

## The Relationship between Auditor's Independence and Financial Reporting Fraud Risk Assessment in the Yemeni Context

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© 2018 جامعة العلوم والتكنولوجيا، اليمن. يمكن إعادة استخدام المادة المنشورة حسب رخصة مؤسسة المشاع الإبداعي شريطة الاستشهاد بالمؤلف والمجلة.

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### **Abstract:**

This study aimed to examine the relationship between the external auditors' independence factors (IRF) and the financial reporting fraud risk assessment (FRFRA). A quantitative instrument was used to measure FRFRA and IRF. 254 external auditors participated in this study. Results revealed that social relations, and hiring and changing of the auditor were positively and significantly associated with FRFRA, whereas economic relations and audit fees were insignificant. The study serves to inform external auditors on how to improve their consideration of FRFRA. It also contributes to the limited body of research on FRFRA within IRF in the emerging economy. New variables were added to the external auditors' independence related factors. These variables included social relations, economic relations, and hiring and changing of the auditor. By adding these new variables, more contributions were made to the extant literature and more evidences were provided to the external auditors in the Republic of Yemen.

**Keywords:** Independence related factors, External auditor, Fraud risk assessment, Financial reporting, Yemen.

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## العلاقة بين عوامل استقلالية المدقق الخارجي و تقييم مخاطر الاحتيال في التقارير المالية في اليمن

### الملخص:

هدفت هذه الدراسة الى اختبار العلاقة بين عوامل استقلالية المدقق الخارجي و تقييم مخاطر الاحتيال في التقارير المالية، وتم استخدام منهج القياس الكمي لقياس تقييم مخاطر الاحتيال في التقارير المالية والعوامل المتعلقة بالاستقلالية، وقد شارك في هذه الدراسة 254 مدقق خارجي، وقد توصلت الدراسة الى أن العلاقات الاجتماعية وتعيين وتغيير المدقق لها علاقة إيجابية ذات دلالة احصائية بتقييم مخاطر الاحتيال في التقارير المالية، في حين أظهرت النتائج أنه لا يوجد للعلاقات الاقتصادية وأتعاب التدقيق علاقة ارتباط بتقييم مخاطر الاحتيال في التقارير المالية، وهذه الدراسة تساعد المدققين الخارجيين في تحسين توجهاتهم واهتمامهم بتقييم مخاطر الاحتيال في التقارير المالية، كما أن هذه الدراسة تساهم في توسيع نطاق البحث حول تقييم مخاطر الاحتيال في التقارير المالية في اطار العوامل المتعلقة بالاستقلالية في الاقتصاديات النامية، وقد تضمنت الدراسة متغيرات جديدة في عوامل استقلالية المدققين الخارجيين، وتمثل هذه المتغيرات في العلاقات الاجتماعية والعلاقات الاقتصادية وتوظيف وتغيير المدقق، ومن خلال تضمين هذه المتغيرات الجديدة، فإن هذه الدراسة تضيف المزيد من المساهمات إلى الدراسات السابقة، وكذلك المزيد من الأدلة التي تقدمها النتائج للمدققين الخارجيين في الجمهورية اليمنية.

الكلمات المفتاحية : العوامل المتعلقة بالاستقلالية، المدقق الخارجي، تقييم مخاطر الاحتيال، التقارير المالية، اليمن.

## Introduction:

The Treadway Commission (1987, p 2) "defined Financial reporting fraud as intentional or reckless misconduct, whether act or omission, that results in materially misleading financial statements". It may involve gross and deliberate misrepresentation of corporate registers as well as the misuse of accounting principles. Financial reporting fraud has become major costs for many organisations (Bierstaker, Brody, & Pacini, 2006). It occurs almost in all types of organizations and expensively causes persistent and increasing problems for businesses (Zahra, Korri, & Yu, 2005). The average estimated loss per organization from economic crimes globally is USD\$ 2.2 trillion over a two-year period (Price Waterhouse Coopers, 2003). According to a survey of Certified Fraud Examiners conducted between January 2008 and December 2009, organizations around the world lose an estimated five percent of their annual revenues to fraud. Practically, to the estimated 2009 Gross World Product, this figure translates to a potential total fraud loss of more than USD\$ 2.9 trillion (Association of Certified Fraud Examiners (ACFE), 2010). Between 2002 and 2010 losses, in terms of the USA Gross Domestic Product, have risen from USD\$ 600 billion to USD\$ 994 billion and the percentage of annual revenue lost to financial reporting fraud has risen from 5% to 7% (Association of Certified Fraud Examiners (ACFE), 2002, 2004, 2006, 2008, 2010). A recent study of 538 companies in 15 European nations found that fraud costs at least € 3.6 billion (Bierstaker et al., 2006; Zhuang, Thomas, & Miller, 2005). Therefore, there has been awareness among the communities on the possible negative effects of financial reporting fraud on economic conditions and its retarding effect on social development, thus making it pertinent to tackle and fight this happening as it has become a global issue (Organization for Economic Cooperation and Development, 2004).

Yemen is not an exceptional case. It has been ranked 152/168 in terms of corruption and fraud around the world (Organization Transparency International, 2015). Recently, Yemeni National Commercial Bank, Spinning and Weaving Factory, Alberh Cement Factory and Marib Poultry Company have collapsed particularly due to financial reporting fraud (COCA, 2007, 2009, 2010; Yemeni Central Bank, 2005). The collapse of these companies resulted in negative effect on the economic and social aspects of the country. In the market place, stakeholders' concerns started to emerge as to who should be responsible in assessing the financial reporting fraud before the company falls down. Many financial report users believe that assessment of

fraud is a primary audit objective and that the auditors have a responsibility for assessing all types of fraud (Dixon, Woodhead, & Sohlman, 2006; Fadzly & Ahmad, 2004; Lee, Ali, & Gloeck, 2008; Leung & Chau, 2001).

It should be noted that the previous studies on the dimension of auditors' attributes have largely been carried out in countries having Anglo-Saxon legislation like the U.S., UK, and similar markets and relying on the theories of agency and attribution. The studies have focused on these countries because their capital markets are well-developed and they have the same type of business and audit environments. Further, these studies have resulted in mixed and inconclusive results regarding financial reporting fraud (Alleyne, Persaud, Greenidge, & Sealy 2010; Glover, Prawitt, Schultz, & Zimbelman, 2003; Law, 2011; Pincus, 1989; Zimbelman, 1997). In spite of the contradictory and inconclusive findings on (FRFRA), such results of studies on non-Yemen settings cannot be generalized to the Yemeni context. This is because the setting of Yemen is different than that in the other countries in terms of politics, economics, and social and institutional aspects. For instance, the reports on auditor scandals and the qualified audit are uncertainly low, given the rising development of the audit market, the rise in demand for audit services, the various degrees of protecting investors from the enforcement of legal action, the structure of ownership, and individual cultural differences. Given the distinction of the Yemeni market from the other countries, focusing on the Yemeni context could provide quite a distinctive correlation results. In addition, using a different sample will provide more empirical evidence. Based on the researcher's best knowledge, empirical evidences that link external auditors' attributes and (FRFRA) in Yemen do not exist. To support this, Adimi (2007) noted that not much is known about the audit function in Yemen. Given this fact, there is a need for more empirical studies on the (FRFRA) in the Yemeni context to motivate the auditors to utilize self-attributes in risk assessment of financial reporting fraud.

Recently, the International Standard on Auditing (IAASB, ISA, No. 240, 2004), regarding the auditor's responsibilities for finding fraud in an audit of financial statements, categorizes fraud risk indicators (FRI) into three, namely, opportunity, pressure, and rationalization, that determine FRFRA. In the case of Yemen, although there has not been local accounting and auditing standards or code of ethics, the law governing the audit profession No. 26 (1999, Articles, 41 & 43) states that auditors are required to comply with general accepted auditing standards. Additional, Article 57 of the Yemeni

Law No. 26 (1999), states that the accountability towards the company's stockholders and users of the financial statements believes in the auditor. He/she has to recompense for any damages or losses he/she reasons such as violating the Yemeni law and the International Standards on Auditing, or issuing improper financial statements.

One important issue related to the auditors' responsibility regarding fraud risk assessment is whether they are able to carry out this responsibility. International Standards for the Professional Practice of Auditing issued by different international as well as national entities such as ISA No. 240 and International Auditing and Assurance Standards Board (IAASB) insist and stress in their standards that the external auditors should possess the attributes needed to perform their individual responsibilities in fraud assessment (Rahahleh, 2010; IAASB, ISA No. 240, Para. 21). Auditors' ability to fraud risk assessment is subject to the change in their characteristics (Albrecht & Romney, 1986; Beasley, 1996; Bell & Carcello, 2000; Colbert, 2000; Kaminski, Wetzel, & Guan, 2004; Loebbecke, Eining, & Willingham, 1989; Persons, 1995). Accordingly, any change in the characteristics of the auditors might likely cause changes in the extent to which financial reporting fraud is being assessed. The implication is that, in those processes, external auditors could indicate their distinctive priorities among them which can be categorized into wider patterns (Apostolou, Hassell, Webber, & Sumners, 2001; Kaminski et al., 2004).

There is a substantial amount of early and recent prior research on FRFRA. These studies focused on auditor's independence related factors such as audit fees (Hwang & Lin, 2008; Li & Lin, 2005).

Given the association between the IRF and FRFRA and the intention to reduce financial reporting fraud in Yemen, the purpose of this study was to determine IRF that are associated with FRFRA process in Yemen. The concepts of IRF and FRI will be reflected to external auditor's ability when undertaking FRFRA. Four IRF were examined in this study, namely, social relations, economic relations, hiring and changing of the auditor and audit fees.

### ► Legal Structure:

Yemen uses legal and institutional systems which establish an official framework that deals with the issues of crimes and prevention of fraud. Nonetheless, the quality of official laws and rules for the prevention of fraud as well as institutions has influenced Yemeni governance structures

(Moghram, 2007). Sometimes official laws are often neglected to give way for unofficial laws, like custom and tribal laws in Yemen. For instance, in a case where an employee with a tribal support is found guilty of fraud, the tribal law or customs is used to deal with the issue through the tribe intervention. As a result, fraud culprits and tribesmen always feel secure by the application of their unofficial laws and customs (Al-Dawsari, 2012). In addition, most cases of fraud are settled at the preliminary, investigating or prosecuting stages through the intervention of tribesmen or the sheikh (tribe leader) for settlements and reconciliations, out of the formal law (Al-Dawsari, 2012).

The essential question to ask in respect of the formal legal and institutional framework is how effective are the frameworks in ensuring good governance and prevention of fraud in Yemen? In order to provide an answer to this question there is a need to review and analyze the present state of official regulatory and organizational infrastructure that exists in Yemen (Moghram, 2007). To do this an evaluation of the present legislation and institutions is necessary in order to identify the ability of the legal and administrative measures executed for the prevention of the fraud increment in Yemen. Many steps have been taken by the Republic of Yemen (a unified state since May 1990) in order to develop a unified legal and judiciary system by eradicating the old systems associated with the previous parts of Yemen. Several laws and regulations were made in order to strengthen the rule of law, enhance administration public service, and promote criminal justice system with the aim of establishing a base for legal framework which assists institutions to control and prevent fraud.

Over the past two decades, there have been tremendous changes in the auditing profession in Yemen due to new policies executed by the Yemeni government. One of the changes that took place involves a gradual implementation of the privatization policy in 1995. This has changed the public companies' ownership with the issuance of Law no. 22 (1997). In order to verify public companies' the financial statements there is a rising demand for audit services in Yemen. As a result, the Yemeni government enacts law no. 31 (1992), which is fundamental to any audit control, and the revision of Law no. 26 (1999). These laws govern the external auditor's work when auditing Yemeni companies.

The Yemeni Association of Certified Public Accountants (YACPA) was established in 1987 with approved or certified accountants as members. It aims to promote accounting profession and auditing and to strengthen the investors' confidence on the capital market (Andersen, 1996). There is a difference between the new and old law in terms of licensing. The new law no. 26 (1999, Article 5) requires the following: a new degree in accounting and three to four years work experience in audit after graduation: one to two years after the Master's degree and six months to one year post-doctoral. The most significant changes in the new law are in the qualification and licensing requirements for accountants as stated by the governing body.

The objective of the Central Organization for Control and Auditing (COCA) is to achieve effective control over public funds and to ensure adequate management by maintaining economy, efficiency, and effectiveness. Article 4 in COCA Law no. 39 (1992) also ensures the improvement of performance, especially in public business organizations via external auditors. The Article emphasizes that external auditors should have three years of experience after earning their CPA license. Furthermore, COCA is responsible for the implementation of financial audit statements of the public economic units. This helps COCA to determine the validity and representation of financial reporting by sharing opinion in how such statement is prepared in accordance with generally accepted accounting principles and comments about the errors and irregularities (COCA, Law 39, 1992, article 7, para. 12).

### ► Literature Review and Hypotheses Development:

According to Gereish (2003), as long as there is a probability that deception will go undetected, the organization has a choice whether or not to comply with Generally Accepted Accounting Principles (GAAP) requirements. It is argued that given this possibility the decision to engage in financial reporting fraud requires that the organization must firstly rationalize its actions to commit financial reporting fraud as acceptable management behavior. Agency theory and FRFRA perspective are highlighted in this study in relation to firms' scandals and external auditors' failure to assess financial reporting fraud risk. The research method adopted in the study was a survey method and regression analysis was used to examine the relationship between factors such as education, training, experience, and responsibility perception and financial reporting fraud. Such a method was used in several previous studies (e.g. Brazel, Carpenter, & Jenkins, 2010; Lee et al., 2008; Loebbecke

et al., 1989; Moyes & Hasan, 1996; Moyes, 2007; Owusu-Ansah, Moyes, Oyelere, & Hay, 2002; Washalley, 2010). The research hypotheses are related to the relationship among external auditors' IRF (social relations, economic relations, hiring and changing of the auditor and audit fees) and FRFRA in Yemen.

– Financial Reporting Fraud Risk Assessment:

References to Financial Reporting Fraud (FRF) have been increasingly growing over the last decade and involved various areas of study. The areas of FRF are dealt with by various theories in different disciplines such as accounting, finance, management, ethics, organizational behavior, social psychology, and leadership. FRF can take different form such as deliberate omission or incorrect stating of organization's assets or obligations (Elliott & Willingham, 1980). The Treadway Commission (1987, p 2) defined FRF as "intentional or reckless misconduct, whether act or omission, that results in materially misleading financial statements. It may entail gross and deliberate distortion of corporate records as well as the misapplication of accounting principles." The outcome of this omission of incorrect statement can be organization's failure. In practical, FRF primarily consists of manipulating elements by overstating assets, sales and profit or by understating liabilities, expenses or losses. The auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud-SAS 99 and SAS 113; and many financial report users believe that the assessment of fraud is a primary audit objective, and that auditors are responsible for detecting all types of fraud (Dixon et al., 2006; Fadzly & Ahmad, 2004; Lee et al., 2008; Leung & Chau, 2001). Under this circumstance, these concerns in Yemen raise questions about the audit function, especially the process of FRF. However, over the past years, the issue of financial and accounting fraud was highlighted in the headlines of global mainstream news. Although accounting fraud is not a new phenomenon, recent cases involve much larger sums than previously.

In business environment, the auditor's opinion is used by users of financial reports (i.e., stockholders, the government, etc.) to identify whether the financial reports, equipped by the administration, are free of material misstatements that might result from errors (unintended misstatements) or fraud (intended misstatements) (Burks, 2006; Porter, 1983). Therefore, in

cases of FRF, many auditors are charged to law court. Consequently, lawsuits brought against the auditors over FRF weaken their credibility and tarnish the auditors' reputations (Dillon & Hadzic, 2009). These lawsuits put mounting pressure on the profession and challenge the responsibilities of the external auditor to assess FRF. The general views are that the responsibilities lie in the hands of the audit profession to embark on necessary steps and actions to regulate and lessen the effects of collapse of several major corporations by living up to their professional responsibility (KPMG & Australia, 2002). One of the well-known significant effects of fraud on the profession is the collapse of Arthur Andersen, one of the world's largest accounting and auditing firms (Bayer, 2002; Cote, 2002).

Therefore, there have been calls for improved quality of auditors to address the issue (Deis & Giroux, 1992; Lowensohn & Reck, 2004; O'Keefe, Simunic, & Stein, 1994). In this regard, the risk of the auditor increases when there is a suspicious case of FRF due to an expensive type of fraud, and management is in a position to directly or indirectly manipulate accounting records, presenting fraudulent financial information or overriding control (Hegazy & Kassem, 2010; IAASB, ISA, No. 240, para.19, 2004; Zimbelman & Albrecht, 2012).

In the United States, many laws have been enacted, such as the Sarbanes-Oxley law of 2002. Its objective is to safeguard the public interest and ensure the confidence of investors in financial markets, oversee the work done by the audit profession, protect the independence of external auditors, and ensure impartiality of the external auditor. These have the effect of protecting and upholding the interests of investors, creditors, and financial statement users (American Institute of Certified Public Accountants, 2005). Statement Auditing Standard [SAS] No. 99 resulted from a long history of the auditing profession efforts to clarify the auditor's role in FRF risk assessment, and it superseded SAS No. 82 (AICPA, 2002; Nieschwietz, Schultz, & Zimbelman, 2000).

In particular, great efforts were made in terms of addressing issues related to fraud risk assessment by AICPA. The Institute adopted many policies and procedures to assess risk and expose management fraud. To reinforce this, standards ISA No.240 and SAS No.99 were issued to recognize the auditors' responsibility in assessing and reporting management fraud. Recently, ISA No. 240, regarding the auditor's responsibilities which are related to fraud

in an audit of financial reports, classifies indicators (fraud risk indicators) into three categories – opportunity, pressure, and rationalization – that determine FRFRA.

Empirically, much investigations into perception of financial report users of auditors' responsibilities in fraud risk assessment have been conducted in many countries (e.g., in Australia: Beck, 1973; Monroe & Woodliff, 1994; in the U.S: Arthur Andersen & Co., 1974; Baron, Johnson, Searfoss, & Smith, 1977; Epstein & Geiger, 1994; in U.K: Humphrey, Turley, & Moizer, 1993; in Hong Kong: Low, 1980; in Singapore: Leung & Chau, 2001; in Egypt: Dixon et al., 2006; in Malaysia: Fadzly & Ahmad, 2004; and in Taiwan: Hsu, Kung, & James, 2013). The results of these studies confirm that users of financial reports believe that fraud risk assessment is the most fundamental objective of the auditors who play an important role to uncover all aspects of fraud.

One important issue related to the auditor's responsibility regarding fraud risk assessment is whether he or she is able to carry out this responsibility. International standards for the professional practice of auditing, issued by different international as well as national entities such as ISA No. 240, and those issued by the International Auditing and Assurance Standards Board (IAASB), insist and stress in their standards that external auditors should possess the attributes needed to perform their individual responsibilities in fraud assessment (IAASB, ISA, No. 240, para. 21; Rahahleh, 2010 ). Several empirical research studies (e.g. Albrecht & Romney, 1986; Beasley, 1996; Bell & Carcello, 2000; Colbert, 2000; Kaminski et al., 2004; Loebbecke et al., 1989; Persons, 1995) report that auditors' ability to assess fraud risk is subject to a change in their characteristics. Accordingly, any change in the characteristics of the auditors might likely cause changes in the extent to which FRF is assessed. The implication is that in those processes, external auditors could indicate their distinctive priorities, which can be categorized into wider patterns (Apostolou et al., 2001; Kaminski et al., 2004).

In the same context, researchers (Chen, 2005; De Lange, Paul, Jackling, & Anee, 2006; Graham & Bedard, 2003; Mahdi & Mansoury, 2009; Mendell, 1995; Rahahleh, 2006) outline several essential features and attributes to be a successful auditor. Independence is a primary characteristic that most stakeholders and users expect from the external auditor. Saksena (2008) documented that several attributes will help external auditors conduct more thorough audits in an effort to assess fraud.

In support of this, Washalley (2010) reports that previous studies have focused largely on the mechanism and procedure of audit operation, but not on the desired design and performance. Further, there is a substantial amount of early and recent research on FRFRA. This research focused on auditor's attribute dimensions, indicators of fraud, red flags (opportunity, pressure/incentive and attitude/rationalization). Previous studies investigated independent variables such as experience (Knapp & Knapp, 2001), ability, motivation, and prior probabilities about the existence of fraud (Pincus, 1984), auditor's penalty and audit fee (Matsumura & Tucker, 1992), auditor industry specialization (Carcello & Nagy, 2004), CPA qualification and types of auditor (Moyes & Hasan, 1996), tenure of auditor (Owusu-Ansah et al., 2002), responsibility (Gloeck, 1993; Lee et al., 2008; Porter, 1983), litigation (Bloomfield, 1997; Bonner, Palmrose, & Young, 1998; Feroz, Park, & Pastena, 1991; Palmrose, 1986), gender and auditor position (Moyes, Din, & Omar, 2009), knowledge of red flags and age (Yang, Moyes, Hamedian, & Rahdarian, 2010), data mining or auto-detection (Han, 2017; Zhou & Kapoor, 2011), and board of director composition (Beasley, 1996) performance (Gottschalk, 2017) and external auditor's brainstorming (Brazel et al., 2010).

This study investigates financial reporting fraud risk assessment (FRFRA) using fraud risk indicators (FRI), which according to ISA 240, is a proxy for the external auditors' ability to detect possible fraud at the company level. Previous studies re-used FRI independent variables and used (0/1) to measure FRFRA. This means if fraud happens in a company, it will be either (1) or (0).

According to ISA 240, FRI is divided into three categories: opportunity, pressure/incentive and attitude/rationalization. Opportunity is a condition where it is ideal for people to commit fraud more easily due to unsuccessful internal controls, insufficient supervision, or managers overriding internal controls. Pressure is a circumstance in which people have a financial incentive to commit fraud such as false overstating sales or incomes to collect their bonuses, or exerting pressure on managers to decrease real expenses to be under budgeted costs. Rationalization is a situation where people have certain attitudes and abilities to commit fraud and give justification with false reasons that they think are true. Thus, external auditors must be independent in assessing FRF so that the possibility of fraud occurrence could be minimized. The proposed external auditors IRF is dealt with in the following subsections.

– Social Relations (SR):

Bashtawi and Suleiman (2003) investigated the influences of the social factors on the external auditors' performance, independence and willingness to sign-off on financial statements that are materially misstated. It was found that the external auditor's commitment to the rules and regulations decrease the adverse consequences of those factors. In addition, it revealed that social factors have a positive influence on the external auditors' independence and performance. On the other hand, social influence, stressed within the accounting firm, has an impact on the auditors' willingness to sign-off on financial statements that are materially misstated (Alan & Dezoort, 2001; Kurihama, 2016).

Basodan, Mustafa, and Almotaz (2004) used the five point Likert scale to measure the effect of personal relationship on auditor change. The result showed that there was a positive relationship between personal relations and external auditor change. Al-Awaqleh (2008) found a positive significant relationship between SR and the company's going concern. Moreover, Simunic (1980) found that the duration of the association among the external auditor and the management of company led to provision of external auditor independence. Making close social relation between external auditor and the manager of organization will help to find indicators of personal pressure that may push managers to fraud. In the same context, social relation has no effect on the external auditor work if he follows professional audit responsibilities. Based on the above arguments that SR greatly influences FRFRA, the following hypothesis is proposed:

H1: SR of external auditors and FRFRA are positively associated.

– Economic Relations (ER):

A study by Amair (2011) using a qualitative research and semi-structured interviews as a tool for gathering data suggested that long-term audit tenure is helpful for the audit quality if certain risk factors like risk of auditor independence and risk of developing complacency. On the other hand, a study by Frankel, Johnson, and Nelson (2002) indicated that non-audit services are related to increased discretionary accruals, as well as to the realization of certain targeted earnings. Reports by Krishnamurthy, Zhou, and Zhou (2006) indicated that the abnormal returns for the clients of Andersen around the indictment of Andersen were negatively significant, especially

at the time the autonomy of external auditor was viewed to be tampered with. Zhang, Zhou, and Zhou (2007) submitted that when management and external auditor have tight ER (non-audit fees), there is a motivation for the external auditor to overcome any difficulties that may develop and offer a new unstained view. Also, Shockley (1981), Titard (1971), and Hartley and Ross (1972) indicated that ER has a negative effect on the autonomy of the external auditors to the extent that ERs have an influence on assessing fraud. Based on this the following proposition is formulated:

H2: ER of external auditors and FRFRA are negatively associated.

– Hiring and Changing of the Auditor (HCA):

Several factors have been identified to have negatively influenced the autonomy of the external auditors; behavioral factors are among these. For instance, this includes the conflicts of interests and goals which come up between the organization's management and the external auditor, and the approaches and ways of HCA (Siam, 2003). The role of management in the HCA is very important, as it negatively affects the autonomy of the external auditors (Matter, 1994). Therefore, Romero (2010) found an alternative where auditors are hired and paid by an external third party. This is due to the fact that External auditor's hiring and changing is an important factor that influences the autonomy of the external auditor. On the other hand, the selection or controlling of the selection process of the external auditor through the shareholders has a positive influence on the autonomy of the external auditor in evaluating financial reports (Al-Amoudi, 2001; Khasharmeh, 2003; Matter, 1994; Teoh, 1992). Therefore, the following proposition is made:

H3: HCA and FRFRA are positively associated.

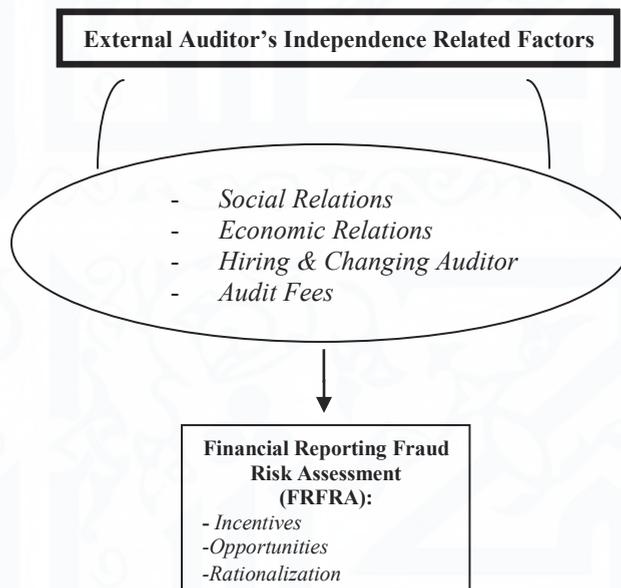
– Audit Fees (AF):

Bashtawi and Suleiman (2003) reported that there is an association between the autonomy of the external auditor and fees. In particular, studies by Palmorse (1986), Francis and Simon (1987), and De Angelo (1981) showed that AF has been positively associated with the autonomy of the external auditor. When forced to increase the minimum amount of testing for fraud, external auditors decreased discretionary testing, yet more spent on overall testing (Matsumura & Tucker, 1992). The increased spending increased fraud risk assessment and decreased fraud commission. In the situation where abnormal audit fees are negative, the quality of the audit is not significantly

associated with the abnormal audit fee (Choi, Kim, & Zang, 2010). In addition, the results of Frankel et al. (2002) indicated that auditor fees are negatively associated with the occurrence of earnings management. Therefore, there was a positive association of abnormal audit fees with financial reporting fraud risk assessment in a situation of positive abnormal audit fees. The findings pointed out those external auditors avoid bias in the reporting of finances for different reasons. This depends on the amount of fees payable via the clients (whether it is larger or smaller than the level of normal audit fees). Given this, the following proposition is made:

H4: AF and FRFRA are positively associated.

Based on the above discussion as well as the ISA No. 240 framework, the conceptual model of this research is proposed as shown in Figure 1.



**Figure (1): Independence factors with fraud risk indicators for assessing financial reporting fraud**

### Research Design:

This study investigated financial reporting fraud issue from the perspective of the external auditors (COCA, Big4, international and local) as it is applicable to the Yemeni setting. A quantitative method was employed to obtain the primary data. The data was gathered from the respondents using a survey

instrument, which was distributed among the representative sample of public and private external auditors working in audit firms and the COCA in Yemen. Factor analysis (principal component analysis) and descriptive analysis were used in this study. For validity and reliability, since factor analysis performs the role of reducing large number of variables into a reasonable and manageable number of factors for easy interpretation, it was employed in this study to test the factors for a reasonable proportion sample (Sekaran & Bougie, 2013). Factor analysis also indicates the pattern of association among the variables and, to that extent, uncovers any variable clusters and ensures the variables that do not correlate. It also identifies factors that are associated in a linear form to the original variables (Agresti & Finlay, 1997). Furthermore, factor analysis is employed for the measurement of the validity of the construct (Hair, Anderson, Tatham, & Black, Babin, 2006). In an inferential study, the use of this approach has always been found to be robustly free of one type error (Agresti & Finlay, 1997). The reliability of the instrument shows the degree at which the structure to be measured is really covered or caught by the variables treated. As suggested by Hair et al. (2006), the study carried out reliability analysis on the factors extracted. The purpose was to determine internal consistency of the instrument measured. Thereafter, the instrument's reliability was subjected to Cronbach's Alpha test. Cronbach's Alpha was employed to determine how credible the responses to the questionnaires were in order to make sure that both the outcomes and responses were in agreement with the sample drawn for the study. The standard acceptable statistical value of Cronbach's Alpha for this measurement is 60 percent or above. It has been shown to be poor if the value is below 60 percent (Sekaran & Bougie, 2013; Hair et al., 2006). Therefore, before gathering the main data, Pre-test and pilot testing were carried out to further improve the questionnaire. The process of improving the instrument also served a validation purpose, since parts of the study instrument were developed exclusively for the study. To refine the study instrument, this study undertook content validity and pilot testing with Yemeni external auditors. In addition, hypotheses were developed to test the relationship in line with the objectives of the study. Multiple regressions were used to examine the relationship between the hypotheses using the statistical package for social science.

### ► Respondents:

According to Yemeni Association of Certified Public Accountants (YACPA) and Ministry of Industry and Trade (MIT), the present active number of external auditors in Yemen is 723, and as of early 2012 there were 227 audit firms and officers in Yemen (YACPA, 2012 & MIT, 2012). The objective of COCA is to achieve effective control over public funds and to ensure adequate management by maintaining economy, efficiency, and effectiveness. Article 4 of Law 39 (COCA, 1992) also ensures the improvement of performance, of public business organizations by governmental external auditors. Those auditors should have three years of experience after getting their CPA license. Since this study investigates external auditors in Yemen, the important role of audit partners, managers, and seniors in determining the quality of the FRFRA is scrutinized (Brazel et al., 2010). In total, 254 external auditors, who have been working in audit firms and the COCA, participated in this study.

### ► Research Instrument:

The questionnaire was used as a research instrument in this study. This instrument has been tested and considered as an appropriate tool to collect data in a survey study (Ismail, 2004). Therefore, the researcher used a questionnaire to obtain the required data from respondents. The researcher developed the questionnaire based on the basic principles proposed by Dillman (1978) as it follows:

- Organized the questions in a descending order according to importance and usefulness;
- Grouped the questions that were similar in content together, and within areas, by type of question;
- Took advantage of cognitive ties that respondents were likely to make among the groups of questions in deciding the order of the relevant questions; and
- Placed the questions that were most likely to be objected to by the respondents after the questions which were less likely to be objected to.

The study used the popular and acceptable five-point Likert scale, which is designed to examine how strongly the respondents agree or disagree with the statement (Sekaran & Bougie, 2013). The five-point Likert scale indicates 1=strongly disagree; 5=strongly agree. The external auditors were asked to indicate their opinion on 74 items concerning the FRFRA by external auditors, and how their level of the exogenous-related factors of the external auditors (SR, ER, HCA and AF) is viewed.

### ► Variable Measurements:

#### – Financial Reporting Fraud Risk Assessment:

The dependent variable of the study is FRFRA. In the study, a quantitative measurement was used to measure FRIs, according to ISA 240 as a proxy for the external auditor's assessment of financial reporting fraud risk. Research studies (e.g. Brazel et al., 2010; Lou & Wang, 2009; Moyes, 2007; Moyes et al., 2009; Smith, Omar, Idris, & Baharuddin, 2005; Yang et al., 2010) have developed the items concerning the auditor's perception of assessment tools. Those items were adopted by this study, using a five-point Likert scale. In all cases, the value of "1" implies that the external auditor's assessment of financial reporting fraud is not perceived as important, while "5" is considered to be very important. This study used the composite measure for the items as a measure of the auditor's assessment of financial reporting fraud. The composite measure of overall FRFRA was created by summing across the three dimensional values according to the guidelines recommended by Zikmund (2000) and Hair, Black, Babin, Anderson, & Tatham (2010). Accordingly, to measure FRFRA (dependent variable), this study employed 40 items. When the lowest point total is 40 (1 x 40 items), it implies that the FRFRA of the respondents is low or bad. If the total maximum points are 200 (5x 40 items), it means that the respondents' FRFRA is high or good. Pre-test and pilot testing were conducted and administered to test the validity of the items, that is, related and valid questions were used for the final survey.

#### – Measurement of Independent Variables:

As mentioned above, independent variables that are used to measure the external auditor's independence-related factors in individual measurements are social relations, economic relations, hiring and changing of the auditor and audit fees. The construct is external auditors' independence-related factors.

In this study, the researcher adopted the measurement used by Basodan et al. (2004) and Firth (1980) for measuring SR. External auditors are required to comply with ISA 240 to improve FRFRA. In order to identify the effect of SR on FRFRA, 8 items were operationalized. The items were placed on a five-point Likert scale of 1 (strongly disagree), indicating low level of effect on FRFRA, to 5 (strongly agree), indicating high level of effect on FRFRA.

For ER, as stipulated by the ISA 240, this study adopted the measurement of Matter (1994), Siam (2003), Awaqleh (2008). External auditors are required to comply with ISA 240 to improve FRFRA. To know whether this affects the ER of FRFRA, it is operationalized using a 5-item instrument. The items were placed on a five-point Likert scale, 1 (strongly disagree) indicating low level of effect on FRFRA, to 5 (strongly agree), indicating high level of effect on FRFRA.

To measure HCA variable, this study adopted Yamani (1991), and Matter (2000). External auditors are required to comply with ISA 240 to improve FRFRA. In order to identify the effect of HCA on FRFRA, 11 items were operationalized. The items were placed on a five-point Likert scale of 1 (strongly disagree), indicating low level of effect on FRFRA, to 5 (strongly agree), indicating high level of effect on FRFRA.

The measurement of AF over FRFRA in this study was adopted from Siam (2003), and Basodan et al. (2004). External auditors are required to comply with ISA 240 to improve FRFRA. To identify whether this affects the AF of FRFRA, it was operationalized using a 10-item instrument. The items were placed on a five-point Likert scale, 1 (strongly disagree) indicating low level of effect on FRFRA, to 5 (strongly agree), indicating high level of effect on FRFRA.

#### ▫ Regression Model:

The conceptual model, which aims to explain FRFRA success, is denoted by the following general expression:

$$\text{FRFRA} = f \{ \text{SR}, \text{ER}, \text{HCA}, \text{AF} \}$$

Multiple regression analysis was employed because it makes it easy to control for *ceteris paribus* analysis, as it gives room for controlling many other factors that simultaneously influence the dependent variable. It allows many explanatory variables that could be correlated, by which one can infer causality, and which could be misleading if simple regression is used. Another advantage of multiple regression analysis is that it has the capability to incorporate fairly general functional form association (Hair et al., 2010). The regression coefficient ( $\beta$ ) indicates the effect of the independent variables on the dependent variable. Specifically, for each unit change in the independent variables,  $X$ , there is an expected change equal to the size of  $\beta$  in the dependent variable,  $Y$ . Based on the above justification, the regression

equation is formulated as follows:

$$FRFRA = \alpha + \beta_1 SR + \beta_2 ER + \beta_3 HCA + \beta_4 AF$$

## Results:

### › Factor Analysis Test on Social Relations:

The results for extracted components of SR variable are shown in Table 1. The extracted components were generated using the latent root criterion. This explained about 64.270 % of the cumulative variance.

**Table (1): The Results of Extracted Component for SR**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	Variance	Cumulative %
1	3.856	64.270	64.270	3.856	64.270	64.270
2	.602	10.026	74.296			
3	.510	8.494	82.790			
4	.394	6.569	89.359			
5	.349	5.820	95.178			
6	.289	4.822	100.000			

Extraction Method: Principal Component Analysis.

### › Factor Analysis Test on Economic Relations:

Table 2 below shows ER in assessing financial reporting fraud risk. Using the latent root criterion, this explained about 67.293 % of the cumulative variance.

**Table (2): The Results of Extracted Component for ER**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	Variance	Cumulative %
1	3.365	67.293	67.293	3.365	67.293	67.293
2	.590	11.794	79.087			
3	.422	8.442	87.529			
4	.377	7.548	95.078			
5	.246	4.922	100.000			

Extraction Method: Principal Component Analysis

### ► Factor analysis Test on Hiring and Changing of the Auditor:

The results for extracted components of HCA variable are shown in Table 3. The extracted components were generated using the latent root criterion. This explained about 45.684 % of the cumulative variance.

**Table (3): The Results of Extracted Component for HCA**

Comp	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	Var. %	Cum. %	Total	Var. %	Cum. %
1	5.025	45.684	45.684	5.025	45.684	45.684
2	.981	8.916	54.601			
3	.893	8.118	62.719			
4	.889	8.085	70.804			
5	.679	6.169	76.973			
6	.560	5.095	82.068			
7	.496	4.507	86.575			
8	.414	3.762	90.337			
9	.391	3.557	93.894			
10	.342	3.108	97.002			
11	.330	2.998	100.000			

Extraction Method: Principal Component Analysis. Note: Comp = Component; Cum. % = Cumulative %; Var. % = % of Variance

### ► Factor Analysis Test on Audit Fees:

Table 4 below shows AF in assessing financial reporting fraud risk. Using the latent root criterion, two diminishes were extracted, which explain about 57.316 % of the cumulative variance.

**Table (4): Results of Extraction of Component for FRFRA**

Comp	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Var. %	Cum. %	Total	Var. %	Cum. %	Total	Var. %	Cum. %
1	4.666	46.657	46.657	4.666	46.657	46.657	3.232	32.320	32.320
2	1.066	10.659	57.316	1.066	10.659	57.316	2.500	24.996	57.316
3	.785	7.853	65.169						
4	.725	7.245	72.414						
5	.561	5.606	78.021						
6	.519	5.195	83.215						
7	.486	4.858	88.073						
8	.459	4.588	92.661						
9	.406	4.064	96.725						
10	.328	3.275	100.000						
11									

Extraction Method: Principal Component Analysis. Note: Comp = Component; Cum. % = Cumulative %; Var. % = % of Variance

#### ► Factor Analysis Test on Financial Reporting Fraud risk Assessment:

Table 5 shows the results for extracted components of FRFRA. Using the latent root criterion, seven diminishes were extracted, which explain about 60.028 % of the cumulative variance.

**Table (5): Results of Extraction of Component for FRFRA**

Comp	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Var. %	Cum. %	Total	Var. %	Cum. %	Total	Var. %	Cum. %
1	10.554	31.041	31.041	10.554	31.041	31.041	4.287	12.608	12.608
2	3.467	10.196	41.236	3.467	10.196	41.236	4.234	12.452	25.060
3	1.669	4.910	46.146	1.669	4.910	46.146	3.469	10.202	35.262
4	1.457	4.287	50.433	1.457	4.287	50.433	2.437	7.168	42.430
5	1.134	3.335	53.768	1.134	3.335	53.768	2.243	6.597	49.027
6	1.118	3.289	57.056	1.118	3.289	57.056	2.023	5.950	54.977
7	1.010	2.972	60.028	1.010	2.972	60.028	1.717	5.051	60.028
8	.964	2.835	62.863						
9	.860	2.529	65.392						
10	.839	2.469	67.861						
11	.806	2.369	70.231						
12	.772	2.271	72.501						

**Table (5): Results of Extraction of Component for FRFRA**

Comp	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Var. %	Cum. %	Total	Var. %	Cum. %	Total	Var. %	Cum. %
13	.748	2.201	74.703						
14	.661	1.944	76.646						
15	.632	1.860	78.506						
16	.597	1.756	80.262						
17	.594	1.748	82.010						
18	.553	1.628	83.637						
19	.529	1.556	85.193						
20	.519	1.527	86.720						
21	.504	1.483	88.203						
22	.425	1.250	89.453						
23	.410	1.206	90.659						
24	.390	1.146	91.804						
25	.374	1.101	92.905						
26	.335	.986	93.892						
27	.307	.903	94.795						
28	.299	.878	95.673						
29	.281	.828	96.500						
30	.275	.810	97.310						
31	.263	.773	98.083						
32	.245	.721	98.804						
33	.236	.695	99.500						
34	.170	.500	100.000						

Extraction Method: Principal Component Analysis. Note: Comp = Component; Cum. % = Cumulative %; Var. % = % of Variance

The reliability test was conducted to determine the consistency of the constructs. Table 6 shows the average values of Cronbach's alpha for SR, ER, HCA, AF and FRFRA.

**Table (6): Summary of Reliability Test for Factors**

Factor	No. of Items	Alpha-Value
SR	6	.888
ER	5	.874
HCA	11	.877
AF	10	.800
FRFRA	34	.744

The Cronbach`s alpha values were above .6 (exceed minimum accepted value of .6 suggested by Nunnally, 1978). To clarify, six items from FRFRA and two items from SR were not loaded due to Cronbach`s alpha value which was less than .6. Consequently those items were removed from FRFRA and SR scale.

### › Descriptive Statistics:

Table 7 illustrates the mean and standard deviation for the dependent variable and independent variables. The table also presents the minimum and maximum values of variables. The average results indicate that mean values for SR, ER, HCA, AF and FRFRA are 3.39, 3.40, 3.69, 3.45 and 3.61 respectively. This indicates that most of the respondents expressed their agreement with the item statements of SR, ER, HCA, AF and FRFRA. Also, the standard deviation values are 1.071, 1.114, .936, 1.064 and .545 which reflect the existence of considerably acceptable variability within the data set.

**Table (7): Descriptive Statistics Factors**

Factor	Minimum	Maximum	Mean	Std. Deviation
SR	1.00	5.00	3.39	1.071
ER	1.00	5.00	3.40	1.114
HCA	1.00	5.00	3.69	.936
AF	1.00	5.00	3.45	1.064
FRFRA	1.00	5.00	3.61	.545
Valid N 254 (listwise)				

Table 8 reports the Pearson correlations among the explanatory variables and illustrates significant correlation between independent variables (SR, ER, HCA, AF).

**Table (8): Correlation Matrix**

Factor		SR	ER	HCA	AF	FRFRA
SR	PC.	1				
ER	PC.	.671**	1			
HCA	PC.	.543**	.482**	1		
AF	PC.	.539**	.515**	.741**	1	
FRFRA	PC.	.382**	.322**	.422**	.372**	1
	Sig	.000	.000	.000	.000	
	N	254	254	254	254	254

Note. \*\*p<.001. a Listwise N=254 PC=Pearson Corr. Sig (2-tailed)

This study used standard regression because all independent variables are of immediate and potential equal interest, and all independent variables enter the regression equation at once. Variables are normally distributed since all the results of skewness and kurtosis are in the range  $\pm 2.58$ , as suggested by Hair et al. (2010). This indicates that the data is appropriate and suitable for multiple regression analysis. Linearity is the second assumption for the multiple regression tests. The results provide justification to adopting multiple regressions to identify the relationship between the dependent and independent variables. The homoscedasticity appears when the values of the variance for dependent variable concentrate on only a limit range of the independent variable (Hair et al., 2010). The assumptions of homoscedasticity are fulfilled and it is appropriate to use multiple regression analysis. VIF and tolerance tests are conducted in this study in order to examine the multicollinearity among the variables. The largest VIF among the variables is 2.769 which is lower than the maximum value (VIF=10) that is suggested by Hair et al. (2010). The lowest tolerance among the variables is .36 which is not a small value (not less than .10); it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity (Hair et al., 2010). The results of multicollinearity test indicate that there is no multicollinearity problem that exists amongst the predicted variables. The result in Table 9 shows that the null hypothesis (that the multiple R in the population is equal to 0) is rejected since the model of this study is statistically significant at ( $P = .000$ ).

**Table (9): The ANOVA (b) Result**

	<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>.Sig</b>
1	Regression	16.096	4	4.024	16.968	.000a
	Residual	59.050	249	.237		
	Total	75.146	253			

a. Predictors: (Constant), SR, ER, HCA, AF b. Dependent Variable: FRFRA

Multiple regression analysis as illustrated in Table 10 was conducted in order to examine the relationships between FRFRA as the dependent variable and SR, ER, HCA, and AF, as independent variables. Multiple regression analysis provides many indicators that explain one relationship. For example, R-value indicates how well a set of variables is able to predict a particular outcome, and .001 and .05 as significant level. The rationale behind this is the sample size of the study (Ang, Davies, & Finlay, 2001; Speed, 1994). From the analysis,

R<sup>2</sup> value of this research is .21 as illustrated in Table 10. This means that the SR, ER, HCA, and AF explain .21% of the variance of FRFRA. According to Pallant (2011) the adjusted R<sup>2</sup> statistic corrects R<sup>2</sup> value to provide a better estimate of the true population value. In this study, the adjusted R<sup>2</sup> value for the Model is .20. The model is also significant at level .001. Table 10 shows the results in details.

Overall, Table 10 details out the relationships between the dependent variable, FRFRA and independent variables. All the four variables are included in the analysis and the results show that SR (B = .112, P = .030), and HCA (B = .223, P = .003), are significant. Also, ER (B = .029, P = .542), and AF (B = .046, P = .486) are not significant.

**Table (10): Model Summary and Coefficients (a) Value**

Model	R Square	Adjusted R Square	Unstandardized Coefficients		Standardized Coefficients		
	21.	20.	B	Std. Error	Beta	t	.Sig
1	(Constant)		1.158	.260		4.447	.000
	SR		.112	.051	.177	2.183	.030
	ER		.029	.047	.048	.611	.542
	HCA		.223	.075	.257	2.971	.003
	AF		.046	.066	.061	.698	.486

a. Dependent Variable: FRFRA

The finding from regression testing, confirms that there is a significant relationship between SR and FRFRA (since the P-value = .030). Therefore, hypothesis H1 in the current study is found to be supported. This result gives support to agency theory in the Yemeni context. The relationship between SR and FRFRA is also positive (with an estimated value of  $\beta = .112$ ). This result supports those obtained by Simunic (1980) and Basodan et al. (2004) in their previous studies where it was reported that SR was significant to external auditor independence. In addition, this result is supported by the correlation test (as displayed in Table 7) result that indicates a significant (P-value = .000) linear relationship between social relations and FRFRA. The findings confirm that the higher the social relations between the external auditor and management, the better they work to improve the assessment of financial reporting fraud risk, with other factors being constant, and vice versa.

The regression test results exhibit that economic relations of the auditor are not statistically significant (with P-value = .542 and an estimated value of  $\beta = .029$ ) with FRFRA in Yemen. This result does not support the proposition of agency theory in the Yemeni context. The results of the study are consistent with studies conducted by Asbaugh, LaFond, and Mayhew (2003) and Reynolds, Deis, and Francis (2004), who found no significant relationship between ER and auditor independence. They argued that an auditor's concern in maintaining the reputation for providing high-quality audits can restrain it from undertaking activities that jeopardize independence, since the revenue from each client will be a small percentage of the auditor's total revenue. There is an indication that FRFRA is not significantly related to the ER of the external auditors. Based on the results of the regression test, which are not significant, hypothesis H2 is not accepted. This implies that Yemeni external auditors avoid audit assignments that are likely to jeopardize their independence of assessing financial reporting fraud risk.

As indicated by the current study results, the association of HCA with FRFRA was found to be significant (with P-value = .003) and positive (with an estimated value of  $\beta = .223$ ). This result supports the agency theory in the Yemeni context. Previous studies (Al-Amoudi, 2001; Khasharmeh, 2003; Matter, 1994; Teoh, 1992) have found a positive influence on the autonomy of the external auditor in evaluating financial statements. Therefore, the current study's hypothesis H3 is found to be supported. In addition, these results are in line with the results found in the correlation test (as shown in Table 7), which confirms that there is a positive significant (P-value = .000) linear relationship between HCA and FRFRA. The results confirm that the greater HCA, the better the auditors work to improve FRFRA, while other variables being constant and vice versa. The results confirm empirically the argument of the legal requirements in Yemeni law that stipulated the power of selecting the external auditor via the shareholders. The results of this study also support the existence of continuing emphasis on HCA via a third party.

The findings of the current study from the regression test show that AF is insignificantly (with the P-value = .486) associated with the assessment of financial reporting fraud risk, with a positive sign ( $\beta = .046$ ). This result does not support the proposition of agency theory in the Yemeni context. This finding is in line with the results of studies done by like Jaro (2005), and Dahdouh (2007). Al-Amoudi (2001) observed that there is a gap between AF and the external auditor's responsibilities due to lack of regulation on

AF charges. Further, Jaro (2005) posited that AF negatively affects audit quality due to the independence issue. He documented further that FRFRA is not significantly related to AF. Similarly, Dahdouh (2007) found that the relationship between the external auditor change and the responsibility of the auditor for the discovery of fraud in financial reporting is not significant. Therefore, consistent with the above discussed results of the prior studies, hypothesis H4 is not accepted. This implies that AF does not affect FRFRA. In Yemen, the AF charged are not appropriate to the external auditor's efforts (Adimi, 2007; Al-Ahdal, 2008). Therefore, the Yemeni government should issue new regulations to ensure suitable AF, since AF affects the independence score of the external auditor, which is a significant factor in FRFRA.

The above findings provide meaningful insights into regulators such as the COCA, Yemeni Association of Certified Public Accountants (YACPA), audit firms, Minority Shareholder Watchdog Group (MSWG), Investment Commission (IC), Taxes Organization (TO), Yemeni academicians, owners, investors, and consultants in designing rules and regulations for the external auditor profession. Moreover, this study has implications for the Yemeni policy makers and government to enrich the external auditors' independence related-factors by issuing new regulations, new laws, and applying more control on the quality of auditing profession to protect the economy and the society stability. There is no gain in saying that the current study has provided enough useful information regarding FRFRA and external auditors' levels in Yemen, for such information has proven to be not easily accessible. Moreover, this study has made a significant contribution to the FRFRA literature by employing a questionnaire and by examining auditors in both COCA and audit firms from the viewpoint of FRFRA in the emerging economy of Yemen. The findings may become interesting to external auditors who can make decisions with regard to FRFRA. With respect to the factor SR, this study offers proof that the external auditor's SR with client management and HCA via the shareholders or third party enhance FRFRA. The essence of Yemeni laws, ISA No. 240, and IRF are to enforce the compliance of the external auditor in FRFRA. To date, local standards are lacking with respect to financial reporting fraud in Yemen. The Yemeni government, COCA, and YACPA are expected to have better control of the report of external auditors on FRFRA. An active role has not been given to YACPA by Yemeni law to inspect, control, and assess Yemeni external auditors' commitment to the International Standards on Auditing. Thus, there should be enforcement by the Yemeni government

to ensure that the external auditors are more responsible in the issue of FRFRA in the future.

### **Conclusion:**

The results of this study suggest that external auditors ought to deal with the issue of financial reporting fraud risk in relation to the interests and expectations of financial statement users. While trying to deal with this challenge, the external auditor must know the outcome of FRFRA and give early warning to the owner of the organization, in case of any threats of organizational bankruptcy. In order to deal with this challenge easily, the external auditor needs the support of the government, COCA, and YACPA. For this reason, the Yemeni government, COCA, and YACPA ought to make new regulations which will require organizing SR and HCA of the external auditors to improve their assessing for financial reporting fraud risk. The results of this study also suggest that the audit career in Yemen needs more control, regulations, policies, and systems to provide a well-developed structure that protects the decisions of auditors with regard to financial reporting fraud issues. In addition, the views of external auditors are very important for sustainable improvement of FRFRA. In order to easily facilitate understanding of FRFRA by external auditors, this study also presents a description of selected factors of independence. The current study is significant in the sense that it helps shed light on the relative importance of the responses of external auditors to FRFRA and the way it can be beneficial to financial statements users. The external auditors' responsiveness in relation to FRFRA unfolded by this study could also serve as a reference to academia and as a catalyst for further investigations. Following a thorough discussion of the study's objectives achieved and related prior literature, the general and individual implications of the outcomes of the study are deliberated to give further details about their importance from the academic and audit points of view. Theoretically and practically, the findings of this study have a significant value in the sense that the research model developed for this study can be used as explanatory models for external auditors in FRFRA. In the audit field, this model contributes to the knowledge. From the external auditors' view, the results of this study can serve as a guide to develop a strategy for audit actions in FRFRA, which as a result has the potential of improving the level of FRFRA by external auditors.

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