the market and avoid litigation risks. In this regard, Srinivasan et al., (2002) conclude that there is a conflict of interest between auditing firms and their clients regarding audit quality and audit fees. Suparto (2011) conducted a study about the complexities of audit fee in Indonesia and found that there has been unhealthy rivalry amongst audit firms reflected through a price war strategy. With the aim of attracting more clients and dominate the market, auditors tend to offer low audit fees, which results in inferior audit quality and raises serious doubts about auditors' independence.

### 2.11. The Influence of the Audit Firm Size: Big 4 vs. Non-Big 4 Auditors

Al-Ajmi and Saudagaran (2011) concluded being a Big-4 is considered as an enhancing factor to AI, agreeing to the findings of previous studies. However, the study noted that this factor is considered as one of the least significant factors. Law (2008) found that there is no major difference between the perspectives of Big-4 and non-Big 4 auditors with regards to AI. Although such finding can indicate that AI is not affected by the auditing firm size from the perspective of auditors themselves, other key stakeholders may still believe that Big-4 companies maintain higher audit quality and AI levels.

## 3. METHODOLOGY

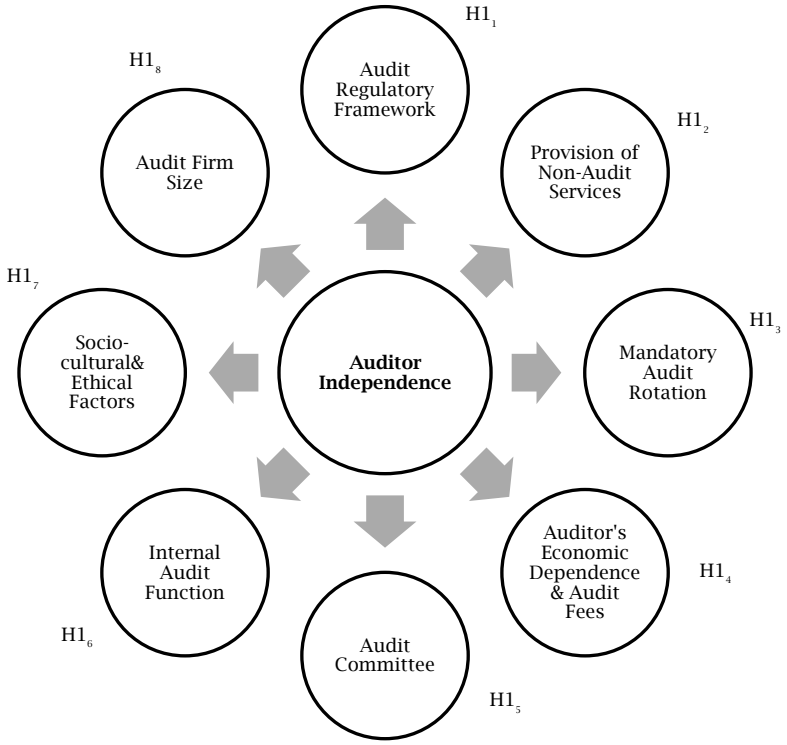
### 3.1. Research Approach (Design)

A detailed questionnaire was constructed to measure the extent of the AI influencing factors. Besides, its affordability and simplicity, one of the main reasons for selecting the questionnaire as a research tool is owing to its effectiveness in measuring the research variables statistically in a way that clearly demonstrates the conceptual framework. It consist of demographic-related questions about the auditors' gender, age, work experience, educational background, and professional qualifications as well as audit company type. After that, the questionnaire included statements about the research variables (i.e. AI influencing factors) in a Likert five scale format, whereby respondents were requested to indicate the level of agreement to a number of statements using a scale ranging from strongly agree (5) to strongly disagree (1).

### 3.2. Research Theoretical Framework

The influencing factors (*independent variables*) include the audit regulatory framework as well as other specific variables (i.e. provision of NASs, audit committee, audit firm size, auditor economic dependence and audit fees, socio-cultural & ethical factors, IAF, MAR). It is assumed that the earlier factors have effect on AI and objectivity (*dependent variable*). The following diagram illustrates the theoretical framework of the research in relation to AI by using a *factorial design.*

**Figure 1.** Research Theoretical Framework



### 3.3. Research Hypothesis

The hypotheses concerning the factors influencing AI were formed as follows:

H0: There is no significant relationship between the presumed *AI influencing factors* and AI in Bahrain.

H1: There is a significant relationship between the presumed *AI influencing factors* and AI in Bahrain.

More specifically, the sub alternative hypotheses that were tested in this research were:

**Table 1.** Research Hypothesis

| |
|---|
| $H1_1$: There is a significant relationship between the *audit regulatory framework* and AI in Bahrain. |
| $H1_2$: There is a significant relationship between the *provision of non-audit services* and AI in Bahrain |
| $H1_3$: There is a significant relationship between the *mandatory audit rotation* and AI in Bahrain |
| $H1_4$: There is a significant relationship between the *auditor economic dependence* and AI in Bahrain. |
| $H1_5$: There is a significant relationship between the *audit committees function* and AI in Bahrain. |
| $H1_6$: There is a significant relationship between the *internal audit function* and AI in Bahrain. |
| $H1_7$: There is a significant relationship between *socio-cultural factors* and AI in Bahrain. |
| $H1_8$: There is a significant relationship between the *auditing firm size* and AI in Bahrain. |

### 3.4. Validity and Reliability

The questionnaire was designed to specifically address the research questions. The adopted research questionnaire was developed and test as pilot study and successfully tested in terms of validity and reliability, indicating high scores as Cronbach's alpha coefficients exceeded 0.6. The questions, however, were amended to fit the specific purposes of this research as well as to assure their relevance to the Bahraini business context and that they clearly reflect the findings of the theoretical framework.

A pilot study was carried out to ensure "construct validity", in which 10 questionnaires were initially distributed to amend any parts that caused confusion and misunderstanding of meanings or language terms. More specifically, a number of draft questionnaires were distributed to accounting academicians, auditors and statisticians, to ensure that the questions are relevant to the theoretical framework and can properly measure the research hypothesis. Generally, the questionnaire was deemed adequate to measure the intended objectives, after making few modifications in terms of sentence structure and formatting.

Apart from validity, the reliability (internal consistency) of the measure was thoroughly evaluated by testing the participants' responses, in which the questionnaire several questions measuring the same variable were integrated in the questionnaire. In this way, the answers of the participants were expected to be consistent, reasonable and free of conflicting responses.

In order to validate the reliability of the measure statistically, Cronbach's Alpha test was used through the SPSS to ensure that it exceeded 0.6 to signify a reasonably high reliability. The questionnaire items regarding each of the independent variables were tested and the results were as follows:

**Table 2.** Reliability Statistics for the Questionnaire Items

| *Variable* | *Number of Items* | *Cronbach's Alpha* |
|---|---|---|
| Audit Regulatory Framework | 7 | 0.743 |
| Provision of Non-Audit Services | 6 | 0.694 |
| Auditor Rotation | 4 | 0.681 |
| Auditor's Economic Dependence and Audit Fee | 5 | 0.779 |
| Audit Committee | 6 | 0.839 |
| Internal Audit Function | 4 | 0.761 |
| Socio-cultural and Ethical Factors | 3 | 0.879 |
| Audit Firm Size | 4 | 0.936 |

### 3.5. Sample Size Selection

Out of 1,530 official listed auditors representing the audit companies in Bahrain (LMRA, 2011), 307 auditors were represented in the sample size for the quantitative study in order to achieve 95% confidence level, and 5% confidence interval. The aim of applying the above scientific measures for sample size calculation was to provide reasonable assurance that the sample size fairly represents the population. For the purpose of this research, the non-probability sampling approach was utilized, wherein a mixture of convenience and snowball methods were particularly adopted. These methods were mainly selected due to their practicality, time efficiency, as well as the unavailability of the specific list of auditors operating in the audit firms. In order to reach the desired sample more efficiently, the questionnaires were distributed both electronically and as a hard copy to a number of auditors representing a variety of audit firms in Bahrain.

### 3.6. Data Collection and Analysis

The numerical data will be analyzed through SPSS, whereby the responses of the participants will be coded numerically in the software, followed by a descriptive statistics analysis. Subsequently, a multiple regression approach was applied to find out the correlation among variables and to test the research hypothesis.

## 4. FINDINGS AND ANALYSIS

### 4.1. Descriptive Analysis

The first part of the analysis was related to the demographic information followed by an in-depth descriptive study for the research variables. It is important to note, however, that the results of the descriptive analysis were not conclusive in nature, meaning that the research findings were only confirmed during the empirical analysis stage when

more advanced statistical tools were incorporated for hypothesis testing.

### *4.1.1. Demographical Analysis*

Out of the 307 respondents, 59% were males, while 41% were females. Moreover, 58.6% of the participants belong to big-4 audit firms, whereas 41.4% work in a non-big-4 audit firms. The representation of auditors from different audit companies was deemed important to highlight any possible similarities or differences in their views towards AI. The majority (64.5%) of the respondents were bachelor's degree holders, whereas 32.2% of the respondents were Master's degree holders. It is worth noting that 41.7% of the respondents hold one professional certificate, and 13% of the participants obtained two professional certificates, while 40.1% of the auditors represented in the sample have not earned any professional certificate (Appendix 1).

### *4.1.2. Analysis of Independent Variables*

• *Audit Regulatory Framework*

The influence of the audit regulatory framework was measured through nine statements. 63.2% of the respondents agreed that the current framework in Bahrain is adequate to safeguard AI. While 15.6% of the respondents disagreed that the regulatory authority is an enhancing factor, 13.4% of the participants were undecided on whether the rules and regulations have a positive effect on AI. The overall mean of this statement was 3.515 indicating that respondents predominantly agree that the audit regulatory authority in Bahrain has a positive effect on AI.

In terms of the adoption of the ISAs and its impact on AI and objectivity, the vast majority of respondents either agreed (65.5%) or strongly agreed (27.7%) that the adoption of ISAs in Bahrain positively affects AI & objectivity. It is worth noting that the extent of auditors' consensus concerning this statement which equals 82.6% indicates that they have greater confidence on ISAs when compared to their local protocols. The participants consider the existence of an audit regulatory framework as a favorable factor, whereby the means of all the seven related statements were above 3.5 indicating noticeable agreements. The standard deviation of all seven statements was less than one, suggesting an overall consistency and low variation among responses (Appendix 2).

• *Provision for Non-Audit Services*

Interestingly, 72.3% of the respondents agreed that when an auditor provides NASs to the same audit client, the auditor may tend to be biased. On the other hand, only 6.2% disagreed that such adverse effect exists. Out of the total number of the participants, 63.2% agreed and 26.1% strongly agreed that when an auditor provides NASs to an existing audit client, the auditor may sacrifice his/her objectivity. Accordingly, 72.3% of the respondents agreed that the confidence in the auditor's ability to remain independent would be affected when an auditor provides NASs to an existing audit client. Nevertheless, when respondents were asked whether audit firms should be totally banned from providing NASs, 35.8% disagreed and 6.5% strongly disagreed that such action needs to be taken. While 46.9% agreed that audit firms should be totally banned from providing NASs, 9.4% of the respondents were neutral. The variations in responses are clearly evident by the mean of 3.007 (neutral) and the standard deviation of 1.0695. Moreover, 68.4% of the respondents agreed that if auditors were to provide NASs, such services should be offered to non-audit clients only. Overall, the responses indicate that NASs are mostly viewed as a threatening factor to AI (Appendix 3).

• *Auditor Rotation*

Of the total participants, 65.9% agreed that a lengthy relationship between an auditor & a client is a threat to AI & objectivity. Even though auditors agreed to a certain extent that a lengthy relationship between an auditor & a client is a threat to AI & objectivity, their opinions differed on whether audit partner rotation is the optimal safeguard in this respect. It is also noted that many past frauds such as Enron, WorldCom, Tesco and Satyam, happened where same auditor was conducting audit for very long period (Appendix 4).

• *Auditor's Economic Dependence and Audit Fee*

This variable was studied through five statements. 54.4% respondents agreed that the income from audit fees received from a single audit client could cause an audit firm to become economically dependent upon that client. Whilst 14.7% of the respondents were undecided, 10.1% of the respondents dis-agreed that audit fees results in economic dependence for audit firms. When analyzing the effect of audit fees and economic dependence on auditor independence, 45.6% of the respondents agreed that even though an audit firm is economically dependent upon its client, it could still maintain its independence & objectivity. This can be practically justified by the intense competition surrounding the audit market, wherein audit firms are thereby required to sustain their reputation through preserving a high level of audit quality and reliability (Appendix 5).

• *Audit Committees*

With reference to role of audit committees (ACs) as an AI safeguard, 62.2% of the respondents agreed that the main role of an audit committee of appointing & reappointing of the external auditors is expected to enhance AI & objectivity. Additionally, 14.7% strongly agreed that the main function of ACs can leads to safeguarding AI & objectivity, while 15.3% of the respondents disagreed that there is a significant relationship between the ACs function and AI. In terms of the specifications of the ACs function, the vast majority of respondents either strongly agreed or agreed that if one member of the audit committee has accounting & financial expertise, the audit committee will highly likely result in greater AI. Statistically, the average mean for this statement equals to 4.215 indicating an 84.3% agreement. Apart from that, the respondents believed that the second important ACs function that may safeguard AI is when it consists of a majority of independent & non-executive directors as key members in the audit committee, with an average mean of 4.212 (Appendix 6).

• *Internal Audit Function*

43.3% of the participants agreed that the existence of an internal audit function (IAF) safeguards the independence & objectivity. In this regard, 59.6% did not agree that external auditors rely on the findings of internal auditors in a way that can weaken their independence & objectivity (Appendix 7).

• *Socio-cultural & Ethical Factors*

58.3% of the respondents agreed that socio-cultural factors are positively correlated with AI &

objectivity. This suggests that the perceptions regarding AI depending on the cultural environment where auditors operate. For example, 46.3% of the respondents agreed that receiving gifts from clients compromises AI & objectivity. In relation to audit firm size, the respondents differed in their opinions in all four statements. More specifically, 52.4% of the respondents agreed that the size of the audit firm is positively associated with audit quality & independence, while 27.4% disagreed with the statement (Appendix 8).

#### *4.1.3. Independent Two-Sample T-Test (Big-4 Audit Firms vs. Non Big-4 Audit Firms)*

**Table 3.** Independent Two-Sample T-Test (Big-4 Audit Firms vs. Non Big-4 Audit Firms)

| *Variable* | *Mean* | | *Mean Difference* | *t* | *Sig (2-tailed)* |
|---|---|---|---|---|---|
| | *Big-4 Audit Firm* | *Non Big-4 Audit Firm* | | | |
| Audit Regulatory Framework | 3.9857 | 3.7998 | 0.18594 | 3.213 | 0.001 |
| Non-Audit Services Provision | 3.8630 | 3.8031 | 0.05981 | 0.936 | 0.350 |
| Mandatory Audit Rotation | 3.4861 | 3.4252 | 0.06091 | 1.163 | 0.352 |
| Auditor's Economic Dependence, Competition & Audit Fees | 3.4211 | 3.5496 | -0.1285 | 0.931 | 0.072 |
| Audit Committee | 3.9315 | 3.9396 | -0.00815 | -1.803 | 0.921 |
| Internal Audit Function | 2.8944 | 3.2500 | -0.35556 | -3.916 | 0.000 |
| Socio-cultural& Ethical Factors | 4.0722 | 3.6982 | 0.37406 | 3.454 | 0.001 |
| Audit Firm Size | 3.6319 | 2.937 | 0.69494 | 6.374 | 0.000 |

The table above aimed to explain the possible differences between Big-4 auditors and Non-big 4 auditors with regards to their perceptions about AI influencing factors.

With reference to regulatory authority, Big-4 auditor agreed that a relationship exists between regulatory authority and AI, signifying an average mean equal to 3.9857. However, the average mean for Non-big 4 auditors was equal to 3.7998 resulting in a mean difference of 0.18594. The significance value of 0.000 (less than 0.05) indicates that the Big-4 and Non-big 4 auditors were significantly different in terms of the regulatory framework variable. In this respect, the significant difference was in favor of the Big-4 auditors. One of the possible reasons for such difference in perceptions may be because big-4 auditors are highly involved in CBB related rules and guidelines, especially when auditing banks and large financial institutions. In other words, big-4 auditors may better appreciate the importance of the audit regulatory framework, since it is more applicable to their high-profile audit engagements.

The second variable that is NASs Provision had an average mean of 3.8630 for the responses of the Big-4 auditors, compared to an average mean 3.8031 for the responses of the Non-big 4 auditors, leading to mean difference of 0.05981. The significance level of 0.350, however, was not inadequate to conclude that there is a significant difference between Big-4 and Non-big 4 auditors concerning NASs Provision, as the significance level was higher than 0.05.

Likewise, the responses for the MAR variable showed an average mean of 3.4861 for Big-4 auditors compared to 3.4252 for Non-big 4 auditors, both of which were between neutral and agree ranges. Yet, the significance value of 0.352 (greater than 0.05) indicates insignificant difference in perceptions. This may be possibly due to auditors (both Big-4 and Non-Big 4) witnessing similar benefits and inadequacies in the current audit partner rotation, which results in parallel opinions in this matter.

Interestingly, "Audit Firm Size" variable was subject to significant differences in perceptions between Big-4 audit firms and Non-Big 4 audit firms. The average mean for Big-4 auditors was equal to 3.6319, compared Non-big 4 auditors with an average mean equal to of 2.937 resulting in a mean difference of 0.69494 and a significance level of 0.000. While Big-4 auditors generally agreed that the size of the audit firm is positively associated with audit quality & independence, Non-big 4 audit firms were neutral. The choice of the participants may incorporate potential bias towards the company that they work for in their responses.

### 4.2. Empirical Analysis

The multiple regression analysis was conducted to empirically examine the relationship between the dependent variables (i.e. presumed AI determinants) and AI.

The main reason for choosing the multiple regression model for this study was due to the fact the number of independent variables were eight in total, all of which are assumed to have influence on one dependent variable (i.e. auditor independence).

The following table illustrates the results for this analysis:

**Table 4.** Multiple Regressions (Model Summary, ANOVA, and Coefficients)

| *Multiple Regression Analysis Variable* | *Beta* | *T-Test* | *Sig.* |
|---|---|---|---|
| Audit Regulatory Framework | 0.192 | 7.769 | 0.000 |
| Non-audit Services Provision | 0.221 | 9.972 | 0.000 |
| Mandatory Audit Rotation | 0.041 | 2.122 | 0.035 |
| Auditor's Economic Dependence, Competition & Audit Fees | 0.168 | 7.83 | 0.000 |
| Audit Committee | 0.172 | 9.388 | 0.000 |
| Internal Audit Function | 0.144 | 10.592 | 0.000 |
| Socio-cultural & Ethical Factors | 0.135 | 10.388 | 0.000 |
| Audit Firm Size | 0.124 | 10.04 | 0.000 |
| R | 0.927 | | |
| R Squared | 0.860 | | |
| F | 22.871 | | |
| Sig (F) | 0.000 | | |

The multiple correlation coefficients (R) are equal to 0.927, indicating a strong positive relationship between the independent variables and the dependent variable. Such noticeable association between the dependent variables and AI has been evident in previous studies that were conducted in different jurisdiction. While the high value of R signified relatively good level of prediction, it is simply deemed a measure of strength, and not causation among variables.

The coefficient of determination (also referred as R Squared) is equal to 0.860, which describes the proportion of variance in the dependent variable (i.e. auditor independence) that can be explained by the independent variables (i.e. AI influencing factors). In this regards, the independent variables explain 86% of the variability of the dependent variable (i.e., auditor independence), while the remaining percentage of 14% are explained by other factors.

Based on the previous results, the factors were ranked according to their Betas as follows (i.e. the higher the variable beta, the greater the influence on Auditor independence):

**Table 5.** Ranked Unstandardized Coefficients (beta) for Independent Variables

| *Ranking* | *Variable* | *beta* |
|---|---|---|
| 1 | Non-audit Services Provision | 0.221 |
| 2 | Audit Regulatory Framework | 0.192 |
| 3 | Audit Committee | 0.172 |
| 4 | Auditor's Economic Dependence, Competition & Audit Fees | 0.168 |
| 5 | Internal Audit Function | 0.144 |
| 6 | Socio-cultural & Ethical Factors | 0.135 |
| 7 | Audit Firm Size | 0.124 |
| 8 | Mandatory Audit Rotation | 0.041 |

As illustrated in the figure above, the most influential factors affecting AI & objectivity were NASs Provision, Audit Regulatory Framework and the Audit Committee. These three variables ranked the top three in terms of beta values (0.221, 0.192, and 0.172 respectively). It is noteworthy that these variables have common characteristics, which is that they are all regulatory in nature. In other words, the results suggest that auditors perceive the existence of governing audit functions as a key safeguard to AI & objectivity. While this result does not necessarily indicate the adequacy of the entire regulatory framework, it still highlights the significant role of several audit functions (i.e. establishment of ACs, NASs provisions) in improving the overall audit quality.

Socio-cultural & Ethical Factors, Audit Firm Size as well as MAR were ranked in the last three positions, with beta values of 0.135, 0.124 and 0.041 correspondingly. One of the reasons why MAR was not regarded as a significant AI enhancing factor could be owing to the possibility that several auditors witnessed inadequacies concerning the mechanism and application of such practice. Potential weaknesses may include close relationships between audit firms and clients, which cannot be mitigated by merely rotating the audit partners. Apart from that, the relations among audit partners themselves may be associated with a high degree of nepotism affecting the credibility of audit rotation.

### *4.2.1. Hypothesis Testing*

Based on the findings from the regression model, a definite conclusion can be reached with regards to the research hypothesis. If the significance level (p-value) is less than 0.05, it can be concluded that the coefficients are statistically significantly different to zero, meaning that the null hypothesis should be rejected. By applying the criteria, it is clearly demonstrated that the significance level (p-value) was equal 0.000 (less than 0.05) in relation to "Regulatory Authority", " NASs Provision", "Economic Dependence, Competition & Audit Fee", "IAF", "Socio-cultural & Ethical Factors" as well as "Audit Firm Size". Accordingly, and the related alternative sub hypotheses were accepted, suggesting that there is a significant relationship between each of these factors and auditor independence.

Although the significant level for the "MAR" was 0.035, it was still less than 0.05, resulting in accepting the alternative hypothesis that assumes significant relationship between MAR and AI. Since the F-value is 22.871 (more than 1.65) and the main significance level was 0.000 (less than 0.05), the main null hypothesis was rejected. Therefore, it can be statistically concluded that there is a significant relationship between the presumed AI influencing factors and AI in Bahrain.

To illustrate, the table below restates the research hypothesis followed by the hypothesis test result as per the criteria:

**Table 6.** Hypothesis Testing

| ***Main Hypotheses*** | |
|---|---|
| | ***Result*** |
| H0: There is no significant relationship between the presumed *AI influencing factors* and AI in Bahrain. | Reject Null |
| H1: There is a significant relationship between the presumed *AI influencing factors* and AI in Bahrain. | Accept Alternative |
| ***Sub Alternative Hypotheses*** | |
| $H1_1$: There is a significant relationship between the *audit regulatory framework* and AI in Bahrain. | Accept |
| $H1_2$: There is a significant relationship between the *provision of non-audit services* and AI in Bahrain | Accept |
| $H1_3$: There is a significant relationship between the *mandatory audit rotation* and AI in Bahrain | Accept |
| $H1_4$: There is a significant relationship between the *auditor economic dependence* and AI in Bahrain. | Accept |
| $H1_5$: There is a significant relationship between the *audit committees function* and AI in Bahrain. | Accept |
| $H1_6$: There is a significant relationship between the *internal audit function* and AI in Bahrain. | Accept |
| $H1_7$: There is a significant relationship between *socio-cultural factors* and AI in Bahrain. | Accept |
| $H1_8$: There is a significant relationship between the *auditing firm size* and AI in Bahrain. | Accept |

### 4.3. Research Discussion

The study suggested the dominance of NASs provision in safeguarding their objectivity and impartiality. In this context, the majority of the respondents considered that carrying out NASs to audit clients jeopardizes AI and objectivity, which requires imposing strict regulatory measures to mitigate the potential threats.

In terms of the influence of the overall audit regulatory framework on AI, the findings agree that the ISAs as well as corporate governance codes have played significant role in reforming the audit profession. While, Moore et al. (2006) argues that the establishment of new standards is inadequate and that the reforms are usually designed in a way that serves special interest, such argument is mostly affected by specific controversial rules such as the MAR. According to the findings, Audit Partner Rotation has been considered as the least significant safeguard to AI, yet this particular aspect shall not affect the prominence of the audit regulatory framework as a whole. In this regards, the findings of the research supports the standpoint of Nelson (2006) who concluded that the outcomes of any regulations should not be evaluated from single incidents.

Nevertheless, Baydoun et al. (2013) have criticized the implementation of corporate governance including audit committee function, whereby they concluded that Bahrain achieved lower scores in corporate governance scale. This suggests that the opinions of stakeholders concerning ACs may differ from the perceptions of auditors and companies, signifying the need for reforms to strengthen the role of ACs in preserving AI and improving audit quality.

Apart from audit governing structure, the findings highlighted a strong positive correlation between 'socio-cultural & ethical factors' and auditor objectivity. Furthermore, the results are partially comparable with the findings of Abu-Tapanjeh (2009) who concluded that there is strong relationship between business values and Islamic guidelines affecting Bahrain business environment including the audit profession. It is worth noting that even though the research findings show that ethical beliefs have some influence on auditor independence, the existence of functional regulations and auditing standards is deemed as a more influential factor.

As for the economic factors and the influence of the audit fee, the research findings relatively agree with Reynolds and Francis (2001) who found that competition among audit firms adds more pressure on auditors to maintain ethical behaviors, so as to preserve their reputation in the market and avoid litigation risks. Finally, the research findings noticeably agree with Al-Ajmi and Saudagaran (2011) who concluded that auditor being a Big-4 is considered as enhancing factor to auditor independence. The findings also agree that the audit firm size is deemed as one of the least significant influencing factors. Whereas Law (2008) concluded that there are no major differences between the perspectives of Big-4 and non-Big 4 auditors with regards to AI, the findings of the research highlighted some significant variations in perceptions especially in relation to the influence of "audit firm size" and "socio-cultural & ethical factors" on auditor objectivity.

## 5. CONCLUSION

Our research inferred that AI is highly correlated with a number of variables that consist of the "regulatory authority", "NASs provisions", "MAR", "economic dependence, competition & audit fees", "audit firm size", "IAF", "ACs" as well as "socio-cultural & ethical factors". Whilst the level of association varies among the factors, the research has indicated that all of the preceding determinates play significant roles as safeguards to AI. Nonetheless, the audit market in Bahrain seems to be mainly affected by the international business environment, as the dominance of the licensed Big-4 companies remains apparent. While the existence of Big-4 companies is a key advantage, the role of local audit firms should be noticeably enhanced to promote Bahrain as a leading hub for accounting and assurance services in the region, thereby move a step towards achieving Bahrain's Economic Vision 2030.

### 5.1. Recommendations

Based on the findings of the research as well as the underlying literature review, it is recommended to apply the following to enhance AI in Bahrain:

- *Oversee the audit firms and accounting professionals through the formation of an independent audit quality board:* Although audit firms adopt specific internal quality control mechanisms to maintain audit quality, there is currently no independent group to objectively and systematically evaluate the effectiveness of these quality measures. If a professional body oversees audit firms, the reliability of the audit reports can noticeably increase. Ideally, such independent body shall be responsible for undertaking regular quality reviews, issuing relevant reports, and communicating their findings to the regulatory authorities and the public to assist in their decision-making. This may also encourage audit firms to adhere with acceptable ethical standards.
- *Restructure the roles and responsibilities of the audit regulatory authorities to achieve a higher level of cooperation and consistency:* Whilst the audit market is officially regulated through the MOIC as per the Auditors Law (No. 26 of 1996), the role of the CBB is also apparent. Particularly, CBB has issued an "Auditors and Accounting Standards Module" as part of the CBB rulebook, in which it sets out certain obligations that external auditors have to adhere to, as a condition of their appointment by specialized licensees. Although the current structure may be deemed satisfactory, it can be argued that it lacks clear mechanisms and defined responsibilities, resulting to undesirable degree of confusion. Therefore, the relationships among the concerned parties (i.e. Ministry of Industry and Commerce, CBB, audit firms, audit clients, international standard setters, quality assurance bodies, local legislatures and the judicial authority) should be thoroughly explained through designing a concrete local audit framework to serve this purpose. This framework should identify the level of authority for each party by clearly identifying the assigned roles and responsibilities. Additionally, the framework should be designed in a way that specifies the authorized regulatory bodies responsible for maintaining specific AI safeguards.

• *Adopt a joint-audit practice for the listed companies:* In order to assure higher degree of independence and competence, it is recommended to consider adopting a joint-audit practice, wherein two auditing firms prepare a single shared audit report for the same client; hence they share the responsibility for completing the audit. In fact, such practice is commonly used in few regions including France, Denmark, Saudi Arabia and Switzerland. One of the underlying advantages is that joint audit can result in greater audit quality, as two audit firms can be more capable and competent in auditing complex accounting treatments or irregularities. Moreover, this approach is expected to encourage both audit firms to act more professionally and ethically to maintain their reputation as a result of the intense market competition. In other words, joint audit offers a communal check of each auditor's diligence, thereby reinforcing auditors' independence and objectivity, yet it will increase the audit fees for client.

• *Amend the existing corporate governance code to include more restrictive measures in relation to audit committees, non-audit services and auditors' rotation:* Despite the fact that the code of corporate governance has addressed the role of audit committees in guarding auditor independence, the code lacks strict legal enforcement in several aspects. The code contains the "comply or explain principle", in which listed companies shall either apply the guidelines of the code or depart from the application of the guidelines subject to disclosing the reasons for noncompliance. It can be argued that such principle results in adverse flexibility, whereby joint stock companies may waive the application of several practices that are deemed important to protect auditor independence. Therefore, it is recommended to limit the application of the "comply or explain principle" to certain rules regarding the audit committee function, non-audit services and mandatory audit rotation. In contrast, such rules ought to be amended in a manner that includes more legal restrictions, to achieve greater level of audit quality assurance. In this context, the rule of audit partner rotation should be replaced with audit firm rotation, and audit committees have to be strictly prohibited from demanding their external auditors to perform any type of non-audit services.

### 5.2. Study Limitations and Suggestions for Future Research

The research was specifically applied in a Bahraini context and hence the findings may be or may not be applicable to other countries that follow different regulatory frameworks. Furthermore, the scope of this research was clearly limited to one group (i.e. auditors), which means that the perceptions of other related parties including audit clients, and other stakeholders were not assessed. While the association between AI influencing factors and AI were adequately assessed through the structured questionnaire and statistical analysis, future research may incorporate qualitative measures, in addition to the questionnaire instrument, to gain in-depth understanding of the perceptions of auditors about AI, in relation to the cultural and legal borders in Bahrain. In terms of future research, comparative studies would be useful, whereby the extent of AI and audit regulatory frameworks can be critically analyzed, compared and contrasted among countries.

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## APPENDICES

**Appendix 1.** Auditors' Demographic Information

| *Variable* | | *Options* | *Frequency* | *Percentage* |
|---|---|---|---|---|
| 1 | Gender | Male | 181 | 59.0% |
| | | Female | 126 | 41.0% |
| | | Total | 307 | 100.0% |
| 2 | Age Group | 30 years or less | 111 | 36.2% |
| | | 31 -40 | 142 | 46.3% |
| | | 41 - 50 | 45 | 14.7% |
| | | 51 or above | 9 | 2.9% |
| | | Total | 307 | 100.0% |
| 3 | Type of Company | Big 4 Audit Firm | 180 | 58.6% |
| | | Non- Big 4 Audit Firm | 127 | 41.4% |
| | | Total | 307 | 100.0% |
| 4 | Work Experience | Less than 5 years | 112 | 36.5% |
| | | 5 - 10 years | 109 | 35.5% |
| | | 11 - 15 years | 47 | 15.3% |
| | | More than 15 years | 39 | 12.7% |
| | | Total | 307 | 100.0% |
| 5 | Highest Academic Qualification | Diploma | 0 | 0.0% |
| | | Bachelor's Degree | 198 | 64.5% |
| | | Master's Degree | 99 | 32.2% |
| | | PhD | 10 | 3.3% |
| | | Total | 307 | 100.0% |
| 6 | Field of Study | Accounting | 197 | 64.2% |
| | | Commerce | 16 | 5.2% |
| | | Finance | 28 | 9.1% |
| | | Business | 54 | 17.6% |
| | | Economics | 12 | 3.9% |
| | | Total | 307 | 100.0% |
| 7 | Professional Qualifications | No professional qualification | 123 | 40.1% |
| | | 1 professional qualification | 128 | 41.7% |
| | | 2 professional qualifications | 40 | 13.0% |
| | | 3 professional qualifications | 14 | 4.6% |
| | | More than 3 professional qualifications | 2 | 0.7% |
| | | Total | 307 | 100.0% |

**Appendix 2.** Frequency Table for Regulatory Authority Variable

| *Audit Regulatory Authority* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S1-The current audit regulatory framework in Bahrain is adequate to safeguard AI& objectivity | 4.9 | 63.2 | 13.4 | 15.6 | 2.9 | 3.515 | 70.3 | 0.9159 |
| S2-The audit law issued by the Ministry of Industry & Commerce is adequate to safeguard AI& objectivity | 6.5 | 61.9 | 12.7 | 16 | 2.9 | 3.531 | 70.6 | 0.9366 |
| S3-The adoption of International Standards on Auditing in Bahrain positively affects AI& objectivity | 27.7 | 65.5 | 0.7 | 4.6 | 1.6 | 4.13 | 82.6 | 0.7729 |
| S4-A peer review program that focuses on audit firms' compliance with audit & ethical standards could safeguard AI | 16 | 65.1 | 8.1 | 8.1 | 2.6 | 3.837 | 76.7 | 0.8817 |
| S5-Regular inspections of the audit documents of public listed companies could safeguard AI | 16.6 | 77.2 | 2.3 | 2.9 | 1 | 4.055 | 81.1 | 0.6264 |
| S6-Immediate investigations on auditors suspected of non-compliance with audit & ethical standards could safeguard AI | 20.2 | 70.4 | 5.5 | 3.3 | 0.7 | 4.062 | 81.2 | 0.6662 |
| S7-Disciplinary actions & sanctions imposed on auditors who fail to comply with audit & ethical standards could safeguard AI | 38.8 | 53.7 | 0.7 | 5.5 | 1.3 | 4.231 | 84.6 | 0.8256 |

**Appendix 3.** Frequency Table for Non-Audit Services Variable

| *Non-Audit Services Provision* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S8-When an external auditor provides non-audit services to an existing audit client, the auditor may tend to be biased in favor of the client | 20.2 | 72.3 | 0 | 6.2 | 1.3 | 4.039 | 80.8 | 0.7531 |
| S9-When an auditor provides non-audit services to an existing audit client, the auditor may sacrifice his/her objectivity in order to retain that high-non-audit-fee-paying client | 26.1 | 63.2 | 4.2 | 5.5 | 1 | 4.078 | 81.6 | 0.7799 |
| S10-When an auditor provides non-audit services to an existing audit client, the confidence in the auditor's ability to remain independent would be affected | 19.9 | 72.3 | 4.2 | 2 | 1.6 | 4.068 | 81.4 | 0.6802 |
| S11-Audit firms should be totally banned from providing non-audit services | 1.3 | 46.9 | 9.4 | 35.8 | 6.5 | 3.007 | 60.1 | 1.0695 |
| S12-If auditors were to provide non-audit services, such services should be offered to non-audit clients only | 23.1 | 68.4 | 0.7 | 6.2 | 1.6 | 4.052 | 81.0 | 0.7945 |
| S13-The audit committee's approval should be sought before any non-audit services could be provided by an existing company auditor | 8.5 | 74.9 | 4.2 | 11.4 | 1 | 3.785 | 75.7 | 0.7917 |

**Appendix 4.** Frequency Table for Mandatory Audit Rotation Variable

| *Mandatory Audit Rotation* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S14-A lengthy relationship between an auditor & a client is a threat to AI& objectivity | 18.9 | 65.5 | 7.2 | 7.2 | 1.3 | 3.935 | 78.7 | 0.8139 |
| S15-The implementation of audit partner rotation enhances AI& objectivity | 10.7 | 48.9 | 8.8 | 28.7 | 2.9 | 3.358 | 67.2 | 1.0945 |
| S16-The rule of audit *partner* rotation should be replaced with a rule of audit *firm* rotation | 25.4 | 59.9 | 7.2 | 5.2 | 2.3 | 4.01 | 80.2 | 0.8612 |
| S17-The likely benefits of audit *partner* rotation exceed the likely benefits of audit *firm* rotation | 2.9 | 19.2 | 16.9 | 49.5 | 11.4 | 2.528 | 50.6 | 1.0202 |

**Appendix 5.** Frequency Table for Auditor's Economic Dependence and Audit Fees Variable

| *Auditor's Economic Dependence, Competition & Audit Fees* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S18-Income from audit fees received from a single audit client could cause an audit firm to become economically dependent upon that client | 20.2 | 54.4 | 14.7 | 10.1 | 0.7 | 3.834 | 0.7668 | 0.8866 |
| S19- Even though an audit firm is economically dependent upon its client, it could still maintain its independence & objectivity from that client | 4.2 | 45.6 | 11.1 | 33.2 | 5.9 | 3.091 | 0.6182 | 1.0898 |
| S20-In deciding whether to invest in a company, I take into consideration the amount of audit fees the company pays to its auditor | 4.2 | 57.3 | 24.1 | 9.8 | 4.6 | 3.469 | 0.6938 | 0.8974 |
| S21-When an audit partner's income is dependent on total fees generated from a single audit client, his/her ability to remain independent may be affected | 0.3 | 71.7 | 14.3 | 13 | 0.7 | 3.58 | 0.716 | 0.7427 |
| S22-Investment decisions in a company would be affected if auditors were perceived to be economically dependent upon that company | 2.9 | 53.4 | 24.8 | 18.2 | 0.7 | 3.397 | 0.6794 | 0.8392 |

**Appendix 6.** Frequency Table for Audit Committee

| *Audit Committee* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S23-The main role of an audit committee of appointing & reappointing of the external auditors is expected to safeguard AI& objectivity | 14.7 | 62.2 | 5.5 | 15.3 | 2.3 | 3.717 | 0.7434 | 0.9707 |
| S24-The existence of an audit committee may safeguard AI if they are active by holding more than 4 meetings a year | 10.7 | 60.9 | 7.8 | 14.7 | 5.9 | 3.56 | 0.712 | 1.0535 |
| S25-The existence of an audit committee may safeguard AI if they review & approve audit fees | 18.6 | 68.1 | 1 | 11.4 | 1 | 3.919 | 0.7838 | 0.8574 |
| S26-The existence of an audit committee may safeguard AI if they are composed of a majority of independent & non-executive directors | 38.1 | 53.4 | 1 | 6.5 | 1 | 4.212 | 0.8424 | 0.8348 |
| S27-The existence of an audit committee may safeguard AI if one member of the audit committee has accounting & financial expertise | 39.4 | 51.8 | 1 | 6.5 | 1.3 | 4.215 | 0.843 | 0.859 |
| S28-The existence of an audit committee may safeguard AI if there is a compulsory audit committee report that describes their activities & actions taken during the year | 25.1 | 55.7 | 13.7 | 3.9 | 1.6 | 3.987 | 0.7974 | 0.8323 |

**Appendix 7.** Frequency Table for Internal Audit Function

| *Internal Audit Function* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S29-The existence of an internal audit function safeguards the independence & objectivity of external auditors | 28.3 | 43.3 | 14.7 | 12.4 | 1.3 | 3.85 | 77% | 1.0115 |
| S30-The existence of internal audit function affects the extent of evidence needed by external auditors to issue an audit opinion | 4.6 | 51.8 | 12.1 | 27.4 | 4.2 | 3.251 | 65% | 1.0411 |
| S31-The existence of internal auditors limits the scope of the audit to be performed by external auditors | 0.3 | 26.7 | 6.2 | 59 | 7.8 | 2.528 | 51% | 0.9811 |
| S32-External auditors rely on the findings of internal auditors in a way that can weaken their independence & objectivity | 0.3 | 27 | 5.9 | 59.6 | 7.2 | 2.537 | 51% | 0.9774 |

**Appendix 8.** Frequency Table for Socio-cultural & Ethical Factors

| *Socio-cultural& Ethical Factors* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S33-If auditors maintain friendly relationship with their clients, their reliability will be questioned | 25.1 | 44.6 | 5.9 | 19.2 | 5.2 | 3.651 | 73% | 1.196 |
| S34-Receiving gifts from clients compromises AI& objectivity | 38.4 | 46.3 | 5.2 | 8.5 | 1.6 | 4.114 | 82% | 0.9549 |
| S35-Socio-cultural factors are positively correlated with AI& objectivity | 26.7 | 58.3 | 4.6 | 7.8 | 2.6 | 3.987 | 80% | 0.9287 |

**Appendix 9.** Frequency Table for Audit Firm Size

| *Audit Firm Size* | *%* | | | | | *Mean* | *%* | *Standard Deviation* |
|---|---|---|---|---|---|---|---|---|
| | *Strongly Agree* | *Agree* | *Neutral* | *Disagree* | *Strongly Disagree* | | | |
| S36-The size of the audit firm is positively associated with audit quality & independence. | 13.7 | 52.4 | 4.6 | 27.4 | 2 | 3.485 | 69.7% | 1.0917 |
| S37-The Big Four firms are more risk averse in respect of damage to their reputation from public scandals & or audit failures. | 13 | 55.4 | 4.9 | 21.5 | 5.2 | 3.495 | 69.9% | 1.1213 |
| S38-The Big Four firms are more independent & more likely to issue qualified reports. | 6.8 | 47.6 | 15.3 | 21.5 | 8.8 | 3.221 | 64.4% | 1.1274 |
| S39-Non-Big Four firms achieve a lower level of audit independence & objectivity. | 6.2 | 47.2 | 9.8 | 31.6 | 5.2 | 3.176 | 63.5% | 1.1033 |