



Designing an Analytical Model to Determine Audit Services Fees Based on Delphi Method and Factor Analysis

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ABSTRACT

This study aims to designing an Analytical Model to Determine Audit Services Fees. To this end, a combined method based on the Exploratory model (qualitative to quantitative) and Delphi and Factor Analysis methodological techniques has been used to identify and validate the effective indices and factors on pricing the audit services. The statistical society of this research, in the qualitative part, includes 30 researchers and scholars in the field of accounting and auditing, and faculty members of universities, and in the quantitative part, includes experts, consultants, and assistants working in the auditing profession, as well as researchers and university professors, from which 160 people were selected as a sample. According to the results of this study, after performing the Delphi method twice, 125 indices had a desirable and acceptable mean and were selected as effective factors to determine the professional auditing services fees by research experts. The agreement between the experts regarding these factors was 71%, which is considered desirable. Considering the results of Exploratory Factor Analysis, the studied factors can be reduced to 10, which explains up to 98% of the variance of the pricing model of the professional audit services fees. The output values obtained from AMOS software (chi-square 674.22, P-value = 0.00315, RMSEA = 0.0401) indicate that the calculated data are logically consistent with the research model, and therefore, the status factors of the audit system, organizational factors related to the auditor, auditor's personal characteristics, institutional-macro audit considerations, clients' financial considerations, institutional-managerial considerations of clients, audit risk, effectiveness and quality of audit services, ownership, governance and growth processes, and social, economic and political considerations of the audit market have a good fit and credibility to price audit services.

Keywords:

Pricing Pattern, Auditing Services, Audit Fee, Delphi.

1. Problem Statement

In the contemporary world, however, events such as the bankruptcy of big corporations such as Enron, WorldCom, etc., have challenged the credibility and reliability of the figures and financial statements resulting from the calculations of accountants and corporations, which are the source of a large portion of financial reporting, so that many investors and economic activists, who are trying to enter some share companies, lost their trust to the formulated statements of company managers (Bahri Sales et al., 2016). These adverse financial fluctuations, in the global economic and financial environment, have increased the audit, control, and the organization of the quality of activities related to the audit of financial statements, in order to deal with fraudulent financial reporting and eliminate numerous misuses of corporate accounting, because the audit is a systematic process of collecting and impartially assessing evidence of claims on economic activities and events to determine the compliance of these claims with the pre-determined criteria, and reporting the results to the stakeholders.

This definition of auditing is provided in the Statement of Committee on Basic Auditing Concepts (1973), according to which auditing indicates the procedures for reviewing the balance sheets and books of financial institutions and corporations (Ebrahimi Kordler et al., 2019). Therefore, receiving Audit Fees and providing valid audit services to employers and owners of the commercial, industrial, and service organizations, is one of the features that has been implemented for many years as the professional mission of independent auditors (Derakhshi et al., 2015). Meanwhile, concentrating on audit fees, as tools for quality control of audit actions, has attracted more attention. Audit fees include all funds and salaries that clients pay to auditors or auditing firms due to receiving audit services, in accordance with contracts or agreements with auditors (Griffin et al., 2008). Auditors are always trying to balance and expand the costs of doing each activity, and the potential future losses due to legal obligations, with the auditing fee, taking into account the minimization of their total costs (Ebrahimi Kordler et al., 2019). Thus, audit fees are a reflection of the audit quality for the extra-organizational users of the financial reports and statements. These fees include the costs incurred by the organizational clients and customers to fulfill the auditors' obligations. According to evidence, the

increase of audit fees increases the auditor's efforts and the provided services quality, but it is important to note that the increase of audit costs leads to dependence between auditors and their clients, and in these cases, auditors may not perform audit procedures properly due to some reason such as maintaining the job and position that customers provide for them (Simunic, 1984). In other words, the evidence suggests that higher fees do not always imply high-quality auditing services, and the institutions that provide auditing services mainly consider standard costs in order to carry out their activities, and of course the salaries they receive are higher than these costs (Griffin and Levent, 2011).

Another issue is that auditing and independent auditors are the basis of economic transparency, trust in capital markets, and government accountability to citizens, and should not be considered as public goods and services. Low fees, unfavorable and unhealthy competition in these areas shake the foundations of the auditing profession, as the structure of the auditing market is heavily influenced by audit pricing (Noshadi et al., 2020). Accordingly, due to the auditing and auditors functions to control and accrediting financial statements, as well as the existence of various forms of audit services quality on the one hand, and the existence of various incentives and issues to prepare and present data, and financial reports of managers in organizations and economic companies, the discussion of audit fees, as one of the important factors in determining the quality of audit processes, has received much attention and has stimulated many researchers and experts in this field, in order to determine the effective factors on audit fees, as well as providing models for pricing (fees) of audit services (Derakhshi et al., 2015). In this field, the literature on the pricing factors of Iranian auditing services, has shown that the auditing services fee is affected by several factors such as size and complexity of work, quality of internal controls (Hoag & Hollingsworth, 2011), corporate governance (Xingze, 2012), business risk (Khodadadi et al., 2017), Short-term audit tenure (Khodadadi et al., 2016), political communication, self-confidence, accruals, monopoly or audit market competition, auditor firm size, financial leverage, Return on assets (ROA) or profitability, macro contexts, management overconfidence, management rewards, first audit, litigation (Bahar Moghaddam et al., 2017), client's asset, stakeholder perception of the

audit, search period for the alternative auditor, business strategies, time, etc. (Hashemian, 2019: 23). In this context, auditors, during the audit and its pricing, should not only consider the risk characteristics of the client, but also have a more comprehensive view of the client's business behavior by considering the risks associated with the financial statements (Khodadadi et al., 2017). Moreover, audit fees are effective in the process of planning and proper implementation and quality of financial audit services, and the pressure of audit fees will be accompanied by a decrease in its quality (Mousavi Shiri and Pahlavan, 2015). Accordingly, the main prerequisite for the quality of audit services is adequate fees, and degraded audit quality leads to a decrease in stakeholder confidence, which not only leads to failure to achieve audit objectives, but also reduces the validity of audit procedures on a wider scale, and will prevent the optimal allocation of capital in the stock exchange, as well as the promotion of capital expenditures and financing (Noshadi et al., 2018). At the same time, the knowledge gained from this issue leads to the acceleration and facilitation of audit activities, and due to the participation of customers, improves the audit procedures.

Therefore, in developing societies such as Iran, the determination of audit fees has become a pervasive challenge, and the turmoil in the pricing of audit services has left no basis to determine pricing audit services, and in some cases, professional-experimental judgments of some auditors result in high and low and contradictory wages, which are not commensurate with their provided activities and services. At the same time, a comparative analysis of auditing fees in the international community shows that the wages received by Iranian auditors are not comparable to those of other countries, especially those of the First World. Therefore, considering the problems and challenges in Iranian auditing science, and the applied methods to determine auditing services fees, as well as the turmoil and disorder in the auditing services market, and regarding the fact that audit fees, in turn, play an effective role in skepticism about auditors' independence and impartiality, the quality of audit reports, selective comments, and some of the ethical risks attributed to them, this study intends to design an Analytical Model to Determine Audit Services Fees Based on Delphi Method and Factor Analysis. Therefore, this study tries to answer the question that

what components and factors are included in a comprehensive pricing model of auditing services?

2. Theoretical Foundations

In order to use the audit services, a fee is mainly paid as audit fees, which are priced by the auditors, taking into account the volume and risk of the audit. The higher the fee paid, the higher the quality of the audit and the market will respond positively to the high quality of the information. Instead, auditors' high fees make them economically and financially dependent on clients, make auditors less independent, and prevent clients from relying on company data and information, and as a result of this action, there will be negative market reactions in exchange for the poor quality of information. Therefore, auditing fees have been raised at both normal and abnormal levels. Abnormal auditing fees are generally attributed to common factors among clients, such as company size, complexity, risk structure, diversity, and others (Emad al-Dini and Saeedi, 2019). In contrast, abnormal audit fees include additional payments made by clients, separate from normal fees, which depend on the interaction and relationship between the audit firms and their clients. Abnormal fees for audit services are mostly paid in the form of economic rent or bribes related to these services, as well as the auditor's financial and economic dependencies on the client (Kinney & Libby, 2002). Nowadays, determining the minimum audit fee is one of the most important issues in this profession. In a general approach, the price of a service or commodity is the price that consumers are willing to pay to use it, however, in societies with a no well-developed competitive economy, this formula is not very effective, and available monopolies or minimum wages determine the minimum wage level. From an auditing perspective, auditors are always looking to reduce and minimize total costs by balancing the cost of their resources (costs associated with doing more auditing) and future losses due to legal liabilities. Therefore, their further efforts lead to a reduction in the probability of losses due to liabilities and auditors provide auditing activities that reduce the total costs (Salehi et al., 2016). Auditors are always trying to balance and expand the costs of doing each activity, and the potential future losses due to legal obligations, with the auditing fee, taking into account the minimization of their total costs (Ebrahimi Kordler

et al., 2019). Thus, audit fees are a reflection of the audit quality for the extra-organizational users of the financial reports and statements. These fees include the costs incurred by the organizational clients and customers to fulfill the auditors' obligations and it is mainly based on the estimation of the effort, attempt, and risks associated with auditors' lawsuits, and the likelihood of clients' future claim against them, which are priced based on factors such as company size, the complexity of client operations and risk of auditing activities. (Simunic, 2001; Vaez and Timuri, 2014). In this regard, the theoretical background of pricing in the field of auditing services, and determining the auditors' maximum and minimum wages, owes the work of researchers such as Simunic (1980) and Menon & Williams (2001) and some other researchers and researchers in the field of auditing, who for the first time, designed this group of applied models in the field of auditing services. In this context, Simunic (1980) for the first time presented a model to pricing audit services, which has evaluated the interdependence of the economic interests of the audited entity and the auditor. In this model, factors such as size, complexity (number of branches, and type and amount of accounting activities), and activity variety of audit services customers are considered, all of which are price determinants in the context of audit fees. Simunic (1980) in his Proven model calculated the auditor's fee based on the calculation of the base price values and the audit services requested by the clients. He attributed the cost of auditing services to the rate per hour of audit work, and the number of hours worked, as well as the auditor's expected profit, which depends on the services provided to companies, the risks raised from of error, and the complexity of audit processes in mentioned institutions. In the form of other models, people such as Menon & Williams (2001) based on previous models, such as Simon and Francis, have considered criteria for calculating audit services:

- 1) The size of the clients and the rate of their total assets,
- 2) The clients' risk, in the form of received total accounts ratio to their total assets,
- 3) The clients' risk, in the form of total debt ratio to total assets.

The Menon & Williams (2001) model in many respects has been an example of Simunic (1980), Craswell et al. (1995), and other past models.

Therefore, the Simunic fee calculation model has been the basis of many later models to determine deviations in different pay levels around the audit services of different companies. At the same time, auditors today are under a lot of pressure to reduce audit costs. To facilitate these issues, auditors and clients have evaluated the relationship between audit fees and audit work and practice, and individuals such as Griffin et al. (2009) have divided the effective factors on audit fees into two groups: the characteristics of the audit firm and the characteristics of the client, or active companies that invite audit firms to perform audit services. According to Simunic and Austin (1987), audit fees are determined based on business risks. Therefore, the costs of auditing services should include all expected and perceived costs and expenses by auditors, the business risks faced by companies and organizations requesting these services (quoted by Khodadadi et al., 2019). At the same time, it is believed that the three main factors in pricing audit services are risk, the volume of work (auditors' working hours), and the complexity of operations.

However, due to various reasons such as cultural and environmental differences, and values and beliefs prevailing in the Iranian work environment and other parts of the world, especially European and American countries, most of which are designed to explain the fees in these societies, the present study has tried to develop a more comprehensive and coherent model, with an emphasis on the survey of auditing experts, in a native form, and in accordance with the organizational conditions of Iran. Therefore, several quantitative and qualitative indicators and quantities have been evaluated to price auditing services in the Iranian audit market, which have been extracted from available theoretical and experimental studies and research. In this context, according to theoretical and experimental studies and researches, 135 factors have been extracted as effective factors on the pricing of audit services. Some of them are: Resources spent in the internal audit of the company, the reputation of the clients, balance sheet values, the experience of the auditing firm (Mehrani and Jamshidi Ivanki, 2011), legal claims against the client, observance of professional behavioral rules and regulations by auditing firms, the audit valueness for the client, the quality of demand, clients' goals of auditing, effective and strong corporate governance, the imagining of society with auditing, competition standardization, the

size and concentration of the audit market, the international relations of auditing institutions (Noshadi et al., 2020), bottlenecks of financial reporting process (Sajjadi and Zarei, 2007), total debt to asset ratio (financial leverage), special investment opportunities of the company, high investment opportunities of the company in the industry (Salehi et al., 2013), Family ownership (Khodadadi et al., 2013), the increase of ownership focus, auditors' independence ratio (Ghadimpour and Dastgir, 2016), Auditors' experience (Nikbakht et al., 2016), ratio of non-executive board members, Scattered ownership, type of auditing firm (Darooghe Hazrati Hazrati and Pahlavan, 2012), the complexity of corporate operations, the complexity of auditing, the corporate assets and their liquidity ratio, gender diversity and the presence of female representatives in the audit committee (Imani Brandagh et al., 2017), b management overconfidence / extreme self-confidence (Gal et al., 2018; Quoted from Khodadadi et al., 2018), situation tax situation risk (tax avoidance) (Pourheidari and Golmohammadi, 2015), the increase evaluated companies and subsidiaries, duality role of CEO - chairman (Bahri Sales et al., 2016), corporate governance Weak, internal control problems, The increase of intrinsic risk and control risk (Malekian et al., 2012), aggressive or forward-looking strategies of companies in business, defensive strategies (Sehbai et al., 2019), litigation risk against auditors (Simonc, 1980), the experience of forming audit committees (Abbaszadeh et al., 2017), management skills (Farajzadeh and Heidari, 2017), search periods for replacement auditors (Bazrafshan, 2018), management ownership (Ebrahimi et al., 2014) etc¹.

Research Background

In the field of domestic studies, Kanakriyah (2021) in a study entitled "Model to determine main factors used to measure audit fees" showed that the most important factors that have significant effect on audit fees are: Audit Report Lag, risk, client size, status of the audit firm, and corporate complexity. Also audit fees are negatively and significantly associated with industry type and profitability. Moreover, no relations were detected between audit committee independence and audit rotation with the audit fees. Rahayu et al. (2021) during a study entitled "Risk management committee, independent commissioner, and audit fee: An update" showed that the proportion of independent

commissioners weakens the relationship between RMC and audit fees. This study proved that the existence of a risk management committee would lead to a higher demand for audit coverage. As a result, the audit fee increased. RMC may demand high-quality external assurance, but it may be ignored because the independent commissioner has more authority than RMC. In addition, researchers of this study also used coarsened exact matching with a consistent result as the OLS. These findings provide evidence for policymakers on the relationship between audit fees and risk management committees.

DaemiGah (2020) in "A Meta-Analysis of Audit Fees Determinants: Evidence from an Emerging Market" suggest that some independent variables have consistent results, several show no precise rhythm to the results, and some others only indicate significant results in specific periods or certain countries; variables of audit quality, accounting firm size, industry specialization of the firm, accounting firm tenure and client size are positively correlated with audit fees. At the same time, this study showed that there is no significant relationship between the risk of client firm and audit fees. Findings from Axén (2020) research in "Determinants of audit fees and the management of corporate disclosures" provided that: (i) the determinants of audit fee cutting and relative audit fee pressure are considerably different, especially with regard to different client business risk factors; (ii) municipal companies are paying significantly lower audit fees than equivalent private companies; (iii) there is a considerable heterogeneity in internal auditing disclosures, and companies with more transparent firm-specific disclosures related to internal auditing pay lower audit fees than do those not providing such disclosures; and (iv) the management of corporate disclosure within the annual report is heavily influenced by the knowledge, skills, and personal characteristics of the project manager.

Ebrahimi Kordler et al. (2019) in a study entitled "Audit Fees and Non-Compliance with Anti-Money Laundering Law", in a quantitative way, and using the regression model, in a sample of 78 companies listed in Tehran stock exchange, over 2013-2017, concluded that there is a direct and significant relationship between non-compliance with anti-money laundering rules and the number of audit fees, because non-compliance with these rules increases the clients' business risk and ultimately the audit risk, and

consequently, the increase of the auditors' efforts, increase the cost of the audit services. Gholami et al. (2019) in a study entitled "Relation of Audit Market Concentration to Audit Fees and Audit Quality according to Article 99 of Fifth Development Plan Law", evaluated 91 listed companies in the period 2006-2016, and showed that the monopoly of the audit market increases the audit services fee, however, does not affect the quality of audit reports. In another study, Sehbai et al. (2019) have examined the effect of business strategies on auditing services fees, and by evaluating 127 companies listed on the Tehran Stock Exchange, in the period 2011-2017, concluded that aggressive or forward-looking strategies Businesses have a positive and direct impact on audit fees, while the relationship between business defensive strategies and audit service fees is negative and inverse. Khodadadi et al. (2019) evaluated 81 companies listed on the Tehran Stock Exchange in "Audit Fee Survey, Based on Company Life Cycle Stages (resulting from cash flow patterns)", and showed that companies enter the growth phase of their life cycle, has a negative and significant effect on the auditing services fee. In other words, companies pay less auditing fees in the growth phase. The research result of Khodadadi et al. (2019), in the field of "The Interactive Effect of Financing Constraints and Management's Over-Confidence on Audit Fees", in the period 2006-2016, show that extreme self-confidence and funding constraints lead to a change of auditing services fee. Azinfar et al. (2019) evaluated "The Impact of Risk Dimensions on Auditing Pricing", and surveyed 85 companies operating in various industries, in the period 2013-2017, showed that there is a relatively strong relationship between financial risk and operational risk with audit fees. Finally, Noshadi et al. (2016) in a study entitled "Investigating Factors Affecting Audit Fees: Factors Related to the Professional, Cultural, and Social Environment", in a qualitative way and based on contextual theory by evaluating the opinions of experts through interviews, shows that the most important professional and environmental factors affecting the remuneration of audit services are the association of the community with the audit, the perception of users and stakeholders of the audit, decision-makers, and policymakers, as well as the degree of competition standardization.

In the field of external studies, Duellman et al. (2015) in a study on management overconfidence, and

audit fees, showed that companies with overconfident managers pay less auditing costs. Krishnan et al. (2016) in a study entitled "Customer Focus and Audit Fee" concluded that customer focus reduces the company's business risk, and ultimately, reduces audit fees. Moreover, Ying et al. (2018) in evaluating the role of audit seasons in the value of audit services fee, concluded that the audit fee in busy seasons is 10% higher than in other seasons. Nan & Cheng (2018) also evaluated the cost of investment development and audit fees and showed that investment development costs have a positive effect on audit fees, but where the company takes advantage of investor support, this impact is less. Reviewing the research background shows that a large proportion of the studies conducted have a limited univariate or multivariate approach to audit fees, and use conventional regression methods to measure the increase or decrease factors of audit fees. Some other studies review the results of meta-analytic studies, provide an analysis of previous studies, and some have turned to tests of factors extracted in the past and previous studies. Thus, the auditing researchers have not paid attention to identifying the main quantitative and qualitative factors to determine the audit fee section and do not try to provide an effective model of audit fees in its various dimensions.

Methodology

A combined method based on exploratory technique (qualitative to quantitative) has been used in this research, which emphasizes the model of making research tools and its testing during the research experimental phase. In the form of this methodological model, the researcher, after collecting qualitative data, and evaluating this data, develops a quantitative data collection tool, and after testing it, determines that whether the results in the form of qualitative data are valid or not. Accordingly, first, it has been tried to identify effective factors on the determination of auditing services, based on documentary-library studies, and analyzing the results of previous texts and studies in Iran, and then, a questionnaire developed considering these factors and tested by Delphi method to determine the agreement of the scientific, research, and experimental experts on these factors, and finally, to determine the main priority factors. The method of using of Delphi technique in this research is that, after reviewing and scientific, experimental, and operational studying the published texts in the field of auditing

fees, the effective factors are extracted to determine auditing fees in the form of factors related to the auditor, clients, the profession general, and social conditions, etc., these factors were inserts in the questionnaire, and the results have been re-evaluated several times by performing the Delphi technique. In the next step, the main factors were extracted and validated by exploratory and confirmatory factor analysis techniques. The statistical universe of this research, in the qualitative part, includes theoretical texts of management, auditing and accounting, internal and external studies and researches, and all published articles, books, and projects in determining the pricing factors of auditing services, and in the quantitative part (sample size = 57 scientific and research works), includes researchers in the field of auditing and accounting (10 people), auditing experts in academic fields (10 people), and experts, consultants and heads of auditing firms (10 people). Membership in the auditing society, involvement in research, having the necessary information and knowledge, having the motivation to participate in research, having academic degrees at higher education levels, having a long experience in the accounting profession, and having desirable and useful knowledge and expertise in the field of accounting and auditing, has been the criteria for selecting the research final sample size. The sample size in the quantitative part includes 160 professional and experimental experts, which were selected by SAMPLE POWER software, considering the regression analysis method, taking into account the error percentage of 0.05, power 0.80, and effect size 0.10, for the coefficient of determination. These subjects were selected from among those who worked in governmental-non-governmental and academic-non-academic organizations and institutions in the experimental and theoretical field of accounting and auditing in the two provinces of Tehran and Isfahan. Moreover, the sampling method in the qualitative part was based on Purposive-Judgmental Sampling, and the criterion for ending the sampling was to achieve theoretical saturation. In the quantitative domain, the quota sampling method was used to obtain the appropriate sample size. Here, the criteria for classifying the statistical universe have been having theoretical and professional knowledge in the field of accounting and auditing, membership in the faculties, as well as working in public and private organizations, and having auditing experience. Therefore, in this

context, and due to the identification of a combination of the statistical universe, online questionnaires were developed, and its file was provided to all members of the sample, and finally, after multiple follow-ups, data related to the appropriate samples in this study were collected. Moreover, in order to implement the Delphi technique and to count the final factors, the survey method has been used with the emphasis on the questionnaire. In order to analyze the data, SPSS 22 and AMOS structural equations in the form of centripetal statistics (mean, standard deviation.), Kendall's coefficient of concordance (W), and goodness of fit to structural equation models have been used.

Results

After reviewing the theoretical foundations and evaluating the results of previous studies and researches, auditors identified 132 factors as effective factors to increase or decrease costs, and pricing of audit services. Accordingly, it has been attempted that the mentioned factors be validated and evaluated from the perspective of experts and researchers in the field of auditing using the Delphi method. 132 factors counted operationally, in the form of a questionnaire (closed-open questions), and the Delphi method was performed interactively two times until reaching the desired agreement and at an acceptable level among the sample sizes. At the same time, in the form of some open-ended items, the respondents to the Delphi questionnaire were asked to indicate some important and effective factors in this field if think researcher has ignored or not taken them into account. It should be noted that in Delphi, 60% of the experts participating in the study were male, 40% were female, 83.34% were married, and 16.66% were single. Moreover, the minimum and the maximum age of the respondents was 24 and 62 years respectively, and their mean age was 38.42 with a standard deviation of 9.18, and in terms of education, 20% had a bachelor's degree, 36.66%, master's degree, and 43.34% had a Ph.D.

Table 1. Kendall's coefficient of concordance on effective factors on the pricing the professional auditing services

Steps of performing Delphi technique	Number of participants	Kendall's coefficient of concordance	Chi-square values	The significance level
The first stage	30	0.640	723.975	0.001
The second stage	30	0.715	845.46	0.001

In the first stage of the Delphi process, 30 questionnaires were sent to active experts and specialists in the field of auditing and accounting, and after completing, all 30 survey forms were returned to the researcher. The mentioned questionnaires were statistically analyzed after conversion processes and were described by centripetal statistics, including mean and standard deviation. The results of this stage of Delphi implementation, and experts' survey showed that out of 132 target factors of researcher, 7 factors, including involuntary accruals (2.73), corporate defensive strategies in business (2.53), social capital (organizational trust and willingness to cooperate and formation of collective actions for economic and social integration) (2.80), gender diversity and the presence of female representatives in the audit committee (2.27), the ratio of operational growth opportunities in the company (2.93), the number of employees in the client company (2.71) and CEO tenure period (2.53) did not achieve the required mean to attend the second stage of the Delphi survey process, and due to the low mean, were excluded from this validation procedure. Thus, over examining the first stage of Delphi, 125 factors had a mean above three (average and normal), and in this regard, were identified as effective factors on audit services fee. At this stage, factors such as the number of accounting documents, and the sales size and amount, and total assets (4.20), the quality of the audit report (4.13), the complexity of corporate operations (4), brand, rank, degree, and reputation of auditing firms (4), working experience of audit firm (4), the experience of auditors (3.93), size of the client company (3.87), competition or monopoly in the auditing market (3.87), quality of the auditor (high quality, diligent and hard-working auditors) (3.87), and the size of the auditor and the audit firm (big auditing firms) (3.80) were identified as the most effective determining factors of professional auditing services fees. At the same time, considering the included opinions, there were formal changes in the appearance of effective factors and criteria in the cost of professional auditing services. According to the deleted items and changes in the form and the wording of the factors and variables, the second questionnaire

is designed to implement in the second stage of Delphi, and along with the previous opinions of the participants in the survey process, as well as the differences between their opinions and other experts and researchers participating in the Delphi process, it was sent again to 30 of them. In the inferential dimension, the evaluation of Kendall's coefficient of concordance in the field of the effective factors on the audit services fee was 0.640, Chi-square, 723.975, and the significance level, was 0.001, and accordingly, 64% of the experts surveyed agreed with these factors, and whether they are effective to increase or decrease the cost of auditing services. However, due to the fact that the 64% coordination among the experts is considered moderate by the existing criteria, the second stage of the Delphi technique was performed in order to reach a stronger agreement.

In the second stage, the results of describing the research factors indicate that all 125 factors developed in the Delphi questionnaire had a desirable and acceptable mean, and in this regard, no factors were removed at this stage. However, at this stage, 6 and 8 factors have undergone some changes in terms of content, and in terms of form and appearance, respectively, and their ambiguity and contradiction have been announced and corrected by experts. Moreover, in addition to the factors with the highest mean in the first stage of the Delphi method, other factors such as competition or monopoly in the audit market (4.1), how to pay audit fees (lump sum, installment, percentage) (3.95), bottlenecks of financial reporting process (3.93), audit seasons (busy/secluded seasons) (3.91), geographical dispersions of auditing firms (3.90), auditing working hours (allocated time to auditing corporate procedures) (3.90), the first audit (3.90), the expertise of the audit committee-expertise (3.89), the size of the board of directors (3.88), the number of audit staff (3.88) and the quality of financial reporting (3.87) and several other factors ranked high in the second stage and were recognized as effective factors to increase or decrease of audit services fees by experts. Moreover, examining Kendall's coefficient of concordance among the experts participating in the Delphi survey showed that

71% of studied experts were agreed with mentioned factors. The chi-square, 845.46, and the significance level were 0.001, which implies the significance of the coefficient of concordance at the level of 99%. Thus, the level of concordance between expert participants, researchers, and faculty members of universities as members of the specialized panel of this study on the effective factors on professional auditing services fees has increased by 7 points from the first to the second stage. Now, considering that Kendall's coefficient of concordance among the experts on the proposed factors has reached an acceptable and desirable level, and this concordance is evaluated as moderate to high (firm concordance), at this stage, the survey of Delphi expert panel members stopped. Therefore, 125 factors were identified as effective factors on the audit services fees. In the next stage, exploratory factor analysis was performed on the calculated factors by the experts in order to extract the factors and components hidden among them. The description of the statistical appearance of the respondents participating in the factor analysis part showed that 73.1% of the participants were male, 26.9%, were female, 82.5% were married, and 17.5%, were single. The minimum and maximum age of the respondents was 26 and 65 years, respectively, their mean age was 41.18 years with a standard deviation of 12.30, and in terms of education, 48.7% had a bachelor's degree, 40.6% master's degree, and 10.6% had a Ph.D.

Table 2. Results of KMO and Bartlett spherical test (factor analysis assumptions)

Statistics		values
KMO Sampling Adequacy Ratio		0.868
Bartlett spherical test	chi-squared	19420.374
	degrees of freedom	159
	Significance level	0.001

According to the results of the KMO test, 0.868, the research data can be reduced to a number of more fundamental factors. In other words, a higher KMO value than 0.7, and its proximity to 1, indicate the sample adequacy for factor analysis. At the same time, the result of the Bartlett sphericity test, 1944/374, is significant at the error level of less than 0.01 and indicates that the correlation matrix between the factors is not an Identity Matrix; this means that on the one hand, there is a high correlation between the factors within each factor, and on the other hand, there

is no correlation between the indices of a factor and other factors. In this regard, using factor analysis in order to identify the underlying effective factors and components to increase or decrease auditing services fees, is considered desirable. Another output that is important in factor analysis is the number of extracted factors and the explained variance values of the extractive factors.

Table 3. Extracted factors of auditing services fee pricing model

Factors	Extracted fundamental components after varimax rotation		
	Total	percentage of variance	Cumulative percentage of variance
1	31,724	25,379	25,379
2	20,277	16,222	41,601
3	15,001	12,001	53,602
4	13,401	10,721	64,322
5	11,836	9,468	73,791
6	8,859	7,087	80,875
7	7,962	6,370	87,248
8	5,277	4,222	91,470
9	4,516	3,613	95,083
10	3,755	3,004	98,087

The result of studying the Kaiser values in the factor analysis model indicates that the 125 studied factors can be reduced to 10 factors, and we can combine these 125 factors to provide a new structure of effective factors on pricing professional auditing services. Moreover, the role of each extracted factor in explaining the variance of effective factors on pricing auditing services is descending; this means that the first factor has the highest role (25.379) and the tenth one plays the lowest role in explaining the variance of all factors. In other words, the first factor was able to explain 25.379% of the variance of the total indicators. This variance value is explained for the second to tenth factors, respectively, 16.222, 12.001, 10.721, 9.468, 7.087, 6.370, 4.222, 3.613, and for the tenth factor is 3.755 percent. In general, a total of 10 identified factors with eigenvalues higher than one can explain up to 98.087% of the variance, and also the changes in the 125 factors of pricing the professional audit services fees.

Table 4. Factor loading of auditing services pricing model indicators

Factor	Indicator
The status factors of the audit system	A long period of auditor tenure (0.714), size of the client company (0.849), customer focus (0.830), limited audit time (time to submit audit report) (0.925), audit working hours (allocated time to auditing corporate procedures) (0.665), the complexity of corporate operations (0.780), resources spent on internal auditing of the company such as budget (0.654), auditing seasons (busy/secluded seasons) (0.827), the increase evaluated companies and subsidiaries (0.801), first audit (0.682), taking advantage of consultants in performing audit processes (0.510), focus on providing audit services (0.762), transactions with related parties (0.622), how to pay audit fees (lump sum, installment, percentage) (0.775), size of business units operations (0.890), change of auditor (0.551)
Organizational factors related to the auditor	Auditor's specialization in the industry (0.715), working experience of auditing firm (0.622), size of auditor and auditing firm (big auditing firms) (0.618), type of auditing firm (local, regional, national, etc.) (0.578), geographical dispersions of auditing firms (0.603), number of auditing staff (0.559), brand, rank, degree, and reputation of auditing firms (0.872), paid salaries of employees in auditing firms (0.420), the rank of auditing institute based on auditing ranking institutions hierarchy (0.790), taking advantage of new technologies in auditing (0.584), observance of professional behavioral rules and regulations by auditing firms (0.524), the international relations of auditing institutions (0.773)
Auditor's personal characteristics	Auditor's expertise (0.770), Auditors' experience (0.607), Auditors' independence ratio (0.561), Auditor quality (high quality, diligent and hard-working auditors) (0.793), Perception of key users and stakeholders from auditing (0.558), strong audit committees (quality of auditing committee) (0.820), the experience of forming audit committees (0.669)
Institutional-macro audit considerations	Persistence of the audit committee (number of meetings) (0.640), the expertise of the audit committee-expertise (0.492), the audit valueness for the client (0.535), attitudes and characteristics of policymakers and decision-makers about the audit (0.816), the past legal claims against the client (0.433), the auditors' conciliation with the managers (0.615), the formulation of effective audit rules and regulations (0.612), uncertainty about conventional values/emphasis on fair values (0.494), auditing property with conventional values (0.513), observing anti-money laundering rules (0.554), the degree of cooperation and participation of clients and auditors (0.631).
Clients' financial considerations	Total debt to asset ratio (0.647), number of accounting documents, and the sales size and amount, and total assets (0.760), corporate losses (0.574), bottlenecks of financial reporting process (0.804), increasing compensation paid to CEOs (0.433), Quality of financial reporting (0.486), High-profit management (0.615), Dividend and operating profit of the company (Return on assets) (0.620), compensation of the board of directors (0.706), Asset revaluation (0.628), optional accruals (0.450), corporate balance sheet values (0.589), the corporate assets and their liquidity ratio (0.814), high free cash flow (0.808)
Institutional-managerial considerations of clients	Independent board of directors (0.580), board size (0.437), ratio of non-executive board members (0.423), combination of a strong board (diversity, expertise and competence, experience, expertise) (0.690), representative role of managers (0.406), duality role of CEO – chairman (0.614), management overconfidence/extreme self-confidence (0.470), reputation of clients (0.433), financial knowledge of the CEO (0.755), management uncertainty (0.543), individual and professional abilities of corporate management (0.678), bargaining power of the client (0.570), resignation of the former auditor (0.518), search periods for replacement auditors (0.545), the frequency of board visits of the company and its financial statements (0.644), mandatory acceptance of international financial reporting standards (0.610), weak management incentives for financial reporting (0.446), CEO sensitivity to fluctuations stock exchange (0.492), management conservatism or ambitious (0.457), perception of audit efficiency (0.451), clients' goals of auditing (0.550)
Audit risk	The increase of intrinsic risk and control risk (0.677), tax situation risk (tax avoidance) (0.745), litigation risk against auditors (0.684), increased financial risk (0.686), the increase of operational risk (0.887), the increase of business risk (0.829)
Effectiveness and quality of audit services	Quality of audit report (0.603), effectiveness and quality of internal control (weakness or strength of internal control - internal audit) (0.641), quality demand by clients (0.706), audit report containing going concern clause (0.612), adjusting the number of audit clauses before commenting in the non-private sector (conditional clauses in the audit report) (0.665)
Ownership governance and growth processes	Ownership control (0.513), Scattered ownership (0.687), Management ownership (0.510), Family ownership (0.482), the increase of ownership focus (0.414), Stock ownership by institutional investors (0.598), High-ownership shareholding (majority shareholder) (0.660), stock ownership by executive directors (0.505), shares percentage (ownership) of governmental and quasi-governmental institutions (0.694), shares held by executive managers (0.677), R&D costs (capitalization of R&D costs) (0.529), aggressive or forward-looking strategies of companies in business (0.463), effective and strong corporate governance (0.728), entering the stage of Maturity in the life cycle of the company (0.422), levels of progress and technology of the client company (0.424), special investment opportunities of the company (0.511), entering the stage of "growth" in the life cycle of the company (0.490), financing constraints (0.676), CEO ownership incentives (0.615)
social, economic, and	Competition of product market (companies operating in competitive markets) (518), inflation (0.471),

Factor	Indicator
political considerations of the audit market	size and concentration of the audit market (0.731), competition or monopoly in the audit market (0.790), rate of the public or private economy (0.458), favorable interactions between regulatory bodies (0.662), legislators and professional and governmental auditors (0.435), established social laws (such as paragraph A of Article 99 of the Fifth Development Plan Law that requires securities issuing companies presenting audited financial statements) (0.510), inclusive professional organizations for the auditing profession (0.491), high investment opportunities of the company in the industry (0.432), the multiplicity of companies in the industry (0.716), competition standardization (0.504), understanding the supervisory bodies on auditing activities (0.512), the imaging of society with auditing (0.408), political relations of companies (0.639)

In order to validate the obtained 10 factors from the exploratory factor analysis section, the Structural Equation Modeling method, and the Confirmatory Factor Analysis technique have been used. This model

is implemented in AMOS, and the results of this method of factor analysis validation are plotted in both standard and significance forms.

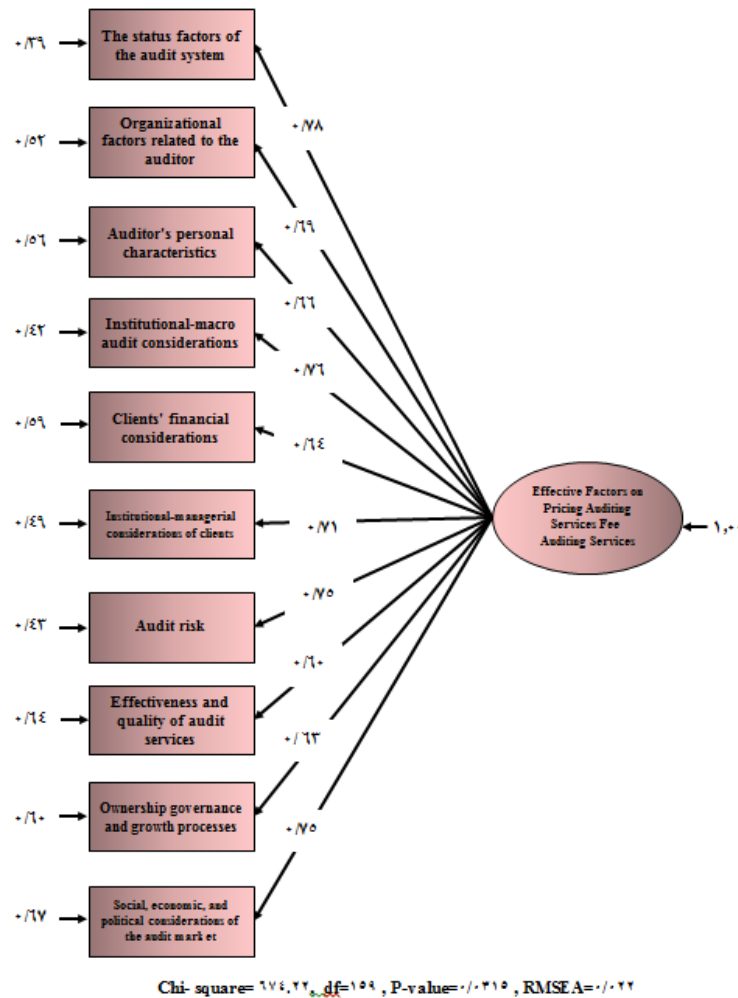


Fig 1. Structural model of pricing auditing services fee (standard)



Fig 2. Structural model of pricing auditing services fee (significance forms)

Table 5. Structural equations goodness-of-fit-index for the pricing model of auditing services fee

Model fit criteria	Abbreviation	Value	Optimal limit	Interpretation
Chi-square to freedom degree	χ^2/df	1.918	3>	Optimal
Goodness-of-fit-index	GFI	0.93	>0.90	Optimal
Adjusted goodness-of-fit-index	AGFI	0.93	>0.90	Optimal
Normed Fit Index	NFI	0.95	>0.90	Optimal
Comparative Fit Index	CFI	0.97	>0.90	Optimal
Incremental Fit Index	IFI	0.92	>0.90	Optimal
Relative Fit Index	RFI	0.94	>0.90	Optimal
Root Mean Residual	RMR	0.0266	~0	Optimal
Root Mean Square Error of Approximation	RMSEA	0.0401	0.08>	Optimal

Evaluation of the research goodness-of-fit-index of structural model indicates that the research model is in an optimal condition in terms of these indices; thus, the

calculated χ^2/df is 1.918, and since the value of χ^2/df is less than 3, it indicates the model's goodness-of-fit, so the optimal limit of Chi-square to freedom degree is

obtained. At the same time, the Root Mean Square Error of Approximation (RMSEA) should be less than 0.08, which in the model of this study is equal to 0.0401. The values of GFI, AGFI, NFI, CFI, IFI and RFI indices should also be higher than 0.90, which in the structural calculations of this research are 0.93, 0.93, 0.95, 0.97, 0.92, and 0.94 respectively. Another fit index obtained in the form of AMOS calculations is the RMR value, which in terms of structural ideal limits should be lower than 0.05, which in the model of this research is 0.0266. Accordingly, the output values of AMOS indicate that the calculated data logically corresponds to the research model, and in this regard, the indices, and their sub-indices, in order to price the audit services, i.e. the status factors of the audit system, organizational factors related to the auditor, auditor's personal characteristics, institutional-macro audit considerations, clients' financial considerations, institutional-managerial considerations of clients, audit risk, effectiveness and quality of audit services, ownership governance and growth processes, social, economic, and political considerations of the audit market, have an optimal fit and credibility.

Discussion and Conclusion

This study has been conducted to provide a comprehensive model for pricing audit services fees in Iran, and its results indicate that the model includes 10 components in the form of 125 indices. These components based on their factor loading and explained variance in the model is as follows:

The status factors of the audit system: When the company's operations are extensive and include multiple auditing complexities and phases, auditors' judgments will be more difficult and the time it takes for audit teams increases, as a result, the demand for monitoring and controlling its financial reporting processes, as well as, their payments increase, which is consistent with the research results of Visoki (2010), Kim et al. (2012), Sajjadi et al. (2012) and Imani Brandagh et al (2017). Moreover, the size of companies and institutions that need auditing services, and as a result, the increase in the financial statements of these companies, which enhance the audit risk for auditing firms, in turn, enhance the scope for increasing the auditing services fees. In this regard, Ben Ali & Lesage(2013) have shown that the size of companies, as well as the number of their subsidiaries, especially in big companies, due to the impact on

auditors' forecasts of audit risks, and the number of hours required to audit a company's activities, changes audit services fee positively. This result is consistent with the results of studies carried out by Oktorina & Wedari (2015) and Bazrafshan (2018). In addition, paying audit fees are effective for the cost, and full payment of audit fees can partly reduce the cost of audit services. Installment or percentage payment of the costs not only does not cause auditors to discount auditing services but in some cases increases the cost of providing these services due to installments. This result is consistent with the results of Mehrani and Jamshidi Avanki (2011) and Noshadi et al (2018). In addition, in the busy seasons of auditing, especially at the end of the fiscal year, due to the large size of demands for auditing services by companies and business units, the auditing fees for those companies that need a quick audit, without delay becomes more. Ying et al. (2018), in meta-analysis research, show that the audit fee is calculated in busy seasons, 10% more than other seasons. The auditing services fee, on the other hand, is closely related to the per hour audit fee, and also the number of working hours of an auditor, which varies depending on the auditor's view on forecasting error risk in financial statements. Simunic (1980) considers the auditing services fee to be dependent on the per hour work, and the number of working hours, as well as the auditor's expected profits, which depends on the size of services provided to companies, the error risks caused by the complexity of audit processes in the mentioned institutions.

Institutional-macro audit considerations: Today, the role and function of audit committees in corporate governance systems have been emphasized by the legislatures, so that, based on paragraph (b) of Article 4, the Internal Control Instructions of the Exchange Organization (2012), the board of directors of the Exchange Organization should form an audit committee and other committees, and provide the requirements for the interaction of committees and internal audit units (Salehi et al., 2016). Audit committees are able to ask companies to hire more trusted and reputable auditors, increase the independence of independent auditors by supporting them while disagreement with clients, and enhance the accuracy of audit reports by reducing the potential risks of replacing the auditor that is based on the motivations of managers (Imani Brandagh et al., 2017). On the other hand, when clients and companies

that need auditing services understand the importance of auditing activities and consider positively auditing financial activities, and the value of auditing activities in each financial year, naturally, they tend to use certified auditors, high-quality auditing bodies, and expert staff to audit the activities of their company and organization, so it will not be difficult for them to pay auditing services fee. In this regard, it is important to understand that auditing financial activities for clients are valuable for the excellence of the audit system and the benefit of the auditing community of sufficient wages, which the results are consistent with the research results of Noshadi et al (2018). Moreover, expert audit committees have more capabilities to understand the auditors' opinions and the nature of the differences between managers and independent auditors. Therefore, if auditors recognize that the audit committees do not have the necessary information about some complex audit issues, they will not refer those issues to them (Yatim, 2006; Abbaszadeh et al., 2017). On the other hand, according to the Iranian anti-money laundering rules, professional auditors, in reviewing and commenting on clients' financial statements and reports, must comply with the provisions of the Antimoney Laundering Law and consider it as an independent clause in their audit report. Money laundering increases the auditing services fees in two ways; first, auditors are concerned about losing their credibility and disclosure of their money laundering, their failure, and their disability to detect and report it. Accordingly, money laundering increases the risk associated with financial distortion, which ultimately leads to greater efforts to detect and disclosure money laundering, and, consequently, to increase audit fees. On the other hand, money laundering can increase the auditing services fees by increasing the business risk of the client (Habib et al., 2017). Therefore, the auditor's assessment of the client's business risk affects the efficiency and effectiveness of his activities and increases the audit fee.

Audit risk: Auditing is a professional activity in which auditors must estimate the risk of an unspecified rate of return and reflect that risk by specifying audit fees. Nikkinen & Sahlstrom (2015) by measuring the effect of risk on the pricing of accounting services in the United Kingdom have shown that the auditing services fee is related to the dimensions of risk, including financial, operational, and commercial risk.

In other studies, corporate risk has been a positive function of the financial, operational, and commercial leverage of a company or institution (Azinfar et al., 2019). Therefore, audit fees are a direct function of different risks; financial leverage indicates the client's ability to pay long-term liabilities, and the high debt-to-asset ratio has increased the possibility of the company bankruptcy, as high liability can be associated with high corporate risk, leading to liquidity issues and the company's going concern. Therefore, auditors have done more to reduce this risk in companies with higher leverage rates, and this has maximized audit fees. Moreover, the tax status risk is operationalized by the size of the company's effective tax rate, and therefore, the lower the company's effective tax rate, the higher the company's tax risk, or in other words, tax avoidance. Donohoe & Knechel (2014), assess the tax evasion of some companies, and its impact on the pricing of auditing services, emphasizing that the complexity of the tax status of business units and their reporting requirements have many applications for independent auditors' decisions, and in cases where companies experience uncertain and risky tax status, they receive higher audit fees. Higher tax avoidance increases fees by up to 6%.

Institutional-managerial considerations of clients: Mainly the credibility and reputation of the clients, their social and economic status, and the need to certify social credibility among their competitors, to increase the desire to use higher quality audit services. This group of clients, in order to maintain their positive reputation and share in the economic and financial markets, did not easily ignore any significant errors or distortions in the financial statements, and therefore, by receiving services from reputable, expert and specialized auditing companies, paid more auditing services. This is consistent with the result of Mehrani and Jamshidi Avanki (2011) and Vaez et al. (2016). On the other hand, a strong board of directors in companies and organizational systems, with a combination of skilled, competent, experienced and knowledgeable, and diverse people, makes them more control the organizational procedures and company operations, as well as financial statements and reports, and in this way, reduce the possibility of fraud and manipulation of managers. This, in turn, reduces audit risk, thereby the audit fees. According to Hay et al. (2008), the professional and legal responsibilities of professional board members are combined with their

need for direct communication with the internal environment, as well as their need to maintain their credibility and reputation and increase the demand for independent auditing, which has been confirmed by the studies of Desender et al. (2011) and Darooghe Hazrati and Pahlavan (2012). Lack or weakness of internal controls, corporate tendencies to extralegal activity (illegal activities of managers), and also, the increase of risk in these companies, mainly led to the resignation of some auditors, consequently, new auditors demand these companies higher fees to cover the potential losses and risks resulted from providing audit services. This is consistent with the results of Mande et al. (2017) and Bazrafshan (2018). In addition, the mandatory acceptance, measurement, and valuation of International Financial Reporting Standards, which are based on fair values and have many complexities, increase the discretion of the client management and as a result, the significant risk of a financial misstatement by the client; the increase of this risk, due to a lack of more audit efforts, can increase the risk of non-disclosure of errors and audit problems. George et al. (2014) have shown that audit costs increase by 23% over the years of adoption of these standards. Finally, non-executive members, who are mostly the members of the board of directors of companies in the form of independent directors, and as independent persons, have supervisory functions, reduce the conflicts of interest and conflicts between shareholders and directors. In these cases, non-executive directors judge the decisions of corporate executives professionally, impartially, and objectively. Therefore, corporate boards with expertise, independence, and institutionalized legal authority are among the potential empowerment mechanisms of companies, and accordingly, increasing the independence of independent and non-executive directors in the composition of the board leads to a reduction of audit fees. This is consistent with the research results of Hazrati and Pahlavan (2012).

Organizational factors related to the auditor: available studies indicate that the higher the brand, rank, degree, and reputation of an auditing firm at the transnational and macro levels, and the greater its reputation in the field of financial and accounting activities, the higher their received fee for the audit services (Mehrani and Jamshidi Avanki, 2011; Mohammad Azadi and Mohammadi, 2015). Francis (1984) believes that big and reputable auditing firms in

the society demand the clients more fees and wages because such firms are considered high-quality firms and high credibility by investors, and society, and in this regard, bring about more transparency and better performance for the company. On the other hand, the experience of auditing firms in auditing and having a rich resume is an effective factor to increase audit fees. This finding is consistent with the research results of Kim & Fukukawa (2013), and Nikbakht et al (2016). At the same time, as Karim (2010), Khodadadi et al. (2016), Farajzadeh and Heidari (2017), and Noshadi et al. (2017) have shown, the size of auditors and auditing firms also affects audit fees and pricing. According to Karim (2010), in less developed societies, audit fees are based on the level of activity and the characteristics of the auditor. Large and reputable auditing firms and auditors are reluctant to provide low-quality, low-cost services, and generally provide high-quality audit services with higher prices to clients because they prefer to gain a better reputation in the market. On the other hand, larger audit firms with higher audit quality encounter lower levels of litigation, audit errors, and unexpected accruals, and have a higher earning response coefficient (Pourheidari et al., 2015). As a result, they receive higher fees for their audit services.

Auditor's personal characteristics: individual or organizational experiences of auditors have irreversible effects on the accuracy of auditors' judgments, and increase and improve their ability to data processing, and to develop a variety of strategies and solutions in specific situations (Kim & Fukukawa, 2013; Faraji Amiri, 2014; Nikbakht et al., 2016). At the same time, experienced auditors are more aware of audit issues. They memorize situational models, and possible error and control conditions from their previous experience, and act on them in similar situations, so they are more successful than other auditors. On the other hand, Doogar et al. (2014) and Pourheidari et al. (2015) are among the researchers who have emphasized the importance of high-quality auditors as one of the most important reasons for increasing costs and the auditing services fees. According to Beatty (1989) high-quality auditors have higher incentives to identify distortions in financial statements because they have invested more in their reputation and, as a result, audit failure endangers their reputation. They are famous (Pourheidari et al., 2015). Therefore, the precision, accuracy, and reliability of

the data presented in the financial statements audited by quality auditors are higher.

Clients' financial considerations: The financial reporting process is a process based on multiple problems, complexities, and ambiguities, and in this process, auditors experience many difficulties in dealing with numbers and calculations and potential fluctuations within these reports. This increases the demand for audit services fees. In this context, the auditor's experience develops structures for judgment, and these experience structures lead to the development of decision-making methods and data interpretation. This is consistent with the research results of Nikbakht et al (2016). Moreover, the amounts of corporate balance sheets, and the assets and liabilities that confirm extensive financial transactions and transfers, indicate the need for high audit workloads, and the use of expertise, manpower, and long working hours, which increase the auditing services fee based on the exponential rate of work activities (Mehrani and Jamshidi Avanki, 2011). Another factor is the quality of financial reporting, which indicates the degree of honesty and reliability of managers in providing fair and accurate data for decision making, and the possibility of financial reporting fraud through audit quality, and high-quality financial reporting is realized (Mitra Et al., 2017). In general, auditors should be aware of possible illegal actions that could have an indirect effect on the financial statements and try to detect and report any distortions or fraud that may result from such illegal actions. As the quality of financial reporting increases, the performance of auditors and audit firms decreases, and therefore the auditing services fees will be reduced to lower levels. In this context, corporate losses are also important, and auditors of entities, in general, perform audits in loss-making entities with more accuracy, precision, caution, and professional care, because, with the no going concern assumption in these companies, there is a possibility of financial losses and bankruptcies. Therefore, due to the increase of time and working hours of audit processes, for reasons such as operational risk and litigation based on working on loss-making companies, audit fees increase (Vaez and Ahmadi, 2014). According to the research results of Oktorina & Wedari (2015) on the assets of the company and liquidity ratio, as a result of increasing the liquidity and profitability of companies and thus increasing the risk and environmental risks,

larger samples are needed for audits, and therefore, size of the company is considered as an effective factor on the cost of auditing. According to Imani Brandagh et al (2017), the increase of one unit to the client's assets, the fee increases by 0.462 unit.

Ownership governance and growth: the quality of corporate governance environment is one of the effective factors on the control and inherent risks, and therefore, the more effective the corporate governance of entities, the independent board, and less change will reduce audit risk, auditors rely more on internal oversight systems, and audit time will decrease. This finding is consistent with the research results of Desender et al. (2011) and Malekian et al. (2012). In the field of the share percentage or ownership of governmental and non-governmental institutions, although the results indicate that the percentage of ownership of governmental and quasi-governmental institutions has a positive and direct effect on audit fees, the role of government in such companies is due to definite operational expectations and coordination of its property policies control activities in some way, and therefore, this governmental control can reduce the operational complexity of these entities to some extent, and lead to a reduction in fees. On the other hand, financing constraints maximize the risk of financial reporting, as they deal with difficulties in investment sourcing and outsourcing, and therefore have to pay higher audit fees. In this regard, Shyti (2018) has suggested that financial constraints lead to changes in management practices in order to manipulate profits to provide opportunities for funding. When managers encounter financial crises, they change the detection time of bad news, and as a result, investors encounter the risk of making the wrong choice, and spending on more opportunity, a choice that leads to higher costs for shareholders than creditors. This is consistent with the research results of Frank & Obloj (2014) and Khodadadi et al (2019). Regarding the entry of the "maturity" stage in the life cycle of companies, some researchers believe that the stable business environment of companies at this stage leads to financial and economic results, which deviate less from the results of previous years, and expectations from auditors are reasonably high in the field of financial results, and their audit processes are effectively executed because business risk and bankruptcy are lower, which leads to lower demand for audit fees. In contrast, some studies have shown

that the competitive and challenging business environment of business units makes their organizational structure more complex, requiring more expensive audit procedures, higher audit efforts, and more time. This is consistent with the research results of Khodadai et al. (2019). Ultimately, managerial ownership reduces the problem of representation among shareholders and managers for reasons such as aligning the interests of managers and shareholders, which leads managers to more optimal control, better performance, and reduce information asymmetry compared to other organizations. Moreover, the managers who have invested in their company, compared to other managers, avoid high-risk decisions, so due to reducing information asymmetry and low-risk decisions, reduce the need for regulatory costs, including audit fees (Ebrahimi et al., 2014). Accordingly, in companies based on managerial ownership, the auditing services fees will reduce.

Effectiveness and quality of audit services: Demand for high-quality audit services increases audit fees. Pourheidari et al. (2015), in a study, confirmed that the auditing quality in large auditing firms has a direct effect on their received fees, and increasing the quality of audit reports prepared by audit firms, as well as increasing quality monitoring of such reports provide the basis for demanding higher audit services fee. Moreover, the effectiveness and quality of the internal report, which has been emphasized in the studies of Ghadimpour and Dastgir (2016), Mashayekhi et al. (2016), and Nikbakht et al. (2016), indicate that issues such as having a strong and adequate internal control system, dividing the tasks and status of the audit process and cycles, by reducing the need for audit activities, and allocating less time in the audit process of companies, provides grounds for reducing the audit services fee. In other words, since financial auditing is based on internal control, and rich in-house monitoring, the development of preventive rules to organizational misconduct, and the closure of abusive ways in organizations, all indicate a complementary internal control system in addition to external audit procedures. Amounts paid as fees reduce audit services due to the quality of in-house reporting.

10. Social, economic, and political considerations of the audit market: Audit fees, like other service goods, have a lot to do with the level of competition, or the monopoly of markets. According to microeconomic theory, as the monopoly of the audit market increases,

the power of institutions and companies operating in this field increases, and as a result, the fear of losing customers and clients decreases, the ability to pricing, and determining auditing fees in auditing firms increases. Gholami et al. (2019) have shown in a study that the monopoly of the audit market increases audit services fees, but does not affect the quality of audit reports. On the other hand, in terms of the size and focus of the audit market, when the audit market has fewer clients, or the size of these clients is small, the audit fees in the centralized audit market increase. In markets where the number of clients or their size is large, a centralized audit market leads to an increase in audit fees (Eshleman, 2013). The existence of comprehensive professional organizations for the auditing profession is another important factor, and in societies whose economic system structure consists of professional institutions in the field of accounting and auditing, and in this regard, the structure, skeleton, and body of their financial system are quite clear, unambiguous, and with fundamental and institutionalized principles and regulations, the auditing services fees are determined on the basis of specific principles and practices, and these supported and established principles and foundations, by professional institutions and organizations, are always supported by all the audit community members. In contrast, the concern due to lack of rules and principles related to the regulation and adjustment of audit service fees, which results from the lack of organizing professional organizations in the field of auditing, destabilized the market of this profession, and the chaos caused by increase and decrease of pricing the audit services. In addition, the degree to which the economy is public or private directly and indirectly affects the audit services fee; so that, in areas based on government economics, decisions related to auditing and auditors' fees depend on government needs and opinions, however, in the private economy, and competitive markets, as individuals look for maximize their profits and resources, and try to achieve higher returns with the lowest risk, crediting reports and financial statements is critical to making the right investment decisions, and optimal allocating resources. It is natural that investors in such markets, look for capable and reliable auditors to reduce the risk of accreditation, and to this end, they should also pay higher fees. The research results of Noshadi et al. (2018) show that because the Iranian economic

structure is government-centered, institutions overseeing the auditing profession cannot operate independently, and do not have the power and independence to make major decisions that have a significant impact on the auditing profession. Finally, according to established social laws (paragraph A of Article 99 of the Fifth Development Plan Law), each entity should annually audit its financial statements and should submit interim financial statements, which include the semi-annual financial statements and the audited quarterly financial statements. As a result, the number of companies required to report audited financial statements has increased, the demand for auditing services has increased, and this leads to a decrease in audit fees. This is consistent with the research results of Gholami et al (2019).

Recommendations for Future Research

Given the large volume of studies accumulated in the research background of audit fee-related studies, it is suggested that future studies be conducted by meta-analysis and meta-combination, and the studies that require the re-collection of new data be avoided. Other suggestions include evaluating the effective factors on the pricing audit services from the viewpoint of major shareholders, evaluating the impact of abnormal audit fees on the quality of audit reports, and evaluating the effectiveness of audit committee quality on accounting conservatism, accounting quality, and auditing.

Research Limitations

Extensive resources in the field of factors related to the pricing the auditing services, the timeliness of credit evaluation, and the extraction of indicators in this area are among the limitations of this research, which made the process of compiling the research, and theoretical and experimental literature, to be carried out in a long-term range. Another limitation of this research is its multidimensional structure and its theoretically multiple nature. In other words, using three phases of data collection of Delphi analysis, exploratory-confirmatory factor analysis, and hierarchical analysis, and using different software, somewhat slowed down the research process.

Resources

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¹ Due to the large volume of citations for each factor, in this context, only one or two of them are mentioned for each category. At the same time, in order to avoid lengthening the article, the sources of this table are provided to the quarterly separately.