# Developing an Audit Quality Model for an Emerging Market

Bita Mashayekhi, Azadeh Maddahi, Arash Tahriri

Abstract—The purpose of this paper is developing a model for audit quality, with regard to the contextual and environmental attributes of the audit profession in Iran. For this purpose, using an exploratory approach, and because of the special attributes of the auditing profession in Iran in terms of the legal environment, regulatory and supervisory mechanisms, audit firms size, and etc., we used grounded theory approach as a qualitative research method. Therefore, we got the opinions of the experts in the auditing and capital market areas through unstructured interviews. As a result, the authors revealed the determinants of audit quality, and by using these determinants, developed an Integrated Audit Quality Model, including causal conditions, intervening conditions, context, as well as action strategies related to AQ and their consequences. In this research, audit quality is studied using a systemic approach. According to this approach, the quality of inputs, processes, and outputs of auditing determines the quality of auditing, therefore, the quality of all different parts of this system is considered.

*Keywords*—Audit quality, integrated audit quality model, audit supply, demand for audit service, grounded theory.

# I. Introduction

THE occurrence of recent financial crises have highlighted the vital role of reliable and high-quality financial reporting. Moreover, the recent crises have increased the necessity of focusing on the role of "audit quality" in promoting financial reporting quality. Achieving the qualified financial reporting depends on the accurate performance of each part of the financial reporting process, and independent auditing has a major role in preserving and improving this process [1]. Moreover, auditing services play a crucial role in reducing information asymmetry and the agency cost as well [2]. The realization of these fundamental roles depends on the quality of auditing [3].

Audit quality and the factors affecting it have been attracting the interest and attention of investors, managers, financial analysts, researchers, and creditors for some time. The relevancy and reliability of financial reporting would be promoted due to the high- quality auditing, and this causes an improvement in capital markets efficiency. The main consequence of relevant and reliable financial reporting is the investors' trust in the capital and financial markets. Moreover, effective decision making would be possible because of more relevant and reliable financial numbers, which is used by investors, creditors, and other individuals.

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Many researches have been conducted in association with audit quality and different variables such as income smoothing [4], [5], analysts' forecast error [6]-[8], and the cost of debt [9]; or about the factors influencing the audit quality. However, previous researches have failed to present a comprehensive model for the factors affecting the audit quality. Also, no model has been developed for audit quality in the Iranian context with regard to the specifications of the audit profession. For instance, there are many auditing firms in Iran, of which most of them are classified as small size; and there is intense competition between audit firms. These features are enough motivation for studying auditing in Iran and to develop a model for that purpose.

Audit quality is a multi-dimension concept which could be examined from different viewpoints. The auditor's report is considered as "a product" in one view and the quality of this product, regarding its conformity with the determined standards, indicates the quality of auditing. In another view, which regards the quality of auditing, auditing is considered as "a service" which must be supplied by well qualified individuals and its procedure for presenting the auditing report follows special predetermined regulations. Therefore, in the case of the above- mentioned services, from the starting to the finishing point presenting the auditing report, are provided in accordance with predetermined regulations and standards with an acceptable level of quality. In other words, a systemic view governs the audit quality in this viewpoint and its inputs, process and outputs determine the audit quality and the quality of all system components emphasized and focused upon [1]. According to the fact that the systemic view is the most comprehensive view, this research has considered the "audit quality with a systemic approach" as its examination basis.

Examining the available literature indicates that some researches emphasize the product and the result of auditing, some emphasize the process of auditing, and some emphasize the interpretation of auditing services users. Also a number of factors influence the audit quality have been examined in different researches or have been considered as parts of the quality of auditing. In other words, no unified comprehensive model has yet been developed for audit quality and the factors influencing it. The issue of the present research is to fill in the gaps of this field in the literature. Therefore, the main issue examined in the present research is: "What is the proper model for the factors influencing auditing quality?" The present study attempts to develop an integrated- auditing- quality model through grounded theory. The auditors, owners, and supervising institutions can also use the identified factors and

do the essential arrangements for promoting purposes and improve economic decisions.

The theoretical principles and the research background will be first presented in the following section. Then the research and data collection method, as well as the results of the data analysis will also be presented. The "audit quality model" which consequently has been developed based on the grounded theory will be then explained. The limitations have been explained at the end and the research suggestions have been presented.

#### II. DETAILS EXPERIMENTAL

#### A. Research Questions

Considering the fact that the main objective of the present research is to present a model for audit quality, the research questions are posed as explained below:

The main research question:

1. What is a proper model for explaining the factors influencing audit quality?

The subsidiary research questions:

- 2. What factors affect audit quality?
- 3. What approaches are adopted for the purposes of achieving audit quality?

## B. Research Domain, Population, and the Sample

Regarding the location, the present research was carried out in the field of accounting firms authorized by the Stock Exchange Organization and the companies that are accepted on the stock exchange, and was carried out during 2011 and 2012. Regarding its subject, the research was conducted in the field of auditing and the relevant factors.

The statistical population are the relevant managers in auditing business including the partners of auditing companies which are authorized by the Stock Exchange Organization, the managers of the Audit Organization, the managers of institutes which supervise the auditing profession including Iranian Association of Certified Public Accountants and the Stock Exchange Organization, Quality Control Committee members of accounting firms and other audit quality experts.

# C. Sampling Method

Like other types of qualitative methods, the grounded theory does not rely on the assumption that the sample represents the population for generalizing the data and reliability of the findings and the samples are often selected purposefully. A process called "theoretical sampling" is used in the analysis process and presenting a theory. Theoretical sampling is defined as a process which includes constantly collecting data in order to create a theory in such manner that the previous analysis affects the decisions made for the manner in which the data must be collected. Snowball or Chain Sampling has been used for the interviews in this study with regard to the research objective. Snowball or chain sampling means selecting participants in such manner that they are somehow related to each other and guide the researcher to other individuals of the same [15]. In other words, a number of experts, educated, and sufficiently

experienced individuals were first selected for the interview and at the end they were asked to introduce other experts in the research subject or in cases where gathering the opinions of individuals with special experiences is needed for the purposes of completing the model and creating the theory, the interviewees were asked to introduce experts with related experiences.

According to the above explanations, the authors attempted to interview people who had experienced the research subject personally and were highly educated and knowledgeable in order to enrich the research. In order to do that, experienced "partners" of accounting firms, who had audited companies with different specifications under different conditions, were selected. Moreover, with regard to the fact that some particulars and decisions of the managers were pointed out during the interviews, some of the "managers" of the companies were interviewed in order to complete the examination and improve the identified concepts and topics. On the other hand, according to the current regulations, the Iranian Association of Certified Public Accountants and the Stock Exchange Organization examine and evaluate the quality of the services of the accounting firms through specialized committees, such as the "accounting firms' quality control task force" and "the acceptance and supervision committee of the accounting firms authorized by the stock exchange". Different issues of low and high- quality auditing are posed and examined in the above- mentioned committees and the violations of accounting firms are examined along with a hearing of the explanations and defenses of their partners. Also, the experiences of the members of these committees significantly help examination identify the factors which influence audit quality, and therefore the members of the mentioned committees were interviewed as well.

After carrying out a total of 23 interviews with experts, the collected data reached saturation point and there was no need to conduct new interviews. It is worth mentioning that regarding the fact that the interviewees were independent from the research subject, they still wanted the research results to be thorough, and therefore, the average interview time was 1 hour and 50 minutes.

## D. Data Analysis Method

The data analyses were coded in three stages in accordance with the grounded theory method. The first step was to find conceptual topics in the data at the primary level of abstraction. The second step is to find a relationship between these topics and the third step is conceptualization and reporting these relationships at a higher level of abstraction. Regarding the above- mentioned explanations, the threefold coding which means open coding, axial coding, and selective coding, are the heart of the grounded theory analysis. These types of coding do not necessarily follow each other in any order but also overlap in many cases and are done simultaneously, although they have conceptually separated operations.

E. The Manner of Evaluating and Validating the Audit Quality Model

The research (quantitative or qualitative) is invalid without scientific accuracy and it will lose its desirability. Different criteria have been presented in different researches in the past 20 years for the purposes of evaluating qualitative researches, such as those based on grounded theory. As Seale notes, it seems like the efforts made in creating criteria in order to judge the quality of researches are uncontrollable and of course, many agreements and overlaps could be seen in these criteria. After analyzing the data obtained from the interviews by the three- fold coding method, "triangulation", "member" checking, and evaluating based on "credibility" criterion [10], have been used considering the grounded theory. This process will be briefly explained in the following section.

Reliability and validity are the two main criterions which have always been presented for evaluating qualitative and quantitative researches. Despite that, [10] have objected to use these two criteria in qualitative researches but they suggested the "credibility" criterion instead. Credibility means the extent to which the findings of the research are reliable and believable in reflecting the experiences of the participants, researcher, and the reader regarding the under-study phenomenon. Corbin and Strauss introduced 10 credibility indexes for purposes such as evaluating the quality of researches based on grounded theory (and also other qualitative researches) and the present research has been evaluated based on these indexes.

Triangulating the data means to use the multiple data resources, such as collecting data from different groups, different environments, or in different time periods. Generally, a more developed image will be obtained when more than one vantage point is used to collect data. In order to develop a comprehensive model for audit quality in this research, an effort was made in examining and analyzing the views and opinions of different groups including the experienced individuals in the Audit Organization, MOFID RAAHBAR Accounting firm, other large accounting firms, medium and small accounting firms, the Quality Control Committee of the Iranian Association of Certified Public Accountants, the Technical Committee and the standards of the official auditing society, the acceptance and supervision committee of the accounting firms authorized by the Stock Exchange Organization, the quality control team of accounting firms, and also the managing director and the financial manager of the company.

Member checking or the validity of the participant is a technique in which the researcher controls his hypotheses with one or more under- study participants and this technique is used to prove the interpretations of the researcher. In this method, the researcher uses the viewpoints of the participants and experts in order to ensure the reliability of the findings and to interpret them [11], [12]. According to [11], this technique is the most important reliability- promoting technique. After analyzing the data obtained from the interviews by the three- fold coding method in the present research the variables extracted from the interviews and the

results were presented to seven professional experts (four individuals who were previously interviewed and three experts who did not take part in the interview previously) and were refined in order to make the research model more reliable.

#### III. RESULTS AND DISCUSSION

The model created in this research will be presented in Fig.

The results of the research indicate that most of the components of the audit quality model that have been extracted, are consistent with the available literature despite many similarities, and some of the indexes and special factors have been introduced and emphasized in this model, for instance, the firm being structured, obligation to audit quality, and the beneficiaries being able to demand accountability and quality. One of the advantages of the model presented by this research for audit quality is that it is the main pillar of supplying audit quality, which has been introduced as "being obligated to audit quality" (with internal and external origin). The degree of being obligated to audit quality means to what extent the partners of the firm are committed and devoted to realizing audit quality.

Examining the available literature in the field of audit quality indicates that being obligated to audit quality with external origin, such as being righteous or devoted to ethics, have been emphasized in most of the researches (including the researches which have been conducted by [13], [14]); however, "being obligated to audit quality with external origin" has been introduced as a key factor in this research which is affected by numerous factors including the level of demand for accountability and the existence of effective answer- demanding mechanisms by investors and other beneficiaries, the degree to which ownership is separated from management, the degree to which managers are responsible for answering, the degree of effective supervision on the auditing profession, the degree to which punishment measures prevent the auditor and the degree of the audit- quality benefits, and so on. It is worth mentioning that some of the factors influencing this variable have been examined in different researches, factors like law suits against the auditor and the degree to which the auditor is responsible. Also, the knowledge and experience of the partners, the investigating team, and the employees of the firm have been emphasized in the previous researches as factors affecting audit quality (such as [13], [14]). The above- mentioned factors have also been approved by the experts in the present research, moreover the concept of "professional training" is one of the concepts which has been introduced as one of the factors affecting the auditors' competence in this study and according to the examinations carried out on the literature, the researcher has not encounter cases which have attended to this concept. Regarding this issue in the case the firm's partners have previously worked in other firms where there was commitment to audit quality, the type of their "professional training" and experience is different from that of a partner who used to work in firms with low- quality auditing before. Other special factors and indexes which have been introduced

and emphasized in this model are based on the answers to these questions: "How much the accounting firms are structured; for how long their partners and employees remain on their jobs; how much quality do their clients need; how their quality is measured; and how much their beneficiaries can demand for audit quality?"

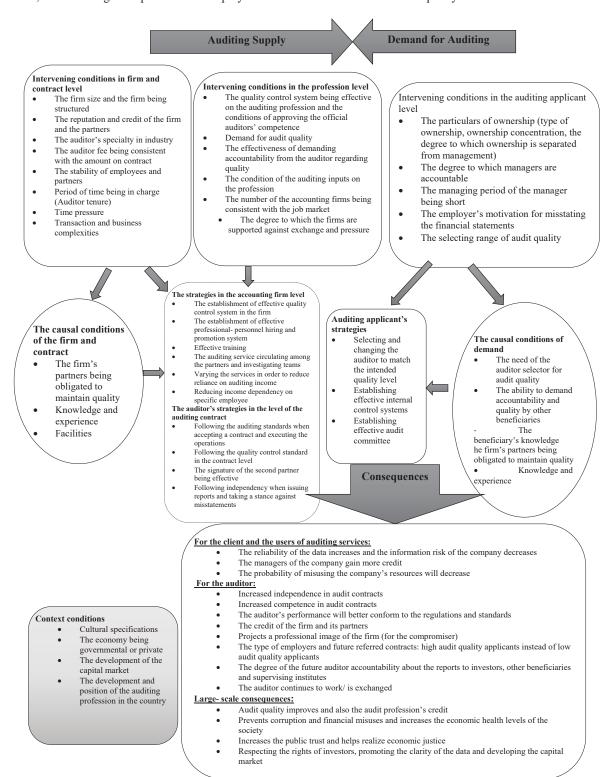


Fig. 1 Audit Quality Integrated Model

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The factors and conditions affecting audit quality from the viewpoint of audit applicants have also been examined in this study. Regarding this matter, the degree of the auditor selector's "need" for audit quality, the reasons for requesting auditing (legal obligation or needing auditing), the specifications of the auditor selector, and the quality level of auditing expected by him, and also the quality demanded by other beneficiaries, are introduced as the most important factors which affect audit quality.

According to the previous explanations, audit quality has a complex and multi- dimensional nature; meaning that although audit quality is affected firstly by the particulars and performance of the auditing team and the partners who are in charge of the work, when focused on more carefully, these factors are affected by different factors and are the "effect" of different factors in the large economy scale, auditing and accounting firms themselves, in addition to that they are influenced by the specifications and performance of the auditing applicant, the auditing beneficiaries and other individuals involved in the financial reporting field chain, and the legal atmosphere and regulations in which the auditor and company work in. Therefore, achieving audit quality requires adopting a consistent approach and considering these different layers. The components of the "audit quality integrated model" have been presented in Fig. 1, in which the factors affecting audit quality have been focused on from the viewpoint of supplying auditing services, as well as from to that of the auditing applicant.

### IV. RESEARCH LIMITATIONS

One of the limitations of the present study is related to the research approach. Since the intended phenomenon is studied in the context in which it occurs in qualitative studies, the possibility to generalize the results and findings of the research in other conditions and situations is restricted. Therefore, the results of the present research cannot be easily generalized to other fields.

The presumptions and bias of the researcher can interfere and manifest in qualitative studies and this may damage the results of the study. Of course the researcher has tried to be unbiased in the present research as much as possible and the results have been merely extracted based on the experiences and opinions of the participants, who were mainly auditors. Another limitation of qualitative studies is that it is possible to have different interpretations of the under-study phenomenon, and therefore audit quality interpretation in the present study is only one of the possible and acceptable interpretations and there may be other interpretations.

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