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A framework for improving the auditor's negotiation strategy

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Abstract

Auditors and their clients often face situations in which professional standards allow for seemingly different judgments about accounting behaviour, and in such situations, auditors and their clients usually seek solutions to resolve their disputes. It is recognized that the quality of accounting information is a function of the outcome of the negotiation between the client's management and the external auditor, as the negotiation can be considered as an effective element on the auditor's judgment. The challenge the researchers face is that interactions between auditors and their clients usually take place behind closed doors and are not visible to outsiders. The lack of archival evidence makes negotiation research primarily a behavioural science, with a diverse set of tools and various contexts. Field research in auditing is an experience-based approach, in which professional auditors are asked to recall an accounting negotiation they experienced in practice and answer a set of questions related to that given incident. The studies conducted have paid less attention to modelling methods; therefore, what was discussed in this study is to provide a practical model to improve the negotiation strategy in the auditing process. In order to identify the indicators, a meta-synthesis approach was applied. By reviewing the available studies, 26 primary indicators have been extracted. Then, a questionnaire based on the fuzzy Delphi approach was designed and provided to the experts. The final sample consisted of 29 experts in the field of auditing who were selected using judgmental sampling and based on having at least ten years of experience and doctoral education. After implementing three fuzzy Delphi steps and reaching the consensus of the experts, the final number of 14 indicators was identified as the indicators of the auditor's negotiation strategy framework and categorized into two groups: interactive negotiation strategy and competitive negotiation strategy. In order to prioritize the indicators, the fuzzy hierarchical analysis technique was used. According to the obtained results, among the elements of the interactive negotiation strategy, attempting to gain the trust of the other party, attempting to maintain relations in line with long-term achievements, and attempting to maintain the satisfaction of the other party are the most important strategies used. Among the elements of confrontational strategies, attempting to maintain to protect personal interests is the most important strategy.

Keywords: auditor's negotiation strategy, interactive negotiation strategy, competitive negotiation strategy, meta-synthesis approach, fuzzy Delphi, fuzzy hierarchical analysis

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1 Introduction

Audited financial statements and related disclosures influence capital market prices, agency relationships, and regulatory actions by providing information about financial performance via providing financial information for various

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uses, including corporate governance and investment decisions [19]. The quality of this information has received serious attention in recent years, and the management's responsibility for financial reporting and disclosure of the organization has become more obvious due to the certification requirements of the Sarbanes-Oxley Act, increasing the importance of management's discussion and analysis in public reports, and strict monitoring on financial reporting [15].

The duty of the auditor is to judge whether the financial reports are correct or incorrect. Judgment is known as a process for making decisions or conclusions among possible alternative solutions in conditions of uncertainty and high risk, and it is a profession or career that requires special knowledge and often long-term and intensive scientific preparation [4]. The source of financial statement audit evaluation is the auditor's professional judgment and collective judgments based on auditing standards. Professional judgment in auditing is the use of relevant knowledge and experience in the field determined by accounting standards and the regulation of professional behaviour, so that an appropriate decision can be made among alternative measures [26]. There is no standard approach to the exercise of professional judgment, but the correct exercise of professional judgment is considered as an outstanding factor for an auditor when performing his/her duty, and increasing judgment skills is of high significance for auditors. Professional standards typically consider general conditions within a specific scope. The rule book can't be completely comprehensive and cover all the complexities of accounting and auditing in today's world. Thus, in the current situation, one of the complexities of accounting and auditing that calls for special attention is to provide a correct model for judgment, as judgment is an issue that exists in all auditing processes. The performance and the need to pay attention to characteristics such as professionalism lead to higher expectations of auditors' judgment quality [22].

However, auditors and their clients often encounter situations in which professional standards allow for seemingly different judgments about accounting behaviour, and in such situations, auditors and their clients usually seek solutions to resolve their disputes [18]. The quality of accounting information is a function of the outcome of the negotiation between the client's management and the external auditor, as the negotiation can be considered as an effective element on the auditor's judgment [15]. The general literature on negotiation, outside the context of auditing, defines negotiation as a type of decision-making in which two or more parties talk to each other in an effort to achieve their various interests. This definition describes a fairly general negotiation framework in three concise terms: first, negotiations involve at least two individuals or groups interacting with each other, second, any negotiation begins with a conflict of interest between the negotiators, and this conflict of interest arises from issues such as conflicting preferences about the outcome of the negotiation or different motivations of the negotiators, and third, all parties are willing to resolve the conflict, and as a result, negotiation is a voluntary process in which people prefer agreement to conflict [31].

Negotiations between auditors and clients over auditing adjustment proposals are common in financial statement audits [14]. Negotiation can influence whether the auditor, when faced with the client's accounting problems, ignores such problems or reports them. The auditor's role in negotiations is to ensure a high-quality outcome, and auditors should avoid overly aggressive accounting procedures and provide external third parties (e.g. shareholders, investors) with reasonable assurance about the acceptability of the outcome of the negotiation under the related auditing standard. Thus, the key to high-quality financial statement audits lies in auditors' behaviour in accounting negotiations [41]. For example, when profits are prepared by the client's accounting settings, the auditor either accepts the client's initial values or needs to adjust the proposed values. The client can then agree to the auditor's proposal or request more acceptable amounts (e.g. the client's initial figures or new figures between the amounts proposed by either party). Audited financial statements are the final result of the negotiation process. Considering that auditing negotiation is common in practice [15], examining auditor and client negotiation processes explains the manner of determining the profit from reporting in financial statements. Sanchez et al. [42] concluded that financial managers are more likely to apply significant earnings-reducing adjustments when auditors overlook ineffective adjustments. The second experiment of the study (using auditors as participants) provides evidence that auditors consider the use of the customer satisfaction strategy and its retention to be efficient. Moreover, when the negotiation style of management is competitive and the risk of customer retention is high, the auditors are likely to use a confrontation strategy.

Auditors seem to use negotiation strategies (and their responses to client usage) as strategies for managing client expectations, inducing client reciprocity, and increasing the likelihood of client retention. Generally speaking, during the negotiation process, the client probably tries to persuade the auditor to accept his/her position [37]. Early independence literature considers the auditor's ability to resist pressure from client management when solving issues as a function of the client's sources of power against the auditor. Thus, the auditor faces cooperation and conflict motives when negotiating with the client. In general, conflicts between the auditor and the client, which may arise during an audit, regarding the correct accounting method and/or disclosure, are often resolved by referring to appropriate accounting laws or guidelines [6]. However, since each challenge situation often involves unique circumstances, the resolution of such conflicts may also be influenced by various factors that affect the relative negotiating power of

the two parties to the conflict. Two groups of factors may influence auditors' decisions in such situations - factors affecting the client power (such as the ability to negotiate an auditor/client contract in a market characterized by the presence of competing audit firms) and factors affecting the auditor power (such as transaction costs to replace the current auditor, start-up costs for a new auditor, loss of expertise of the current auditor, and the strength of the client's corporate governance structure) [8]. Recognizing that implicit pressure from clients can potentially inhibit auditors' independence, studies on the effectiveness of audit functions highlight the role of clients' bargaining power in interactions between auditors and clients. The sources of customer bargaining power in negotiation processes are closely related to their economic interests, especially quasi-rents and other potential returns. Using a simple analytical model, DeAngelo [10] suggests that quasi-rent is a necessary condition to impair auditor independence. According to DeAngelo's insight [10], Zhang et al. [49] show that quasi-rent plays a role in weakening the auditor's independence, meaning that this type of economic interest can strengthen the client's bargaining power. By threatening to terminate interactions, clients in aggressive bargaining positions can force auditors to settle on contentious issues that benefit the clients [25].

Pre-audit negotiation research examines the effects of auditor and client negotiation strategies on the immediate outcome of negotiated proposed audit settings (e.g. audit disputes) and perceptions/attitudes related to the negotiation (e.g. satisfaction with the outcome and willingness to continue the relationship) of the financial statement audit [45]. A challenge facing researchers is that interactions between auditors and their clients usually take place behind closed doors and are not visible to outsiders [13]. The lack of archival evidence makes negotiation research primarily a behavioural science, with a diverse set of tools and diverse contexts. Field research in auditing is an experience-based approach, in which professional auditors are asked to recall an accounting negotiation they experienced in practice and answer a set of questions related to that given incident [32]. In these studies, no attention has been paid to the modelling methods and the presentation of the negotiation model in order to improve the audit negotiation strategy and subsequently improve the audit results. Therefore, what is discussed in this study is to provide a practical model to improve the negotiation strategy in the auditing process.

2 Theoretical framework

Audit clients have negotiating power in auditor-client negotiations because they influence the hiring or firing of auditors and the determination of audit fees. The results of recent studies show that financial controllers play an important role in determining auditor compensation and retention after the passage of the Sarbanes-Oxley Act [9]. Financial managers (on behalf of the audit client) can argue or participate in how to negotiate with auditors [17]. The negotiator's approach to a conflict affects the negotiation environment [38], the behaviour of the other party, and the outcome of the disputed issue [43]. Recently, researches show that financial controllers who are dissatisfied with the outcome of negotiations with the auditor are less likely to continue the relationship with the auditor [46]. This means that a client with a contentious negotiation style (who is reluctant to submit an audit modification) is both dissatisfied with the auditor who makes such an audit modification and is less willing to continue the relationship with this auditor. Hatfield et al. [17] found that the client's negotiation style influences auditors' willingness to use an interaction-based strategy. They operationalize the use of a contrast-based strategy in terms of whether the auditor makes insignificant audit adjustments in the negotiation with the intention of waiving them in the future, versus waiving the insignificant audit adjustments before the negotiation. The idea is that using a confrontational strategy forces the client to be confrontational by scoring more points in their negotiations with the auditor. In their testing, the client is a participant in previous negotiations with the auditor. Their results show that the tendency of auditors to use a strategy based on interaction with the client in a conflictual negotiation style is more when there is also a risk of losing the client. However, there is no auditor's score for the condition in terms of total items and the number of significant items to be recorded. The conclusion that can be drawn here is that the client's negotiation style influences auditors' use of a confrontation-based strategy, but has no direct effect on the outcome of the negotiation (in terms of items submitted). In Hatfield et al.'s [17] experiment, auditors decide whether to adopt or forgo audit adjustment (a binary choice dependent variable), but they do not evaluate the audit adjustment about deciding on the level of audit adjustment.

Previous research has shown that auditors agree with client preferences if there is antecedent subjectivity in the audit standard [27]. Client preferences, faced with the prospect of negotiating with the client in a contentious negotiation style, are likely to predict that the client will strongly oppose the proposed audit adjustment and that the client will expect to receive a rating. In contrast, with a collaborative negotiation style client, the client is likely to agree to the auditor's proposed audit adjustment to the extent that it is consistent with the auditing standard, and there is less need for the auditor to offer concessions to the client to satisfy him. According to the previous

literature that indicates that auditors give in to the client's preferences when available [16], it can be stated that auditors will understand the final outcome of a negotiation (in terms of the level of income-reducing audit adjustment) with a client with an adversarial negotiation style (which has a strong preference for not adjusting the audit) less than with a client with a cooperative negotiation style (which has a weaker preference or no preference). Recent studies document beneficial effects of auditor rating or negotiation experience on negotiation outcomes. For example, Trotman et al. [48] found that partners' estimates of the maximum reduction the customer is willing to accept are higher than managers' estimates, and that partners are more assertive than managers in asking for a higher initial proposed reduction, minimum reduction in value, and expected reduction. Brown and Johnstone [7] stated that auditors in conditions of lower negotiation experience/high participation risk conditions feel the most pressure to yield to client preferences and, respectively, have the least conservative negotiation results compared to auditors in other conditions. Psychological literature also shows that negotiation experience helps to achieve better negotiation results and states that this effect is influenced by the strategies used during negotiations [44]. Research in auditing provides evidence consistent with this argument, that is, negotiation experience is associated with knowledge of negotiation strategies to employ during auditor-client negotiations. For example, Brown and Johnston [7] show that compared to auditors with more negotiation experience, those with less negotiation experience tend to use a concession negotiation strategy. McCracken et al. [33] found general support for their predictions that, compared to audit partners, managers were more likely to use integrative and scoring strategies, but less likely to intend to use conflicting strategies. They find that these ranking effects vary by context.

An auditor with less negotiation experience is likely to be less aware of the strategies needed to deal with a client in a confrontational negotiation style, and is therefore more likely to score points to satisfy the client. In contrast, an auditor with more negotiation experience is likely to know the negotiation process of strategies for dealing with clients [7, 33], and will perform well in adjusting the intended audit. Therefore, an auditor with more negotiation experience is less likely to accept a client's contentious negotiation style request to waive a proposed audit adjustment, compared to an auditor with less negotiation experience. In contrast, collaborative client negotiation does not pose many challenges for the auditor and may be performed with relative ease for auditors with different levels of negotiation experience [12].

Tiklaf has modelled the quality of accounting and a competent accountant using torque conditions as follows:

$$C_t = \pi_t + w_t - w_{t-1} \tag{2.1}$$

$$E_t = \pi_t + v_t - v_{t-1} \tag{2.2}$$

$$A = -w_t - w_{t-1} + v_t - v_{t-1} (2.3)$$

where

E: time profit series

C: cash flow operations

A: accrual items

Tiklaf has obtained the following cultivation conditions:

$$m(1) : E(E_t E_t) = \sigma_{\pi}^2 + 2\sigma_v^2$$

$$m(2) : E(C_t C_t) = \sigma_{\pi}^2 + 2\sigma_w^2$$

$$m(3) : E(A_t A_t) = 2\sigma_w^2 + 2\sigma_v^2$$

$$m(4) : E(E_t E_{t-1}) = \rho_{\pi} \sigma_{\pi}^2 - \sigma_v^2$$

$$m(5) : E(C_t C_{t-1}) = \rho_{\pi} \sigma_{\pi}^2 - 2\sigma_w^2$$

$$m(6) : E(A_t A_{t-1}) = -\sigma_v^2 - \sigma_w^2$$

where

 σ_{π}^2 : True performance variance

 σ_w^2 : Variance component of accruals performance

 σ_n^2 : Variance component of accounting error

In addition to the above torque conditions, the following torque conditions can also be proposed to differentiate the variables:

$$\Delta C_t = C_t C_{t-1} = (\pi_t + w_t - w_{t-1}) - (\pi_{t-1} + w_{t-1} - w_{t-2})$$
(2.4)

then

$$\Delta C_t = \Delta \pi_t + w_t - 2w_{t-1} + w_{t-2} \tag{2.5}$$

By the same calculation, ΔE_t and ΔA_t can be obtained:

$$\Delta E_t = \Delta \pi_t + v_t - 2v_{t-1} + v_{t-2} \tag{2.6}$$

$$\Delta C_t = -w_t + 2w_{t-1} - w_{t-2} + v_t - 2v_{t-1} + v_{t-2}$$
(2.7)

The following torque conditions are explained to specify the differential variables:

$$m(1') : E(\Delta E_t \Delta E_t) = \sigma_{\Delta \pi}^2 + 6\sigma_v^2$$

$$m(2') : E(\Delta C_t \Delta C_t) = \sigma_{\Delta \pi}^2 + 6\sigma_w^2$$

$$m(3') : E(\Delta A_t \Delta A_t) = 6\sigma_w^2 + 6\sigma_v^2$$

$$m(4') : E(\Delta E_t \Delta E_{t-1}) = \rho_{\Delta \pi} \sigma_{\Delta \pi}^2 - 4\sigma_v^2$$

$$m(5') : E(\Delta C_t \Delta C_{t-1}) = \rho_{\Delta \pi} \sigma_{\Delta \pi}^2 - 4\sigma_w^2$$

$$m(6') : E(\Delta A_t \Delta A_{t-1}) = -4\sigma_v^2 - 4\sigma_w^2$$

After estimating the desired parameters, the accounting quality (AQ) is defined as follows:

$$AQ = \frac{\sigma_w^2}{\sigma_w^2 + \sigma_v^2} \tag{2.8}$$

3 Research background

Aghazadeh et al. [1] investigated the effect of negotiating audit disputes on the evaluation of auditors' internal confidence coefficient (ICD). They stated that the timing strategy of the client's score during the negotiation of the audit dispute is more likely to influence the auditors' severity assessment of the relevant ICD. Auditors rated ICD severity higher (lower) in immediate (gradual) conditions. Customer retention risk inferences mediate this effect. The impact on auditors' ICD severity assessment may not ultimately affect the audit report. Kang et al. [28] using data for pre-audit profit, which is uniquely available in South Korea, find that business group affiliation and the existence of circular control links in business groups are initially suggested by customer management. Henrizi et al. [21] report the results of an experimental research design to analyze the audit judgment of 85 auditors in Switzerland. Based on the results of the experiment, the results evidence consolidation and adjustment in audit judgments in Swiss audit judgments. The authors can identify the effect of audit firm size, auditors' experience, and auditors' knowledge about behavioural orientation and heuristics of fixation on the effect of fixation and adjustment on audit judgment. Based on a sample of 152 professional auditors in Qatar, Awadallah [5] conducted an empirical study to address auditors' chosen negotiation strategy in audit disputes with client management. Based on the dual concerns model, the investigated negotiation strategies are: 1) competition, 2) adaptation, 3) cooperation, 4) compromise, and 5) avoidance. The results showed that there is no single strict approach in dealing with audit conflicts. However, from the results, it can be inferred that they will use some strategies more easily than others, and therefore tend to rely more on those strategies. Kulset and Stuart [30] investigated which negotiation strategies and tactics are used by audit partners. They then tested three hypotheses (one new and two that extend previous findings) and (i) the more specific accounting standard is relevant, (ii) general audit experience or task-specific negotiation experience, and (iii) The relationship between auditors and clients is less positive when auditors agree more that contingency tactics are used in their negotiation strategies. Heyrani et al. [22] investigated the effect of auditors' professional level on their judgment to resolve the auditor-management conflict and the mediating role of professional judgment, considering professionalism at both high and low levels. The results showed that the professionalism of auditors is effective in professional judgment. They also showed that professional judgment has an effect on the conflict between the auditor and management, but professionalism has no effect on it, and professional judgment does not have a moderating role on the effect of professionalism on the conflict between the auditor and management. Fu et al. [12] present experimental results in the context of auditor-client negotiation that investigate the effects of two factors - auditors' negotiation experience and client negotiation style - on the final outcome of auditors' negotiation in terms of delay in asset impairment. They showed that negotiation experience leads to the final negotiation branch for the client with an argumentative negotiation style. Negotiating experience for a client with a collaborative negotiation style has no effect. They also found that the effect of the client's negotiation style on auditors' negotiation outcome depends on

the auditors' negotiation experience. Inexperienced auditors get fewer results from negotiations when dealing with clients with an argumentative style instead of cooperation. In contrast, the negotiation failure of experienced auditors is not affected by the client's negotiation style. Hollindale et al. [23] provide an extensive set of tactics that are widely cited and used by meditation practitioners in the psychology literature. They showed that there are four basic factors which include the claimant (compulsory/assertive), the compromiser, problem solver and conformer. Auditors also purposefully classify tactics into groups of homogeneous tactics, and cluster analysis reveals the four factors of appeal to authority, coercion/assertion, context setting, and facilitation. These groupings from factor analysis and ranking of auditors are consistent with previous research. Little difference is observed between partners' and managers' assessment of the importance of tactics, while auditors with formal negotiation training place less emphasis on compromise tactics than those without training.

Kazemi Olum et al. [29] identified and ranked factors influencing the adoption of scoring strategy by the auditor in negotiations with the employer. The findings of the research show that behavioral characteristics (negotiation experience and techniques, previous negotiations and past relationships with the employer, communication style, method and method of negotiation, flexibility and pressure of the employer and time behavior), management system (audit committee and audit fees), rules and regulations and code of professional conduct (audit opinion, independence of auditors, power and bargaining, competition in the audit market and mandatory turnover of auditors) and gender of auditors have an effect on the adoption of scoring strategy by auditors. The research findings are in line with the passion level theory. Hosseini and Rasouli [24] stated that the studies conducted regarding judgment, the determining and influencing factors on judgment were classified in three areas including personality variables (including knowledge, experience, information processing, decision-making tools and previous beliefs), Work variables (including presentation doubts, work complexity and risk) and environmental variables (including corporate governance and internal control, time pressure, information processing process in a group form versus individual processing, accountability). All three areas are inseparable parts of judgment, and it is necessary to consider all factors in evaluating the quality of judgment. Hemmati et al. [20] explained the factors affecting the assurance of audit judgment and investigated the impact of the right to choose, the risk of lawsuits, the amount of information, and experience on audit assurance. The results of data analysis show that in situations where the risk of lawsuits is high. The research findings are in line with the passion level theory. Less experienced auditors tend to collect more information in non-choice situations. Also, the results indicated that having the right to choose gives more confidence in the judgment of auditors, and especially when the risk of lawsuits is high, this confidence increases in the presence of high experience. Saidi Garaghani and Naseri [39, 40] studied the effect of four individual characteristics, including two demographic characteristics (gender and experience) and two psychological characteristics (optimism and self-confidence), on professional judgment. The research results show that optimism and self-confidence, experience and gender lead to differences in auditors' professional judgment. Mehrani and Eskandar [34] modeled the auditor's negotiation process using the method of theory arising from data and through in-depth interviews with experts from both sides of the negotiation, i.e. audit partners and company managers.

Based on the results obtained from the interviews, the main causes of the majority of disputes and conflicts between auditors and owners, which make negotiation inevitable, are: 1. Knowledge causes (lack of quality knowledge of the negotiating parties), 2. Information causes (information asymmetry) and 3. Communication reasons (the nature of the entrepreneur's business and the shift of all communications to the end of the year) and 4. Instrumental problem (the quality of accounting rules and standards). Mehrani et al. [35] investigated the impact of the auditor-employer relationship and the auditor's assessment of the employer's flexibility on the auditor's strategy. The results indicated that the flexibility of the employer strongly affects the auditor's strategy; However, even if the auditor sees the employer as flexible, he will expand the program if necessary. But often in such situations, the auditor will try to solve the problem or compromise. Concerning the effect of the relationship between the two parties and the auditor's strategy, the results showed that the relationship between the auditor and the employer affects the strategy used by the auditor. When there are good relations between the two parties, The auditor will strongly reduce the use of the conflict strategy, but will not compromise.

3.1 Methods

In order to present the auditor's negotiation strategy, a qualitative approach is used. In the first stage, using the meta-combination method, the indicators affecting the auditor's negotiation were identified. Metasynthesis is a research that evaluates other researches. Therefore, it is referred to as the evaluation of evaluations. Therefore, metasynthesis is a kind of research about other researches. Metasynthesis can be considered a systematic study and review of past researches. In general, metasynthesis is a type of qualitative study that uses information and findings extracted from other studies with a similar and related topic. According to metasynthesis, the combination of the

interpretation of the main data of the selected studies. In other words, metacombination refers to the time when the researcher combines the secondary data of the results of other studies to respond to his own results and obtains new results. In total, three goals have been stated for metacomposition, which include theory construction, theory description, and specific conceptual development.

In the upcoming research, a meta-composite approach was used, which consists of seven steps (1) defining the research question, (2) determining the types of studies needed to answer the research questions; (3) comprehensive literature search; (4) deciding which research can be included or excluded based on the inclusion criteria; (5) evaluate studies critically; (6) synthesis of studies and assessment of homogeneity; and (7) dissemination of findings.

In the first stage, the questions based on what (what are the indicators that create the auditor's negotiation?), what elements (the indicators form the professional negotiation in the audit process?) and how (the auditor's professional negotiation is defined?) are designed.

In the second stage, the researcher systematically searches for articles published in different and reliable domestic and foreign scientific journals and domestic and foreign websites to find authentic, reliable and relevant documents in the right time frame. Selection of search terms has been according to related articles in the field of negotiation, negotiation strategy, auditor's professional negotiation, negotiation from the perspective of behavioral sciences, elements affecting professional negotiation in the audit process, effects of professional negotiations, sources of formation of professional negotiations, types of negotiation in the workplace.

In the search process, the researcher considers various parameters such as title, abstract, content, article details (author's name, year of publication), etc. Also, the criteria for acceptance and rejection of studies include research language, study time frame, study conditions, study community and study type.

The study community of the current research is academic experts and market activists in the audit field. In order to sample, judgmental sampling was used and people who had at least ten years of experience and a doctorate education were selected as samples.

After extracting the desired indicators, a questionnaire was designed based on the fuzzy Delphi approach and given to a sample of experts, and they were asked to determine the rate of importance of each identified indicator according to the 5-point Likert scale from very little to very much. The number of respondents was a sample of 34 people, and from among the received questionnaires, by checking the questionnaires and removing the questionnaires with missing and distant data, finally, 29 final questionnaires were analyzed. The method of reaching people through electronic databases was distribution and collection of questionnaires. The demographic characteristics of these people are presented in table 1.

Table 1: Demographic characteristics of the respondents

Row	Gender	Scientific category	Education/Position	Work experience	Age
1	Man	Assistant Professor	Ph.D.	Above 20 years	Above 50 years
2	Female	Assistant Professor	Ph.D.	Above 20 years	Above 50 years
3	Man	Assistant Professor	Ph.D.	Above 20 years	Above 50 years
4	Man	Assistant Professor	Ph.D.	Above 20 years	Above 50 years
5	Man	Assistant Professor	Ph.D.	Above 20 years	Above 50 years
6	Man	Assistant Professor	Member of the Society of Certified Accountants	Above 20 years	Above 50 years
7	Man	Assistant Professor	Member of the Society of Certified Accountants	Above 20 years	Above 50 years
8	Man	Assistant Professor	Ph.D.	Above 20 years	Between 35 and 50 years
9	Man	Assistant Professor	Ph.D.	Above 20 years	Between 35 and 50 years
10	Man	Assistant Professor	Audit expert	Above 20 years	Between 35 and 50 years
11	Female	Assistant Professor	Ph.D.	Between 10 and 15 years	Between 35 and 50 years
12	Man	Assistant Professor	Ph.D.	Between 10 and 15 years	Between 35 and 50 years
13	Man	Assistant Professor	Ph.D.	Between 10 and 15 years	Between 35 and 50 years
14	Man	Assistant Professor	Ph.D.	Between 10 and 15 years	Between 35 and 50 years
15	Female	Assistant Professor	Member of the Society of Certified Accountants	Between 10 and 15 years	Between 35 and 50 years
16	Man	Assistant Professor	Audit expert	Between 10 and 15 years	Between 35 and 50 years
17	Man	Assistant Professor	Ph.D.	Between 15 and 20 years	Between 35 and 50 years

18	Man	Assistant Professor	Ph.D.	Between 15 and 20 years	Between 35 and 50 years
19	Man	Assistant Professor	Ph.D.	Between 15 and 20 years	Between 35 and 50 years
20	Female	Assistant Professor	Ph.D.	Between 5 and 10 years	Less than 35 years
21	Female	Assistant Professor	Member of the Society of Certified Accountants	Between 5 and 10 years	Less than 35 years
22	Man	Associate Professor	Ph.D.	Above 20 years	Above 50 years
23	Man	Associate Professor	Member of the Society of Certified Accountants	Above 20 years	Between 35 and 50 years
24	Man	Associate Professor	Audit expert	Between 15 and 20 years	Between 35 and 50 years
25	Female	Associate Professor	Audit expert	Between 15 and 20 years	Between 35 and 50 years
26	Man	Associate Professor	Ph.D.	Between 5 and 10 years	Less than 35 years
27	Man	Associate Professor	Member of the Society of Certified Accountants	Between 5 and 10 years	Less than 35 years
28	Female	Associate Professor	Audit expert	Between 5 and 10 years	Less than 35 years
29	Man	Associate Professor	Audit expert	Between 5 and 10 years	Less than 35 years

According to the results listed in Table 1, most of the experts are male, have the scientific rank of assistant professor, have a doctorate education, have more than 20 years of experience, and are between 35 and 50 years old. The indicators extracted from the metacomposite approach are shown in table 2.

Table 2: Indicators derived from the hybrid approach

Category	Indicator symbol	Index title
	C1	Valuing other people's opinions
	C2	Considering the other party's financial and social situation
	C3	Providing the opportunity for the parties to negotiate
	C4	Trying to gain the trust of the other party
	C5	Protecting the dignity of the other party
	C6	Striving to maintain relationships in line with long-term gains
Interactive negotiation	C7	Not trying to dominate the other party
strategy	C8	Trying to reach an agreement on time
	C9	Trying to keep the other party satisfied
	C10	Consider mutual goals
	C11	Defending the interests of the other party while protecting your own interests
	C12	Commitment and loyalty to the established bond
	C13	Considering the other party's cultural patterns in the negotiation process
	C14	Listening to the words of the other party without prejudice and confrontation
	C15	Trying to protect personal interests
	C16	Try to bargain when paying the fee
	C17	Lack of focus on the goals of the other party
	C18	Trying to reduce the other party's profit
	C19	Ignoring long-term relationships and focusing on short-term relationships
Competitive negotiation	C20	Not trying to gain the trust of the other party
strategy	C21	Failure to consider the satisfaction level of the other party
	C22	Use a personal style when negotiating
	C23	Focusing on the behavior of the negotiating party in order to deal with her
	C24	Trying to protect your social and financial position
	C25	Focus on short-term profits
	C26	Failure to pay attention to the correct valuation of services

Fuzzy Delphi in the current research was conducted in three rounds using Excel software, in this way, in each round a questionnaire was designed and distributed among the professors, they were asked to rank the indicators from 1 to 9 in the fuzzy spectrum. Then, based on the calculation of the average, the less important factors (with an average of less than 0.5) were eliminated. In the next round, a new questionnaire is designed and together with the factors eliminated in the previous round, it will be sent to the hearing and opinion of the sample, so that in addition to the new survey, the factors that were eliminated in the previous round will be reviewed again. After reaching a consensus of opinion and having a difference of less than 0.1 in two consecutive rounds, the fuzzy Delphi was completed in three rounds.

Triangular fuzzy scores used in the present study are shown in table 3.

Table 3: Fuzzy scores in Delphi technique

The degree of influence	Very much	Much	Medium	Low	Very little
Numerical value	4	3	2	2	1
Phases	(0.75,1,1)	(0.5, 0.75, 1)	(0.25, 0.50, 0.75)	(0.25, 0.5, 0.5)	(0,0,0.25)

To measure the fuzzy score $w_j = (a_j, b_j, c_j)$ for each index j in terms of sample i, the following method (Formula (3.1)) is used.

$$a_j = \min\{a_{ij}\}; \quad b_j = \frac{1}{n} \sum_{i=1}^n b_{ij}; \quad c_j = \max\{c_{ij}\}$$
 (3.1)

To convert the fuzzy number into a definite number, the average of three elements a_j, b_j, c_j was calculated for each criterion. According to the fuzzy numbers used, if the obtained average is greater than 0.5, the index is acceptable, and otherwise it is removed from the model.

Finally, in order to prioritize the audit negotiation indicators, the fuzzy hierarchical analysis approach was used. Analysis Hierarchy Process (AHP) is a method developed by Saati [2] to support multi-criteria decisions where the word analysis indicates that the problem is broken down into its constituent elements. Hierarchy indicates that a hierarchy of building blocks is specified in relation to the main goal, and process indicates that data and judgments are processed to reach a final result. AHP method is widely used in various fields such as software selection problems, solving economic and managerial problems, factory location selection, supplier selection, evaluation of project termination or continuation, selection of the best option between different outsourcing contracts in terms of maintenance services, etc. This method consists of the following two steps: defining the hierarchy tree and numerical evaluation of the tree. Hierarchy tree definition starts by defining the proposed objective, then criteria and sub-criteria are defined using experts' experiences. Finally, options known as priors represent the leaves of the tree. The evaluation stage is based on pairwise comparison. Criteria from the same level of the hierarchy are compared to determine relative importance compared to the target level. This process allows the weights of the criteria to be determined, and secondly, a ranking of the options is provided. Evaluation is bottom-up: the decision-making process begins by comparing alternatives with last-level criteria. Evaluation continues up to the first level criteria, and is then compared to the target.

3.2 Measuring validity of indicators

In this section, the results obtained from three fuzzy Delphi rounds are presented. In each step, if the index should be kept, it is indicated by the number one, and if it should be removed in the next step, it is indicated by zero. It should be noted that indicators with an average value of less than 0.5 are removed. The results of fuzzy Delphi implementation are shown in Tables 4 to 6.

Table 4: The results of fuzzy Delphi (first round)

	140	ne 4: I ne r		I	ii (first round	1)	
Criterion	Indicator	Symbol	\mathbf{Fuzzy}	value of c	riterion J	$S = \frac{a_j + b_j + c_j}{2}$	More than the
Criterion	Indicator	Symbol	$\overline{a_j}$	b_j	c_j	$S = \frac{3}{3}$	threshold value of 0.5
	Valuing other people's opin-	C1	0.00	0.45	0.75	0.40	0.00
	ions						
	Considering the other	C2	0.00	0.41	0.75	0.39	0.00
	party's financial and social						
	situation						
Interactive	Providing the opportunity	C3	0.00	0.41	0.75	0.39	0.00
negotiation	for the parties to negotiate						
0	Trying to gain the trust of	C4	0.50	0.64	0.75	0.63	1.00
strategy	the other party						
	Protecting the dignity of the	C5	0.00	0.38	0.75	0.38	0.00
	other party						
	Striving to maintain rela-	C6	0.50	0.66	0.75	0.64	1.00
	tionships in line with long-						
	term gains						
	Not trying to dominate the	C7	0.00	0.44	0.75	0.40	0.00
	other party						
	Trying to reach an agree-	C8	0.00	0.45	0.75	0.40	0.00
	ment on time						
	Trying to keep the other	C9	0.50	0.65	0.75	0.63	1.00
	party satisfied						

	Consider mutual goals	C10	0.50	0.59	0.75	0.61	1.00	
	Defending the interests of the other	C11	0.50	0.59	0.75	0.61	1.00	
	party while protecting your own in-							
	terests							
	Commitment and loyalty to the established bond	C12	0.50	0.61	0.75	0.62	1.00	
	Considering the other party's cul-	C13	0.50	0.59	0.75	0.61	1.00	
	tural patterns in the negotiation							
	process							
	Listening to the words of the other	C14	0.25	0.52	0.75	0.51	1.00	
	party without prejudice and con-							
	frontation	015	0.50	0.40	0.55	0.00	1.00	
	Trying to protect personal inter-	C15	0.50	0.60	0.75	0.62	1.00	
	ests	Cita	0.50	0.50	0.55	0.01	1.00	
	Try to bargain when paying the fee	C16	0.50	0.59	0.75	0.61	1.00	
	Lack of focus on the goals of the	C17	0.00	0.44	0.75	0.40	0.00	
Competitive	other party Trying to reduce the other party's	C18	0.00	0.45	0.75	0.40	0.00	
negotiation	profit	C18	0.00	0.45	0.75	0.40	0.00	
strategy	Ignoring long-term relationships	C19	0.25	0.46	0.75	0.50	1.00	
	and focusing on short-term rela-	019	0.25	0.40	0.75	0.50	1.00	
	tionships							
	Not trying to gain the trust of the	C20	0.00	0.44	0.75	0.40	0.00	
	other party	020	0.00	0.11	0.10	0.10	0.00	
	Failure to consider the satisfaction	C21	0.50	0.61	0.75	0.62	1.00	
	level of the other party							
	Use a personal style when negoti-	C22	0.50	0.62	0.75	0.62	1.00	
	ating							
	Focusing on the behavior of the	C23	0.50	0.64	0.75	0.63	1.00	
	negotiating party in order to deal							
	with her							
	Trying to protect your social and	C24	0.50	0.69	0.75	0.65	1.00	
	financial position							
	Focus on short-term profits	C25	0.25	0.54	0.75	0.51	1.00	
	Failure to pay attention to the cor-	C26	0.50	0.69	0.75	0.65	1.00	
	rect valuation of services							

According to the results listed in Table 4, in the first round, a total of 9 items out of 26 items were not approved.

Table 5: The results of fuzzy Delphi (second round)

	Table	e 5. The res		<i>v</i> 1	(second rou	/	3.6	
Criterion	Indicator	Symbol	Fuzzy value of criterion J			$S = \frac{a_j + b_j + c_j}{3}$	More than the threshold value of 0.5	
	V-1-:	C1	a_j	b_j	c_j		threshold value of 0.5	
	Valuing other people's opin-	C1						
	ions	CO						
	Considering the other	C2						
	party's financial and social							
	situation							
Interactive	Providing the opportunity	C3						
negotiation	for the parties to negotiate							
strategy	Trying to gain the trust of	C4	0.50	0.69	0.75	0.65	1.00	
strategy	the other party							
	Protecting the dignity of the	C5						
	other party							
	Striving to maintain rela-	C6	0.50	0.66	0.75	0.64	1.00	
	tionships in line with long-							
	term gains							
	Not trying to dominate the	C7						
	other party							
	Trying to reach an agree-	C8						
	ment on time							
	Trying to keep the other	С9	0.50	0.63	0.75	0.63	1.00	
	party satisfied							
	Consider mutual goals	C10	0.50	0.65	0.75	0.63	1.00	
	Defending the interests of	C11	0.50	0.65	0.75	0.63	1.00	
	the other party while pro-							
	tecting your own interests							
	Commitment and loyalty to	C12	0.50	0.63	0.75	0.63	1.00	
	the established bond							

	Considering the other party's cultural patterns in the negotiation process	C13	0.50	0.69	0.75	0.65	1.00	
	Listening to the words of the other party without prejudice and confrontation	C14	0.25	0.36	0.50	0.37	0.00	
	Trying to protect personal interests	C15	0.50	0.69	0.75	0.65	1.00	
	Try to bargain when paying the fee	C16	0.50	0.67	0.75	0.64	1.00	
Competitive	Lack of focus on the goals of the other party	C17						
negotiation strategy	Trying to reduce the other party's profit	C18						
strategy	Ignoring long-term relationships and focusing on short-term rela- tionships	C19	0.25	0.37	0.50	0.37	0.00	
	Not trying to gain the trust of the other party	C20						
	Failure to consider the satisfaction level of the other party	C21	0.50	0.68	0.75	0.64	1.00	
	Use a personal style when negotiating	C22	0.50	0.66	0.75	0.63	1.00	
	Focusing on the behavior of the negotiating party in order to deal with her	C23	0.50	0.65	0.75	0.63	1.00	
	Trying to protect your social and financial position	C24	0.50	0.67	0.75	0.64	1.00	
	Focus on short-term profits	C25	0.25	0.39	0.50	0.38	0.00	
	Failure to pay attention to the correct valuation of services	C26	0.50	0.66	0.75	0.64	1.00	

According to the results listed in Table 5, in the second round, a total of 3 items were not approved.

Table 6: The results of fuzzy Delphi (third round)

	Tab	le 6: The re			i (third roun	,	
Criterion	Indicator	Symbol	$\frac{\mathbf{Fuzzy}}{a_i}$	b_i	$\frac{\text{criterion J}}{c_i}$	$S = \frac{a_j + b_j + c_j}{3}$	More than the threshold value of 0.5
	Valuing other people's opinions	C1		J	J		
	Considering the other party's financial and social situation	C2					
Interactive	Providing the opportunity for the parties to negotiate	С3					
negotiation strategy	Trying to gain the trust of the other party	C4	0.50	0.64	0.75	0.63	1.00
	Protecting the dignity of the other party	C5					
	Striving to maintain relationships in line with long- term gains	C6	0.50	0.62	0.75	0.62	1.00
	Not trying to dominate the other party	C7					
	Trying to reach an agreement on time	С8					
	Trying to keep the other party satisfied	С9	0.50	0.65	0.75	0.63	1.00
	Consider mutual goals	C10	0.50	0.62	0.75	0.62	1.00
	Defending the interests of the other party while pro- tecting your own interests	C11	0.50	0.60	0.75	0.62	1.00
	Commitment and loyalty to the established bond	C12	0.50	0.62	0.75	0.62	1.00
	Considering the other party's cultural patterns in the negotiation process	C13	0.50	0.63	0.75	0.63	1.00
	Listening to the words of the other party without prejudice and confrontation	C14					

	Trying to protect personal interests	C15	0.50	0.68	0.75	0.64	1.00
	Try to bargain when paying the fee	C16	0.50	0.66	0.75	0.64	1.00
	Lack of focus on the goals of the	C17					
Competitive	other party						
negotiation	Trying to reduce the other party's	C18					
strategy	profit						
strategy	Ignoring long-term relationships	C19					
	and focusing on short-term rela-						
	tionships						
	Not trying to gain the trust of the	C20					
	other party						
	Failure to consider the satisfaction	C21	0.50	0.61	0.75	0.62	1.00
	level of the other party						
	Use a personal style when negoti-	C22	0.50	0.62	0.75	0.62	1.00
	ating						
	Focusing on the behavior of the	C23	0.50	0.60	0.75	0.62	1.00
	negotiating party in order to deal						
	with her						
	Trying to protect your social and	C24	0.50	0.65	0.75	0.63	1.00
	financial position						
	Focus on short-term profits	C25					
	Failure to pay attention to the cor-	C26	0.50	0.63	0.75	0.63	1.00
	rect valuation of services						

According to the results listed in Table 6, in the third round, all items were approved.

In order to evaluate whether the consensus of opinion has been reached or not, the difference between the opinions in the first and second stages and the second and third stages is used, and if the difference is less than a very low threshold (0.25), the consensus of opinion achieved.

Table 7: Assessment of disagreement

Symbol	l First stage Second Third The difference between the		The difference between the	Reach a		
		stage	$_{ m stage}$	first and second steps	second and third stages	consensus
C1	0.399					
C2	0.387					
С3	0.388					
C4	0.629	0.647	0.629	0.017	0.017	1.000
C5	0.378					
C6	0.635	0.635	0.624	0.000	0.011	1.000
C7	0.397					
C8	0.399					
C9	0.632	0.626	0.632	0.006	0.006	1.000
C10	0.615	0.632	0.624	0.017	0.009	1.000
C11	0.612	0.632	0.618	0.020	0.014	1.000
C12	0.621	0.626	0.624	0.006	0.003	1.000
C13	0.615	0.647	0.626	0.032	0.020	1.000
C14	0.609	0.244		0.135		
C15	0.618	0.647	0.644	0.029	0.003	1.000
C16	0.612	0.641	0.635	0.029	0.006	1.000
C17	0.396					
C18	0.399					
C19	0.629	0.233		0.112		
C20	0.396					
C21	0.621	0.644	0.621	0.023	0.023	1.000
C22	0.624	0.635	0.624	0.011	0.011	1.000
C23	0.629	0.632	0.618	0.003	0.014	1.000
C24	0.647	0.641	0.632	0.006	0.009	1.000
C25	0.626	0.253		0.135		
C26	0.647	0.635	0.626	0.011	0.009	1.000

According to the obtained results (Table 7), the difference of opinion in two consecutive stages is less than 0.2, which proves the high accuracy of the results obtained from the Delphi approach.

	G 1 1	Table 8: Final indicators
category	Symbol	Negotiation strategies
	X1	Trying to gain the trust of the other party
	X2	Striving to maintain relationships in line with long-term gains
	Х3	Trying to keep the other party satisfied
Interactive negotiation strategy	X4	Consider mutual goals
	X5	Defending the interests of the other party while protecting your own interests
	X6	Commitment and loyalty to the established bond
	X7	Considering the other party's cultural patterns in the negotiation process
	X8	Trying to protect personal interests
	X9	Try to bargain when paying the fee
	X10	Failure to consider the satisfaction level of the other party
Competitive negotiation strategy	X11	Use a personal style when negotiating
	X12	Focusing on the behavior of the negotiating party in order to deal with her
	X13	Trying to protect your social and financial position
	X14	Failure to pay attention to the correct valuation of services

In order to weight the final indicators obtained from the fuzzy Delphi stage and also the elements of the auditor's professional judgment, 22 questionnaires were distributed among the experts, of which 15 questionnaires were complete and were used for weighting. After collecting all the answers, the consensus matrix of the experts' opinion was formed, which was formed based on the arithmetic mean of the answers received from the experts. Then, the created deterministic matrix was transformed into a fuzzy matrix and normalized.

Table 9: Normalized	l fuzzy m	atrix - audite	or and client	negotiation	strategy
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#	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14
Y1	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 2 3]	[1 1 1]	[1 1 1]	[1 2 3]	[1 1 1]	[1 2 3]	[1 2 3]	[1 3 5]
Y2	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	$[1 \ 2 \ 3]$	[1 1 1]	[1 1 1]	$[1 \ 2 \ 3]$	[1 1 1]	[1 2 3]	[1 2 3]	[1 3 5]
Y3	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 2 \ 3]$	[1 1 1]	$[1 \ 1 \ 1]$	$[1 \ 2 \ 3]$	$[1 \ 1 \ 1]$	$[1 \ 2 \ 3]$	$[1 \ 2 \ 3]$	[1 3 5]
Y4	[1 1 1]	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 1 1]	[1 2 3]
Y5	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	[1 2 3]
Y6	$[1 \ 1 \ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	[1 1 1]	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	[1 1 1]	$[1 \ 1 \ 1]$	[1 2 3]
Y7	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$
Y8	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1\ 2\ 3]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1\ 2\ 3]$	$[1 \ 1 \ 1]$	$[1 \ 2 \ 3]$	$[1\ 2\ 3]$	$[1 \ 3 \ 5]$
Y9	$[1 \ 1 \ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	[1 2 3]
Y10	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$
Y11	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 2 \ 3]$
Y12	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	[1 1 1]
Y13	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[1\ 1\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$
Y14	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[0\ 0\ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[0\ 0\ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$	$[1 \ 1 \ 1]$

According to the created matrix, the fuzzy, deterministic and normalized weights of the examined elements (negotiation indicators between the auditor and the client) are shown in Table 10.

Table 10: The weight values of the indicators in the fuzzy approach - auditor and client negotiation strategy

Indicator	Symbol	Phase weight	Actual weight	Normalized weight
Trying to gain the trust of the other party	X1	0.0604, 0.1252, 0.1706	0.1188	0.1053
Striving to maintain relationships in line with long-	X2	0.0604, 0.1252, 0.1706	0.1188	0.1053
term gains				
Trying to keep the other party satisfied	Х3	0.0604,0.0998,0.1202	0.1188	0.1053
Consider mutual goals	X4	0.0604, 0.0998, 0.1202	0.0935	0.0829
Defending the interests of the other party while pro-	X5	0.0604, 0.0998, 0.1202	0.0935	0.0829
tecting your own interests				
Commitment and loyalty to the established bond	X6	0.0000, 0.0000, 0.1111	0.0935	0.0829
Considering the other party's cultural patterns in the	X7	0.0604, 0.1252, 0.1706	0.0370	0.0328
negotiation process				
Trying to protect personal interests	X8	0.0604, 0.0998, 0.1202	0.1188	0.1053
Try to bargain when paying the fee	X9	0.0000, 0.0000, 0.1111	0.0935	0.0829

Failure to consider the satisfaction level of the other party	X10	0.0604,0.0998,0.1202	0.0370	0.0328
Use a personal style when negotiating	X11	0.0000, 0.0000, 0.1111	0.0935	0.0829
Focusing on the behavior of the negotiating party in	X12	0.0000, 0.0000, 0.1111	0.0370	0.0328
order to deal with her				
Trying to protect your social and financial position	X13	0.0000, 0.0000, 0.1111	0.0370	0.0328
Failure to pay attention to the correct valuation of	X14	0.0604, 0.1252, 0.1706	0.0370	0.0328
services				

According to the obtained results, among the elements of the interactive negotiation strategy, trying to gain the trust of the other party, trying to maintain relations in line with long-term achievements, trying to maintain the satisfaction of the other party, are the most important strategies used. And of the conflicting strategies, trying to protect personal interests is the most important strategy.

In order to check whether the comparisons are reasonable or not, the compatibility rate index was used. If the index is less than 0.1, it indicates the reasonableness of the comparisons. The value of the obtained inconsistency index is equal to 0.0001, which indicates the high consistency of the comparisons and the results are acceptable.

4 Discussion and conclusion

Effective and efficient communication skills are one of the most important organizational needs. The success of an organization is related to the technical abilities of the applicant depend on the ability of the employees to communicate effectively. Also, the biggest cause of failure can be due to poor communication skills. On the other hand, dominant communication processes that are a form of social interaction are implicitly based on negotiation. In communication science, negotiation is a process in which the parties involved in the negotiation try to consider the interests, positions and goals in a combination of verbal and non-verbal communication and want to understand the interests and goals of the other party. Paying attention to negotiation techniques is effective in promoting product sales and providing services. In the field of accounting and auditing, since the existence of conflict between the auditor and the employer can complicate the audit work, it is necessary to negotiate in the process of checking the accounts to manage the conflict between them. The negotiation starts when the employer intends to enter into a contract with the audit firm, and it can continue until the end of the audit work and the presentation of the audit report. Considering the importance of intelligent negotiations in the audit field, in the present study, a model was presented to improve the negotiation strategy in the audit field.

In order to achieve the goal of the research, based on the meta-composite approach, the indicators that make up the negotiation were identified, and based on the fuzzy Delphi method, the validity of the indicators was evaluated in the audit matter. The final number of 14 indicators was classified into two categories: interactive negotiation strategy and competitive negotiation strategy. To measure the importance of indicators, the fuzzy hierarchical analysis approach was used, and the results showed that among the elements of the interactive negotiation strategy, efforts to gain the trust of the other party, efforts to maintain relationships in line with long-term achievements, efforts to maintain the satisfaction of the other party, are the most important strategies used. And of the conflicting strategies, trying to protect personal interests is the most important strategy.

According to the obtained results, trust is one of the important elements in the negotiation strategy. In high-trust economies, corporate managers are more likely to disclose information because they believe that investors are more likely to revise their prior information in light of accounting disclosures, because they view these disclosures as credible. On the other hand, mistrust leads capital market actors to ignore disclosed information, thereby reducing managers' future incentives. In addition, more trust in an economy leads to the development of institutions that complement financial reporting and disclosure, thereby increasing the efficiency of reporting and disclosure activities of companies. Higher quality institutions can prevent corporate malfeasance and expropriation, which reduces managers' incentives to obfuscate information and thus increases firms' observed accounting quality and investors' confidence. Finally, higher quality financial reporting and self-disclosure may increase investor confidence, thus leading to the observed positive relationship between accounting quality and trust. Therefore, the expansion of trust between the members involved in the audit process can affect the future of companies.

Focusing on relationships is another important element in audit negotiations. Maintaining a long-term relationship between the auditor and the client is important because the auditor needs time to get to know the client's company, its processes, risks, etc. This is why it is difficult to audit in the first year compared to successive years. Therefore, at least three to five years are required to provide good audit quality. However, extensive long-term relationships can be dangerous because they create very close relationships between the employer and the auditor, which may affect the

auditor's independence. Hence, the long-term relationship appears to be highly beneficial and performs well compared to public companies if other relevant factors such as objectivity and integrity are controlled. Therefore, if the auditor adheres to professional conduct and integrity in the auditing profession, the extent of the relationship can be beneficial. The desire to protect the auditor-employer relationship during an auditor-employer dispute can be seen as a source of pressure on the auditor to accept the demands of the employer's management, leading to a potential conflict between maintaining independence and retaining the client. Auditor independence, in which the auditor is not willing to give any concessions, is in contrast to the requirement, in which the auditor is primarily concerned with maintaining the relationship between the auditor and the client. It can be argued that an auditor who is concerned about losing a client may choose an imperative style, yielding to pressure to accept the employer's position. Therefore, increasing the auditor's independence is one of the barriers to the unprofessional productivity of the relationship between the employer and the auditor.

Consent is an important element in the audit negotiation process. The audit firm's client relationship management practices potentially cause auditors to perceive pressure to satisfy clients. Public accounting firms monitor their performance on customer service dimensions by asking customers for satisfaction ratings. Nevertheless, regulators and academics have cautioned auditors to be aware that the pressures of the audit engagement, including the pressure to achieve high ratings on client satisfaction surveys, can influence their judgments and impair audit quality. However, customer satisfaction ratings are not necessarily inconsistent with high-quality audit performance. While client satisfaction surveys increase the willingness of audit partners to interact with the client, and lead to fewer adjustments in the auditor's judgment, even in aggressive accounting situations. These surveys also increase auditors' perception of client pressure to adjust audit judgment. Auditors with relatively higher performance on customer service dimensions are more likely to adopt aggressive accounting when they focus on customer satisfaction goals. But when they also pay attention to audit quality objectives, they are less likely to perform aggressive accounting. Therefore, it can be said that customer satisfaction sometimes makes auditors vulnerable to customer influence. But at other times, it can lead auditors to focus on audit quality. Therefore, understanding and maintaining customer satisfaction in the audit negotiation process is very important.

Conflict of interest is an important and influential element in the audit negotiation process. Conflict can be defined as the result of events that conflict with people's own values. Therefore, the origin of moral conflict can be expressed as incompatibility between the values of employees and their managers or organizational values. Some circumstances may cause managers or auditors to disregard ethical standards or values. Since ethical rules, norms and culture form the ethical environment of organizations, their incorrect implementation and incorrect application may create a tendency to unethical behavior. Also, reward systems, norms and culture and codes of conduct have also been expressed as factors affecting unethical behavior in organizations. In addition to the environment, ethical norms and rules, codes of conduct, organizational culture, individual's personality and cultural orientation are factors that affect the individual's willingness to perform ethical/immoral behaviors and the possibility of their involvement in ethical conflicts. Therefore, the efforts of auditors or managers to protect their personal interests and ignore the interests of the other party can be caused by weaknesses in the audit system, audit institutions or audited companies that must be investigated and controlled.

In the negotiation process, commitment and loyalty are important and necessary. Work commitment involves an active relationship with work organizations whose goal is to strive for the success of the organization concerned. Different dimensions of professional commitment indicate the relationship between professional commitment and performance. Professional commitment is a form of personal attachment to one's profession and a mental attachment to one's profession, beliefs and identification with various goals and values in which a person is willing to work hard for one's profession. Professional expertise is created from work experience, so performance improvement in the execution of tasks can be associated with professional commitment. This may be particularly relevant for accountants whose expertise comes from experience and continuing education. Professional commitment can lead to an understanding of how individuals develop and integrate multiple commitments inside and outside the workplace. In the audit process, high professional commitment reduces the turnover rate, increases motivation and improves performance. Since all listed and non-listed financial institutions are required to form an independent audit committee. According to the law, listed non-financial companies are not required to form such committees. The members of the audit committee of financial institutions are introduced by the board of directors and approved by the central bank. However, it is unclear whether the criteria used by the central bank for approval include ensuring independence and knowledge. The Principles of Auditor Supervision published by the International Organization of Securities Commissions (IOSCO) in 2002 state that audit quality is an important requirement for the integrity of financial statements. The establishment of independent audit monitoring systems can strengthen the independence of auditors and improve the governance and regulations of the auditing profession. Independent audit monitoring regimes make audit institutions emphasize audit

quality. Therefore, maintaining commitment and loyalty in the audit negotiation process is important and should be paid attention to.

In his study, Awadallah [5] showed that the auditor's negotiation is based on 4 strategies of competition, adaptation, cooperation and compromise, in which conflict of interest plays an important role in its formation. The results of the present study are consistent with their study in terms of the importance of conflict of interest in the formation of the auditor's negotiation strategy. Trotman et al. [47] emphasized the importance of considering the client's goals and interests in the audit negotiation process and the value of the role-playing technique to improve the auditor's negotiation effectiveness. The results of the present study, in terms of the importance of considering goals and interests in the formation of the auditor's negotiation strategy, are consistent with their study. Gibbins et al. [15] showed that accounting standards and disclosure related to external conditions and constraints, risks inherent in customers and past relationships with customers related to the interpersonal context, And the accounting and negotiation expertise of audit firms related to the capabilities of the parties are significantly related to each step in the negotiation process. The results of the present study are consistent with their study in terms of the importance of the relationship between the auditor and the client in the formation of the auditor's negotiation strategy. Elias [11], Pai et al. [36], and Arifin [3] pointed out the importance of commitment in the auditor's negotiation strategy. The results of the present study, in terms of the importance of considering commitment in the formation of the auditor's negotiation strategy, are consistent with their study.

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