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# A systematic study on the model for determining and identifying major audit issues: Using a content analysis approaches

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**Abstract**

In today's complex financial world, identifying and disclosing major audit issues is crucial for transparency, accountability, public trust, and economic stability. This exploratory, mixed-methods study presents a comprehensive model examining key factors affecting this process. Due to the lack of a coherent framework, it identifies themes via content analysis of prior research and interviews with 14 experts (audit academics/professionals and Auditing Standards Development Committee members, purposively sampled via snowball approach). Results revealed 4 overarching themes: Regulatory/Professional Frameworks, Institutional/Environmental Structures, Client Characteristics, and Auditor Frameworks, along with 8 organizing themes (including ethical requirements, regulatory roles, institutional impacts, economic environment, client traits, and auditor characteristics) and 55 basic themes. Delphi analysis confirmed the reliability of these dimensions across two rounds. Interpretive Structural Modeling (ISM) then identified Supervisory Structures as the most influential theme within the major audit issues pattern. This research advances auditing literature, particularly for developing countries, offering technical innovations and practical insights for policymakers and audit institutions to better understand auditor characteristics and drivers of major audit issues.

Keywords: Major audit issues, supervisory frameworks, professional requirements, institutional structures
2020 MSC: 91G15, 97N80

## 1 Introduction

Auditing, as a fundamental pillar of economic systems, plays a pivotal role in ensuring transparency and accountability [5]. This systematic and evidence-based process, using mathematical, statistical and economic principles, evaluates the reliability of financial information. In addition to specialized technical knowledge, modern auditing requires a comprehensive understanding of the economic environment, regulatory frameworks and human factors affecting financial reporting [4, 6].

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On the other hand, the major issues of auditing can be categorized into several main axes: First, the issue of auditor independence and impartiality is raised as one of the fundamental challenges of this profession. Auditor independence is worth considering not only from the perspective of professional ethics, but also from a philosophical perspective; Because this independence is a necessary condition for achieving financial truth, and any damage to it can lead to distortion of reality and create an inaccurate picture of the financial situation of organizations. The second issue is the increasing complexity of the economic and financial environments, which has faced auditors with new challenges. The globalization of the economy, the emergence of new technologies such as blockchain and artificial intelligence, and the increase in the volume and diversity of financial transactions have all made the audit process much more complex and costly [11]. These complexities have made the need to develop new audit methods and use advanced analytical tools more apparent than ever before. The third issue is the issue of auditors' accountability and responsibility for possible errors or omissions, which can lead to widespread financial losses and loss of public trust. This highlights the need to create more detailed supervisory frameworks as well as to improve the level of education and professional qualifications of auditors. Finally, it should be noted that auditing, as a dynamic and evolving process, requires an interdisciplinary perspective that can bridge the gap between financial science, philosophy, ethics, and technology in order to effectively respond to the complex issues it faces [29]. Key audit matters should be specifically related to the company under review and the audit process so that the audit report can convey relevant and important information to users. Therefore, key audit matters are based on the auditors' judgment to help them select the key matters to communicate to those charged with governance. This framework for deciding on key matters aims to focus auditors on matters that are of interest to investors and other users, especially those parts of the financial statements that require significant judgment or that require the auditor to prepare them in accordance with a risk-based approach. Therefore, auditors should determine, from among the matters communicated to the company's governing bodies, those that require special attention during the audit operation, and in this regard, consider the following: a) Matters that have a high risk of material misstatement or are considered to have a significant risk in the context of International Standards on Auditing. b) The auditor's judgments about items in the financial statements that are subject to significant judgments by the company's management, including accounting estimates containing significant uncertainty; c) The effect of significant events or major transactions that occurred during the financial period [17]. Recently, the results of field research show that in order to comply with the new standard regulations on major audit matters, audit firms must apply additional procedures, receive and apply more training, and perform more quality control reviews [19]. The independent audit report and its content are actually an important communication tool about the company's financial performance that auditors prepare for stakeholders [28]. Therefore, the main purpose of presenting the audit report is to assure investors, creditors, shareholders, and other stakeholders [27]. In fact, the independent auditor's report and its content can express the company's management's obligations to investors, and the client pays the auditor in exchange for fulfilling these obligations. The issue of financial crises and audit quality issues has led to the need for research to investigate factors that improve audit report transparency and audit quality [2, 9].

In this study, first, with an analytical approach in the content analysis section, during the coding stages, open coding of the research is used to identify themes, and then through selective coding, the overarching, organizing, and basic themes related to major audit issues are determined so that, based on the model designed for this variable, a questionnaire based on validity and reliability is developed. In the next step, using an interpretive structure (ISM), the themes are prioritized in order to identify the most influential themes. Therefore, the main problem of the present study is what is the appropriate framework for major audit issues?

## 2 Theoretical Framework of the Research

Following the financial crises of the last two decades and the financial scandals of companies, the finger of blame has been pointed to some extent at auditors and the issue of audit quality. In Iran, after the discovery of the 2011 banking fraud, some experts claimed that auditing had failed [12]. Independent auditing plays a major role in supporting the quality of financial information and reports worldwide, both in the private and public sectors. Independent auditing is an important part of the institutional inspection and supervision infrastructure and an effective mechanism based on public interest. Therefore, the quality of audit services is the most important issue for those who develop auditing standards and also for audit firms. Financial reports and financial statements of companies provide the information needed by investors, creditors and other users, and in fact, they put a seal of approval on the information provided based on the auditors' opinion and their approval. Therefore, auditing financial statements is important and necessary because audited financial information provides users with assurance on which to base their decisions. This section will then examine the concepts related to key audit matters.

### 2.1 History of Key Audit Matters

In 2013 and 2016, in the UK and the US, respectively, auditing standards setters introduced a significant change in the structure and content of auditors' reports. This change was accompanied by the introduction of the "extended auditor's report," which required auditors to clearly disclose key and challenging audit matters and to describe in detail their approach to addressing these matters. This change not only increased the auditors' legal responsibility, but also took a major step towards greater transparency and accountability by improving the information content of the reports [26]. Key audit matters, as milestones in the audit process, play a decisive role in the formation of the auditor's final opinion. These matters, which often involve high risks and significant complexity, should not only be comprehensively reflected in the auditor's report but also need to be communicated directly to those charged with governance to enable informed decision-making.

From a recent perspective, Camacho-Mi˜nano et al [6] and Bepari [4] have classified key audit matters into two distinct categories: key matters at the entity level and key matters at the account level. Key matters at the entity level generally relate to all functional and structural aspects of the entity and are not limited to a specific account. For example, weaknesses in internal controls or concerns about going concern are among these issues. In contrast, account-level issues are directly related to specific accounts, such as inventory or goodwill, and require more detailed and focused examination. This classification, presented in full in table below, provides a clear framework for better understanding the different dimensions of major audit matters and helps auditors analyze and report on these matters more accurately [6].

| **Issues at the Entity Level** | **Issues at the Account Level** |
|---|---|
| Going Concern | Management Remuneration |
| Internal Control and Fraud | Revenue Recognition |
| Discontinued Operations and Restructuring | Expense Recognition |
| Accounting for Acquisitions and Mergers | Accruals, Deferrals, and Management Estimates |
| Tax-Related Matters | Inventory |
| Exceptional Items, Presentation, and Disclosure | Cash and Receivables |
| Legal Claims and Systemic Issues | — |
| Investment-Related Issues | — |
| Intangible Asset Issues | — |
| Property, Plant, and Equipment Issues | — |
| Lease and Long-Term Debt Issues | — |
| Pension Benefit Accounting | — |

The Public Company Accounting Oversight Board in the United States (2019) has divided major audit matters into two distinct categories in its reviews: The first category is those that are directly related to a specific account or disclosure related to the financial statements. For example, goodwill, as one of these cases, requires in-depth and detailed investigations to ensure that its value is correctly reflected in the financial reports. The second category is those that are comprehensive and all-encompassing in nature due to their broad impact on several accounts or different sections of the financial statements. For example, the issue of going concern, as one of these issues, affects not only the financial aspects, but also the overall performance and future of the business entity and requires comprehensive and multidimensional analyses. This division helps auditors to better understand the different dimensions of major issues and adopt a targeted and systematic approach in dealing with them.

### 2.2 Factors affecting the disclosure of major audit matters

Several studies have examined the factors affecting the disclosure of major audit matters and have analyzed various dimensions in this regard. For example, Camacho-Minano et al. [6] showed in their findings that the deeper a company is in a financial crisis, the more auditors are inclined to disclose major matters in their reports. These findings indicate that financial crisis conditions, as a strong incentive, push auditors towards greater transparency. On the other hand, Cameran & Campa [7] concluded in their study that audit fees and report delays are directly related to the number and type of major matters disclosed. In other words, the higher the audit fee and the longer the time to prepare the report, the greater the likelihood of disclosing major matters.

Further, Ferreira and Morais [11] have emphasized that auditor characteristics, client characteristics and the quality of the relationship between them play a decisive role in the disclosure of major matters. Shao [25] has also examined auditor characteristics and identified factors such as industry expertise, experience, gender and size of the audit firm as key elements affecting this process. In addition, Özcan [23] showed in his research that larger audit firms tend to disclose major matters more and that the financial complexity of the client company directly affects the number of these matters in audit reports.

Table 1: Systematic review of research related to factors affecting the disclosure of major audit matters

| Authors | Year | Examined Factors | Key Findings | Mechanism of Influence |
|---|---|---|---|---|
| Camacho-Mi˜nano [6] | 2023 | Financial condition of the company | Financially distressed companies are more likely to disclose critical issues | Financial crisis acts as a trigger for transparency |
| Cameran & Campa [7] | 2023 | Audit fees and reporting delay | Direct relationship between high fees/reporting delay and disclosure of key issues | Economic interests and time pressure influence professional judgment |
| Morais [11] | 2019 | Auditor-client relationship characteristics | Quality of the relationship determines level of disclosure | Stronger professional ties lead to more comprehensive evaluations |
| Shao [25] | 2020 | Auditor characteristics | Industry expertise, experience, and firm size impact disclosure level | Greater expertis leads to better issue identification |
| Özcan [23] | 2021 | Firm size and financial complexity | Larger firms disclose more critical issues | More resources in large firms allow for deeper investigation |

A comprehensive analysis of the findings shows that auditors' decisions on disclosure of major issues are a complex function of the interaction of three key factors: client company characteristics (including financial condition, reporting quality, and tax issues), auditor characteristics (such as expertise, firm size, and professional relationships), and economic and legal factors governing the business environment. The dominant pattern in research suggests that the level of risk-taking of the firm, as a pivotal variable, has the greatest impact on auditors' willingness to disclose. However, the observed nonlinear relationships between some variables, such as audit fees and disclosure levels, as well as significant differences in the approaches of audit firms of different sizes, indicate the need for further research in this area. It is worth noting that most of the existing studies have been conducted in the context of developed markets, and the generalizability of the findings to developing economies requires further comparative studies. This analysis provides a comprehensive conceptual framework for understanding the dynamics affecting the process of disclosure of major audit matters, which can be a valuable basis for future research and the improvement of professional standards.

### 2.3 Research Background

Kachelmeier et al [18] found in their study that investors show less trust in financial statements that include the disclosure of a major audit matter. They also concluded that auditors feel less responsible for the misstatements that occurred in the financial statements for which a major audit matter was disclosed. On the other hand, Backof et al. [3] stated that the disclosure of major audit matters has valuable information content only for professional users and can help improve their decision-making, but for non-professionals, this information is not very useful and understandable. In contrast, Rapley et al. [19, 24] argue that disclosure of these matters can have a negative impact on the decision-making of non-professional investors. Overall, these studies suggest that major audit matters may contain more information, but the conflicting results of these studies suggest that less experienced users of financial statements may have difficulty understanding and integrating this information into their decision-making models. For example, Gutierrez et al [14] found that from the perspective of investors, disclosure of these matters does not necessarily help improve decision-making and in some cases may even lead to misleading them. Carver and Trinkle [8] also emphasized that disclosure of major matters reduces the readability of audit reports and has little impact on investment decisions and company valuations.

Psychological research suggests that investors may base their investment judgments on analysts' earnings per share forecasts [13]. Financial analysts, as information intermediaries, play a vital role in processing and disseminating information to stock market participants. From the perspective of investors, analysts' earnings forecasts, given their professional skills and information advantages, can provide valuable information about the operating performance and future prospects of companies and become an important reference for investment decisions [30]. If the disclosure of major audit matters provides investors with new information, this information may be of particular importance in assessing the performance of the earnings benchmark. This importance arises because managers have significant incentives to meet or exceed analysts' earnings forecasts [22].

In research conducted in Iran, the results of the study by Heydari and Moshayekh [15] showed that major audit issues affect the judgment and decision-making of professional investors and reduce their willingness to invest, but do not affect the judgment and decision-making of non-professional investors. The factor of profit criterion performance on the evaluation judgment of both groups was found to be influential and no interaction was found between profit criterion performance and major audit issues. It is worth noting that the findings of this study can provide valuable insights for various stakeholders such as standard setters, publishers, auditors and investors. Afkhami and Fazeli [1] showed that the inclusion of major audit issues in independent auditor reports leads to delays in issuing the audit

report. We also provide evidence that there is a significant positive relationship between major audit issues and audit costs. Our findings help regulators and regulators to better understand the implications of new auditing standards. Ghaemi et al. [12] showed that at the industry and industry group levels, the number of significant audit issues is not significantly related to any of these variables, and only in the insurance, banking, and financial intermediary industries, the number of significant issues disclosed in the audit report is positively related to the complexity of the business entity. Jafarinasab et al. [17] concluded that the current level of audit reporting in Iran is significantly different from what is required by auditing standards. To achieve desirable standards, it is necessary to increase supervision in the profession and adopt strategies to improve the quality of audit reports. Jafarinasab [16] showed that auditors have different views on the advantages and disadvantages of the current auditor's report and consider it necessary to change it. They also agreed to the phased and simultaneous implementation of the new auditor's report for all economic entities and accounting entities, as well as the disclosure of the auditor's tenure in the reports.

The history of research related to identifying factors affecting major audit issues shows that this issue has been examined from various perspectives. Previous studies have mainly focused on the effects of factors related to firm characteristics (such as size, leverage, profitability, and liquidity), auditor characteristics (such as industry expertise, experience, and size of the audit firm), and environmental characteristics (such as business entity complexity and financial reporting quality). Some studies have shown that larger and more leveraged firms are likely to encounter more major issues, while larger audit firms are more likely to disclose these issues. Also, business entity complexity and poor financial reporting quality have been identified as key factors affecting the number and type of major issues disclosed. However, the inconsistencies in the findings indicate that a comprehensive and systematic model for identifying and prioritizing these factors has not yet been presented. The difference between the present study and previous studies is that this study systematically and by using modern analytical methods aims to provide a comprehensive model for identifying the factors affecting It deals with major audit issues. While previous studies have mainly focused on examining the factors separately, this study seeks to create a model that can operationally identify and prioritize major audit issues by integrating different factors into an integrated framework. This model not only helps to better understand the relationship between different factors and major issues, but also serves as a powerful tool for auditors.

## 3 Research Methodology

The methodological nature of this study is considered developmental in terms of results, because no study in the past has attempted to provide a framework for the major audit issues model, and conducting this study can contribute to the conceptual integration of the phenomenon under study. Also, based on the purpose, this study is classified as an exploratory study that seeks to determine the basic, organizing, and comprehensive themes in line with the major audit issues model based on interviews with experts and three-stage coding. Finally, from the perspective of the nature of data collection, it should be It is stated that this study is a combination of qualitative and quantitative analysis methods. The philosophy of the present study is considered to be based on the intersection of voluntarism in the philosophy of the world with structuralism in the philosophy of science; therefore, the nature of the basic philosophy in research is a combination of the inductive-deductive approach.

| Methods Dependent on Specific Epistemology | Methods Independent of Specific Epistemology |
|---|---|
| Phenomenology | Latent Content Analysis |
| Discourse Analysis | Grounded Theory |

Figure 1: Types of qualitative research methods

To collect data, a semi-structured in-depth interview was used, and to identify experts, the snowball technique, which is one of the purposive sampling methods, was used. The reason for using a semi-structured interview is that in addition to the possibility of exchanging opinions and thoughts, the discussion and topic of the interview can be directed towards achieving the research objectives. Also, during the interview process, it is possible to observe the feelings and reach the beliefs and convictions of the interviewees about the research topic.

### 3.1 Data collection methods and tools

The statistical population in the qualitative section includes academic experts and auditing professors who are experts and have professional experience in the field of auditing, as well as members of the Auditing Standards

Development Committee. The sampling method in the qualitative section is a combination of purposive sampling and snowball methods. For this purpose, in the first step, three people from among the members of the statistical population who were recognized as experts based on published articles in fields related to the research topic or scientific and executive backgrounds in the field of auditing were purposefully selected. In the second step, people from the statistical population who were introduced to the researcher by the interviewees based on the snowball method and had the opportunity to be interviewed were added to the statistical sample, and the criterion for reaching the end of data collection is the theoretical saturation point. The logic of purposeful sampling is to select cases that are rich in information about the research topic and provide the possibility of in-depth research. The process of introducing subsequent people by the participants and conducting interviews continued until theoretical saturation reached 14 people. Theoretical saturation is determined based on the subjective judgment of the researcher, and reaching theoretical saturation indicates the adequacy of data collection.

Data in this stage were collected in the following two ways:

a) Review of texts: First, 12 texts were selected using a library method for reviewing theoretical literature and analysis and were numbered.

b) Interview: In this stage, a semi-structured interview tool was used and interviews were conducted with experts and experts in the field of accounting and financial reporting and were numbered.

The same statistical population as the qualitative part was present in the quantitative part for interpretive structural modeling. In terms of sample size, the desired limit of the statistical population in this study was 12 to 25 people, and 14 people are approved as a sample in this study. The demographic information related to the research participants is presented in Table 2:

Table 2: Demographic characteristics of the research experts

| Variable | Group | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 11 | 0.79 |
| | Female | 3 | 0.21 |
| | **Total** | **14** | **1.00** |
| Age | Up to 45 years | 2 | 0.14 |
| | 46 to 55 years | 4 | 0.29 |
| | Over 56 years | 8 | 0.57 |
| | **Total** | **14** | **1.00** |
| Experience | 10–20 years | 3 | 0.21 |
| | 21–30 years | 7 | 0.50 |
| | Over 30 years | 4 | 0.29 |
| | **Total** | **14** | **1.00** |

In this study, the researcher pluralism method was used to assess the validity of the research. Using researcher pluralism, more than one researcher is used to collect, analyze, or interpret data. Finally, to assess reliability, the level of agreement between coders (researchers) is examined. For this purpose, all interview and coding steps were carried out in parallel by two people, and the same results were obtained. Recoding of part of the data from the interviews by the second researcher: For this purpose, about 20 percent of the interviews (four interviews) were provided to the second researcher familiar with the qualitative research method and aware of the research topic, and the percentage of coding agreement was calculated. This index shows the intra-subject agreement between two different coders. The results are presented in Table 2, which is acceptable.

$$\mathbf{100}\times\frac{\mathbf{2}\times\mathbf{Number\ agreements}}{\mathbf{Total\ number\ of\ codes}}=\mathbf{Reliability\ percentage}$$

As shown in Table 3, the percentage of agreement in the extracted codes was 91%. The percentage of agreement obtained is more than 60%, so the codings have sufficient validity. It is recalled that the number of codes extracted in the table is solely related to the analysis of selected interviews to assess the validity of the research through the researcher's pluralism method.

## 4 Research findings

After collecting data through interviews, the necessary analyses are carried out to localize the data using the theme analysis method. In Table 4, the process of theme analysis and theme network analysis is presented in the form of

Table 3: Inter-Coder Reliability Calculation at the Interview Stage

| Interview Number | Total Codes | Agreements | Disagreements | Inter-Coder Reliability (%) |
|---|---|---|---|---|
| 3 | 24 | 11 | 3 | 91.66 |
| 4 | 18 | 8 | 2 | 88.88 |
| 8 | 34 | 16 | 2 | 94.12 |
| 12 | 38 | 18 | 2 | 94.74 |
| **Total** | **140** | **64** | **12** | **91.43** |

three stages, six steps and twenty actions.

Table 4: Step-by-step process of theme analysis and theme network analysis

| Stage | Step | Action |
|---|---|---|
| 1. Text Analysis | Becoming familiar with the text | - Transcribing data (if necessary)<br>- Initial and repeated reading - Writing initial ideas |
| | Generating initial codes | - Proposing a coding framework and theme template<br>- Breaking the text into smaller segments<br>- Coding notable data features |
| 2. Interpretation & Explanation | Identifying and reviewing themes | -Matching codes with the theme framework<br>- Extracting themes from coded segments<br>- Refining and revisiting themes |
| | Mapping theme networks | - Reviewing consistency of themes with extracted codes<br>- Organizing themes<br>- Selecting basic, organizing, and overarching themes<br>- Drawing thematic networks<br>- Revising and confirming networks |
| | Analyzing theme networks | - Defining and naming themes<br>- Describing and explaining the network |
| 3. Synthesis & Integration | Report writing | - Summarizing networks and expressing them clearly<br>- Extracting interesting data samples<br>-Linking analysis results with research questions and theoretical background<br>- Writing the academic and professional report |

In this study, a comprehensive step-by-step process based on the Atride-Stirling method was used for theme analysis as follows:

1. Getting to know the text: This step forms the backbone of the subsequent steps. The researcher must immerse himself in the data in such a way that he becomes fully familiar with its depth and richness.

2. Creating initial codes and coding: This step is important from an interpretative perspective. The extracted codes were either directly stated in the interviewees' conversations or implicitly extracted by the researcher from the interview text.

3. Searching and identifying themes: In this step, the codes are analyzed and the way in which different codes are combined and combined to form a basic theme is considered. In this part, by further refining and re-examining the themes, an attempt is made to ensure that the themes are sufficiently broad, non-repetitive, and specific.

4. Drawing a theme network: In this step, the themes obtained from the text are categorized into similar and coherent groups. The data within a theme should be consistent with each other in terms of concept and meaning. Theme networks are very useful for focusing on different variables and reviewing the information to be analyzed simultaneously.

5. Analyzing the theme network: After creating the theme network, the researcher should refer back to the original text and interpret it with the help of these networks. The researcher has chosen specific titles for his themes. The naming of the themes is done based on their contents and the researcher's discretion.

6. Report preparation: The written report should provide sufficient and appropriate evidence regarding the themes in the data. The purpose of this work is to re-examine the research questions and the theories underlying them in order to answer the main research questions by discussing and examining in depth the patterns obtained from the analysis of the text.

### 4.1 Research Review

In this section, first, through an analysis of similar studies, the overarching themes related to the pattern of major audit issues should be identified through content screening. For this purpose, the amount of similar studies was determined through three initial stages of content evaluation; title and ratio analysis; therefore, with the aim of identifying overarching themes, a list of concepts that can be considered in identifying similar studies was first presented according to Table 5 so that research could be identified to determine overarching themes.

Table 5: Keyword search in selecting similar studies

**Keywords of the Major Audit Issues Framework**

- Audit Fees
- Weak Internal Controls
- Tax Issues
- Complex Business Structures
- Governing Laws and Regulations
- Job Expectations

Therefore, with regard to determining the key words of the major audit issues pattern, international and domestic research databases and references were used to find similar studies to determine the overarching themes.

All primary sources identified were 23, and after several stages of screening in terms of content, title, and analysis, 12 studies were finally selected that matched the content, title, and analytical processes of this study. At this stage, the concepts had to be separated based on the overarching themes, so that basic and organizing themes could be created through interviews. In this analysis, and through the critical evaluation method with the participation of research experts, based on the criteria of research objectives, logic of the research method, research design, sampling, data collection, reflectivity, accuracy of analysis, theoretical and clear expression of findings and research value, and based on the research keywords presented below, the dimensions and propositional themes are determined.

Table 6: Process of evaluating approved research

| Studies / Audit Issues Criteria | Elshafie [10] | Camacho-Mi˜nano [6] | Cameran & Campa [7] | Mah Mardini [21] | Backof et al. [3] | Lynch et al. [20] | Özcan [23] | Shao [25] | Ferreira & Morais [11] | Kachelmeier et al. [18] | Carver & Trinkle [8] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Objective | 3 | 2 | 3 | 3 | 4 | 4 | 3 | 2 | 2 | 3 | 1 |
| Method | 3 | 4 | 4 | 2 | 1 | 1 | 2 | 2 | 1 | 4 | 1 |
| Design | 4 | 4 | 3 | 3 | 2 | 2 | 4 | 2 | 2 | 1 | 1 |
| Sampling | 2 | 5 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 2 | 2 |
| Data Collection | 3 | 2 | 4 | 4 | 1 | 3 | 4 | 1 | 1 | 4 | 3 |
| Generalizability | 3 | 2 | 4 | 4 | 3 | 3 | 4 | 2 | 1 | 2 | 2 |
| Ethics | 3 | 3 | 2 | 4 | 2 | 1 | 4 | 1 | 3 | 4 | 2 |
| Analysis | 3 | 4 | 2 | 3 | 4 | 1 | 3 | 1 | 3 | 4 | 2 |
| Theoretical Contribution | 3 | 4 | 4 | 1 | 2 | 3 | 1 | 3 | 3 | 4 | 2 |
| Value | 4 | 3 | 4 | 3 | 2 | 1 | 4 | 3 | 3 | 4 | 2 |
| **Total** | **31** | **33** | **33** | **32** | **24** | **23** | **32** | **21** | **21** | **32** | **18** |

Based on the results of this analysis, it was determined that 6 studies that did not obtain the required score (more than 30 points) were excluded from the review. In the following, the following scoring method is used to determine some organizing themes of the major audit issues pattern. Based on this method, all sub-criteria extracted from the text of the approved articles are written in the table column, and then the names of the researchers of the approved studies are given in each table row. Based on the use of each researcher of the sub-criteria written in the table column, the sign "□" is inserted, then the scores in each sub-criteria column are added together, and the scores higher than the average of the studies conducted are selected as the research components.

Based on the confirmation of 6 studies from the critical appraisal stage, in order to determine the organizing themes to focus on interview questions to reach the overarching and basic themes, the main dimensions that obtained more than half of the approved studies were identified as the main organizing themes of the major audit issues pattern, and the themes of tax problems and job expectations were eliminated considering that they obtained a score below the average. In the following, the results of the studies under review and interviews with experts were reviewed and comprehensive identification of the overarching, organizing and basic themes was discussed. Information related to the basic, overarching and organizing themes is shown in Table 8.

Unlike the theme template approach, theme networks are presented graphically, similar to a web page, to eliminate the idea of any hierarchy between them. They are only an analytical tool, not an analysis itself. Figure 2 shows a

Table 7: Analysis of research components

| Research Studies | Organizing Themes | Elshafie [10] | Camacho-Miño [6] | Cameran, Campa [7] | Mah Mardini [21] | Özcan [23] | Kachelmeier et al. [18] |
|---|---|---|---|---|---|---|---|
| Audit Fees | √ | √ | √ | √ | √ | - | |
| Weak Internal Control | √ | √ | √ | - | - | √ | |
| Tax Issues | √ | √ | - | - | - | √ | |
| Complex Client Structures | - | √ | √ | √ | √ | √ | |
| Governing Laws and Regulations | √ | √ | √ | √ | - | √ | |
| Job Expectations | - | √ | √ | - | - | - | |

theme network of major audit issues, which can be used as a visual mechanism for interpreting the text so that the results are understandable and clear to researchers.

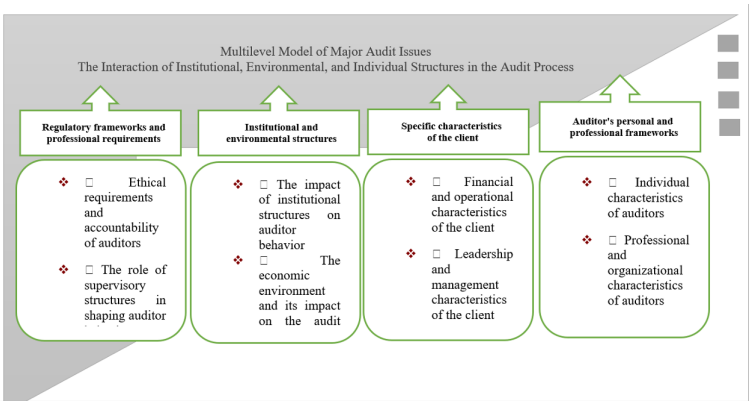


Figure 2: Framework for the Major Audit Issues Model

The qualitative data analysis in this study led to the identification of a comprehensive network of themes related to major audit issues that are organized at four levels: At the macro level, four overarching themes were identified, including 1) regulatory frameworks and professional requirements, 2) institutional and environmental structures, 3) client-specific characteristics, and 4) auditor-personal and professional frameworks. These core themes were broken down into eight organizing themes, the most important of which include auditors' ethical requirements, the role of regulatory structures, the impact of the economic environment, client financial and managerial characteristics, and auditors' professional characteristics. Finally, these themes were broken down at the micro level into 55 basic themes that indicate the precise and more detailed dimensions of each of the factors affecting major audit issues. This network of themes clearly demonstrates that audit issues are a multidimensional phenomenon that is shaped by the interaction of environmental, organizational, and individual factors.

### 4.2 Findings of Delphi Analysis

Delphi analysis is considered as a link between qualitative and quantitative analysis, because by assessing the reliability of the dimensions of the designed model, it allows the explanation of the model components in the form of the desired research tools in the target population in the quantitative section. In this study, Delphi analysis was used to assess the reliability of the presented model themes. This analysis is based on two criteria: agreement coefficient and mean. In order to carry out this assessment, the research components were first arranged in the form of a seven-option questionnaire to be distributed among the panel members and, based on several rounds of the questionnaire, the reliability level of the research components was assessed.

Based on the two criteria of average and agreement coefficient, it was determined that all the main themes related to the pattern of major audit issues are approved. In other words, considering that the average of the main components was 5 and higher than 5 and on the other hand, since the agreement coefficient obtained is more than 0.5; it can be stated that all the themes identified in the qualitative section were approved. Therefore, structural-interpretive analysis should be used in the following to determine the most influential themes identified.

Table 8: Identification and extraction of overarching, organizing and basic themes

| **Basic themes** | **Organizing Themes** | **Inclusive themes** |
|---|---|---|
| 1. • Auditors' commitment to adhering to ethical principles in the audit process | Ethical Requirements and Accountability of Auditors ditors | Regulatory Frameworks and Professional Requirements |
| 2. • The role of auditors' professional conscience in disclosing complex financial issues | | |
| 3. • The impact of ethical training on improving auditors' judgments | | |
| 4. • Auditors' accountability towards stakeholders and society | | |
| 5. • Ethical challenges auditors face under managerial pressures | | |
| 6. • The role of professional ethical codes in shaping auditors' behavior | | |
| 7. • Auditors' commitment to maintaining independence and impartiality during the audit process | | |
| 8. • The impact of regulatory bodies on increasing transparency in audit reports | The Role of Supervisory Structures in Shaping Auditor | |
| 9. • role of professional organizations in developing auditing standards | | |
| 10. • The effect of periodic inspections on improving auditors' work quality | | |
| 11. • The role of transparent reporting in enhancing public trust in auditors | | |
| 12. • The impact of strict regulations on reducing financial misconduct in the audit process | | |
| 13. • The role of continuous supervision of auditors' performance in identifying major issues | Behavior | |
| 14. • effect of regulatory mechanisms on reducing conflicts of interest in auditing | | |
| 15. • The role of local and international laws in shaping auditing procedures | The Impact of Institutional Structures on Auditor Behavior | Institutional and Environmental Structures |
| 16. • The impact of institutional structures on increasing transparency in the audit process | | |
| 17. • The role of regulatory bodies in improving the quality of audit reports | | |
| 18. • The effect of tax laws on increasing auditors' sensitivity to financial matters | | |
| 19. • The role of anti-corruption laws in shaping auditing procedures | | |
| 20. • The impact of international laws on harmonizing auditing standards | | |
| 21. • The role of local laws in adapting auditing processes to local needs | | |
| 22. • The effect of economic fluctuations on increasing auditors' sensitivity to financial issues | The economic environment and its impact on the audit | |
| 23. • The role of economic recessions in increasing audit-related risks | | |
| 24. • The impact of economic growth on improving the quality of audit | | |
| 25. • The role of inflation in changing auditing procedures and identifying financial issues | | |
| 26. • The effect of exchange rate fluctuations on increasing the complexity of the audit process | | |
| 27. • The role of financial crises in raising auditors' sensitivity to major issues | | |
| 28. • impact of economic stability on improving auditors' accuracy in identifying financial issues | | |
| 29. • The effect of company size on the number of major issues identified by auditors | Client's financial and operational characteristics | Client Specific Characteristics |
| 30. • The role of company profitability in shaping auditing procedures | | |
| 31. • The impact of company financial leverage on increasing auditor' sensitivity to financial issues | | |
| 32. • The role of company liquidity in improving the quality of audit reports | | |
| 33. • The effect of operational complexity on auditors' accuracy in identifying issues | | |
| 34. • The role of the company's industry in shaping auditing procedures | | |
| 35. • The impact of company ownership structure on increasing transparency in the audit process | | |
| 36. • The role of management quality in improving interactions with auditors | Client's financial and operational characteristics | |
| 37. • The impact of corporate governance structure on increasing auditors' accountability | | |
| 38. • The role of management transparency in reducing conflicts between auditors and the client | | |
| 39. • The effect of board independence on improving the quality of audit reports | | |
| 40. • The role of internal control systems in reducing audit-related risks | | |
| 41. • The impact of corporate culture on increasing auditors' commitment to ethical principles | | |
| 42. • The role of effective management communication with auditors in improving the audit process | | |

| | | |
|---|---|---|
| 43. • The impact of auditors' experience on more accurate detection of complex financial issues | Auditors' personal characteristics | Auditor Personal and Professional Frameworks |
| 44. • The role of auditors' industry expertise in identifying industry-specific issues | | |
| 45. • The effect of specialized training on improving auditors' analytical skills | | |
| 46. • The role of auditors' technical knowledge in reducing human errors in the audit process | | |
| 47. • The impact of auditors' independence | | |
| 48. • The role of auditors' expertise in identifying emerging financial risks | | |
| 49. • The effect of auditors' experience on increasing accuracy in disclosing major issues | | |
| 50. • The reputation of the audit firm | Professional and organizational characteristics of auditors | |
| 51. • The role of internal standards of the audit firm in improving audit process quality | | |
| 52. • The impact of the audit firm's organizational culture on increasing auditors' commitment to ethical principles | | |
| 53. • The role of audit firm quality control systems in reducing human errors | | |
| 54. • The effect of continuous training in the audit firm on improving auditors' skills | | |
| 55. • The role of modern technologies in transforming audit processes and increasing accuracy in issue identification | | |

Table 9: Delphi analysis of identified themes

| Overarching Themes | | Organizing Themes | Delphi Round 1 | | Delphi Round 2 | | Result |
|---|---|---|---|---|---|---|---|
| | | | Agreement Coefficient | Mean | Agreement Coefficient | Mean | |
| Major Audit Issues Pattern | Regulatory Frameworks and Professional Requirements | Ethical requirements and accountability of auditors | 5.91 | 0.91 | 6.04 | 0.92 | Confirmed |
| | | The role of supervisory structures in shaping auditor behavior | 5.74 | 0.89 | 6.14 | 0.93 | Confirmed |
| | Institutional and Environmental Structures | The impact of institutional structures on auditor behavior | 5.66 | 0.88 | 5.90 | 0.91 | Confirmed |
| | | The economic environment and its impact on the audit process | 6.11 | 0.84 | 6.69 | 0.90 | Confirmed |
| | Client Specific Characteristics | Financial and operational characteristics of the client | 5.29 | 0.81 | 5.89 | 0.92 | Confirmed |
| | | The leadership and management characteristics of the client | 5.43 | 0.69 | 5.71 | 0.82 | Confirmed |
| | Auditor Personal and Professional Frameworks | Personal characteristics of auditors | 5.30 | 0.65 | 5.50 | 0.81 | Confirmed |
| | | Professional and organizational characteristics of auditors | 6.01 | 0.82 | 5.74 | 0.84 | Confirmed |

### 4.3 Findings of interpretive structural analysis

With the confirmation of the main components of the research being determined, now a structural interpretive analysis is carried out with the aim of selecting the most influential component of major audit issues. First, it is necessary to code the components in the following table.

Table 10: Codes related to the components of major audit issues

| Abbreviation | Component |
|---|---|
| A | Ethical Requirements and Accountability of Auditors |
| B | The Role of Regulatory Structures in Shaping Auditors' Behavior |
| C | The Impact of Institutional Structures on Auditors' Behavior |
| D | The Economic Environment and Its Impact on the Auditing Process |
| E | Financial and Operational Characteristics of the Client |
| F | Governance and Managerial Characteristics of the Client |
| G | Personal Characteristics of Auditors |
| H | Professional and Organizational Characteristics of Auditors |

Based on the coding of Table 10, the components confirmed by Delphi analysis have been determined based on the defined signs and symbols to create a structural self-interaction matrix. To form this matrix, the "mode" index has been used for pairwise comparison so that among the four possible relationships between the indicators, the relationship that has the highest frequency according to the participants has been included in the final table. This

matrix is a matrix of dimensions of confirmed propositions that is compiled based on a pair-by-pair comparison of propositions. This self-interaction matrix is formed in the form of a checklist questionnaire and based on the discussion and opinions of the expert group. However, to determine the score, the defined symbols $O$, $A$, $X$ and $V$ are used based on the definitions in the table below.

Table 11: Conceptual relationships in the formation of the structural self-interaction matrix

| ***Defined abbreviations*** | | | | |
|---|---|---|---|---|
| | **V** | **A** | **X** | **O** |
| Mathematical explanation | $\mathbf{i} \Rightarrow j$ | $i \Leftarrow \mathbf{j}$ | $\mathbf{i} \Leftrightarrow \mathbf{j}$ | $i \not\Leftrightarrow j$ |
| Explanatory explanation | Direct row-column effect (one-way relationship) | Direct effect of column on row (inverse relationship) | Row and Column Interaction (Two-way Relationship) | No row and column effect |

Then, the participants' opinions are selected based on the "mode" index, considering the highest frequency among the conceptual relationships $V$; $A$; $X$ and $O$. According to these explanations, the following table shows the results of the self-interaction matrix, which is presented in coded form:

Table 12: Formation of the self-interaction matrix

| **Established codes** | | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|
| Ethical requirements and accountability of auditors | A | - | O | V | V | V | O | V | X |
| The role of supervisory structures in shaping auditor behavior | B | O | - | V | V | V | V | V | O |
| The impact of institutional structures on auditor behavior | C | A | A | - | V | O | O | V | O |
| The economic environment and its impact on the audit process | D | A | A | A | - | V | O | O | X |
| Financial and operational characteristics of the client | E | A | A | O | A | - | O | V | V |
| The leadership and management characteristics of the client | F | O | A | O | O | O | - | V | V |
| Individual characteristics of auditors | G | A | A | A | O | A | A | - | V |
| Professional and organizational characteristics of auditors | H | X | O | O | X | A | A | A | - |

At this stage, by converting the symbols of the structural matrix relations into the numbers two, one, zero and negative one, the access matrix can be formed based on the table below. The access matrix is obtained by converting the structural self-interaction matrix into a two-valued matrix of zero and one. To extract the access matrix, in each row of the self-interaction matrix, instead of the symbols X of the number 2 and V of the number one, A of the number -1 and O of the number zero are used. The obtained matrix is called the initial access matrix. The elements of the main diagonal are set to one. In fact, this stage is known as obtaining the Structural Self-Interaction Matrix (SSIM). Now, in order to separate the results obtained from the research experts, it should be done according to Table 13:

Table 13: The process of converting abbreviation symbols

| **Converting conceptual symbols into quantitative numbers** | | |
|---|---|---|
| **Conceptual symbol** | V | The cell corresponding to this pair is placed in the access matrix with the number 1 and its symmetrical cell is placed in the number -1 |
| | A | The cell corresponding to this pair is placed in the access matrix with the number -1 and its symmetrical cell is placed in the number 1. |
| | X | The cell corresponding to this pair is placed in the access matrix with the number 2 and its symmetrical cell is placed in the number 2. |
| | O | The cell corresponding to this pair is placed in the access matrix with the number 0 and its symmetrical cell is placed in the number 0. |

In this section, based on these concepts, an achievement matrix is formed to determine the comparison of row "$i$" and column "$j$".

As can be seen in the table above, the conceptual symbols assigned based on the mode index have been converted to scores of 0 and 1 according to the definition of conceptual relationships to numbers according to the previous table. Again, in order to form the final matrix, this time the indirect relationships should be specified as "*1". In other words, the access matrix is developed using the self-interaction structural matrix and this matrix is examined for its coherence. The coherence of the content relationship is a fundamental assumption in interpretive structural modeling. Coherence means that if variable "$A$" is related to variable "$B$" and variable "$B$" is also related to variable "$C$", then variable "$A$" is also related to variable "$C$". The final access matrix for the criteria is obtained by considering the coherence relationship to make the initial access matrix consistent. For this purpose, the initial matrix must be raised

Table 14: Determining the panel members' scores in the form of the initial matrix

| **Established codes** | | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|---|
| Ethical requirements and accountability of auditors | A | - | 0 | 1 | 1 | 1 | 0 | 1 | 2 |
| The role of supervisory structures in shaping auditor behavior | B | 0 | - | 1 | 1 | 1 | 1 | 1 | 0 |
| The impact of institutional structures on auditor behavior | C | -1 | -1 | - | 1 | 0 | 0 | 1 | 0 |
| The economic environment and its impact on the audit process | D | -1 | -1 | -1 | - | 1 | 0 | 0 | 2 |
| Financial and operational characteristics of the client | E | -1 | -1 | 0 | -1 | - | 0 | 1 | 1 |
| The leadership and management characteristics of the client | F | 0 | -1 | 0 | 0 | 0 | - | 1 | 1 |
| Individual characteristics of auditors | G | -1 | -1 | -1 | 0 | -1 | -1 | - | 1 |
| Professional and organizational characteristics of auditors | H | 2 | -1 | 0 | 2 | -1 | -1 | -1 | - |

to the power of $k+1$, so that the stable state is established "$M^k = M^{(k+1)}$". In this way, some zero elements will also be converted to 1, which is shown as "*1". After constructing the relationship matrix or the initial access matrix, the final access matrix must be obtained using the following relations:

$$M = D + I$$

$$M^* = M^k = M^{k+1},\ k > 1.$$

In large and complex systems, it is assumed that each component is reachable by itself. Hence, all the principal diagonal elements of the final matrix of the system are always 1. For this purpose, the identity matrix "I" is added to the initial reachability matrix to obtain the final matrix. The properties of the final matrix include:

$$M^2 = M$$

For this purpose, the final matrix obtained is raised to the power until the above state occurs and the obtained matrix will be the final matrix. The number of 1s in the first row indicates the lines or effects that result from the first criterion. The number of 1s in the first column indicates the effects that are made on the first criterion. A component that affects all components of the system and is not affected by any component is called the source. According to the explanations given, the final access matrix is determined.

Table 15: Determining the panel members' scores in the form of the final access matrix

| **Established codes** | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| Ethical requirements and accountability of auditors | A | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| The role of supervisory structures in shaping auditor behavior | B | *1 | 1 | 1 | 1 | 1 | 1 | 1 |
| The impact of institutional structures on auditor behavior | C | 0 | 0 | 1 | 1 | *1 | 0 | 1 |
| The economic environment and its impact on the audit process | D | *1 | 0 | *1 | 1 | 1 | 0 | *1 |
| Financial and operational characteristics of the client | E | *1 | 0 | *1 | *1 | 1 | 0 | 1 |
| The leadership and management characteristics of the client | F | *1 | 0 | *1 | *1 | *1 | 1 | 1 |
| Individual characteristics of auditors | G | *1 | 0 | 0 | *1 | 0 | 0 | 1 |
| Professional and organizational characteristics of auditors | H | 1 | 0 | *1 | 1 | *1 | 0 | *1 |

According to the results obtained in Table 15, which shows the final achievement matrix, in Table 16 the influence power (score 1 obtained from the row) and the dependence power (score 1 obtained from the column) are determined.

Table 16: Separation of influence and dependence forces

| **Indicator** | **Abbreviation** | **Influence Power** | **Dependency Power** |
|---|---|---|---|
| Ethical requirements and accountability of auditors | A | 6 | 6 |
| The role of supervisory structures in shaping auditor behavior | B | 7 | 1 |
| The impact of institutional structures on auditor behavior | C | 5 | 4 |
| The economic environment and its impact on the audit process | D | 5 | 8 |
| Financial and operational characteristics of the client | E | 5 | 6 |
| The leadership and management characteristics of the client | F | 5 | 2 |
| Individual characteristics of auditors | G | 4 | 8 |
| Professional and organizational characteristics of auditors | H | 6 | 8 |

To determine the relationships and leveling of criteria in the interpretive structural model (ISM), the set of outputs and the set of inputs for each criterion must be extracted from the received matrix. The set of outputs includes the

criterion itself and the criteria that it is affected by. The set of inputs includes the criterion itself and the criteria that affect it. Then, the set of two-way relationships of the criteria is determined. The first row where the commonality of the two sets is equal to the achievable set (inputs) will be the first level of priority. In this section, in order to determine the relationships between variables, the output set, input set, and common elements must first be identified. The score for determining the level and priority of the variables, the achievement set, and the prerequisite set are determined for each variable. The achievement set of each variable includes the variables that can be reached through this variable, and the prerequisite set includes the variables according to which this variable can be reached. Then, the commonalities of the Reachability set AnteceVent set and AnteceVent set are determined, and if the reachability set is the same as the commonality set, that factor(s) is considered as the priority level. The level refers to the designed layers of the final model. To obtain other levels, the previous levels must be separated from the matrix and the process repeated. In other words, after determining the reachable set and the antecedent set for each criterion and determining the common set, the criteria are ranked. By obtaining the commonality of the two reachable and antecedent sets, the common set is obtained. Criteria whose common set is the same as their reachable set are assigned the first priority level. By eliminating these criteria and repeating this process for other criteria, the levels of other criteria are also determined.

Based on MICMAC analysis, variables are divided into four categories based on their influence and dependence. Supervisory structures ($B$) The role of supervisory structures in shaping the behavior of auditors with high influence (7) and low dependence (1) is identified as a key variable that has a very high impact on auditor behavior and is less affected by other factors. The ethical requirements and responsibility of auditors ($A$) and the professional and organizational characteristics of auditors ($H$) with high influence and dependence (6 and 6 for A and 6 and 8 for $H$, respectively) act as independent variables; these variables both affect the system and are significantly affected by other factors. On the other hand, the economic environment ($D$) and the individual characteristics of auditors ($G$) with low influence (5 and 4, respectively) and high dependence (both 8) are identified as dependent variables that have little impact on the system but are significantly affected by other variables. The client's financial and operational characteristics ($E$) and the impact of institutional structures on auditor behavior ($C$) with medium influence and dependence (5 and 6 for $E$ and 5 and 4 for $C$, respectively) are classified as autonomous variables that have a medium influence and dependence on the system. Finally, the client's leadership and management characteristics ($F$) with medium influence (5) and low dependence (2) are recognized as an autonomous variable that has a medium influence on the system and is less affected by other factors. This analysis shows that regulatory structures and ethical requirements play a key role in shaping the system, while the economic environment and individual characteristics of auditors are more affected by other variables. Based on the determination of influence and dependence, the nodes and links of each research component are analyzed in the form of a mik-mak diagram analysis; Therefore, based on the power of influence and dependence, by combining the symmetry of the components based on the 4 graphical dimensions of this analysis, the components are placed, which are presented in Figure 1 of these results:

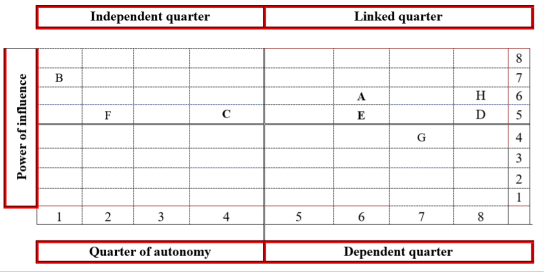


Figure 3: (MICMAC) Placement of research components based on the power of influence and dependence

Independent quadrant: Supervisory structures ($B$), client governance and management characteristics ($F$) and the impact of institutional structures on auditor behavior ($C$) are in this quadrant. These variables have high influence and low dependency, meaning that they have a very strong impact on the system but are less affected by other factors. Among them, supervisory structures in shaping auditor behavior ($B$) is known as the most influential variable in the independent quadrant, because it has the highest influence (7) and the lowest dependency (1). This variable plays a key role in shaping auditor behavior and improving the quality of audit processes. Client governance and management characteristics ($F$) also act as an important independent variable with medium influence (5) and low dependency (2) and have a significant impact on the system.

Linked quadrant: Auditors' ethical and responsibility requirements ($A$), auditors' professional and organizational

characteristics ($H$), client's financial and operational characteristics ($E$), and economic environment ($D$) are located in this quadrant. These variables have high influence and dependency, meaning that they both affect the system and are significantly affected by other factors. These variables act as complex and interacting factors in the system and play an important role in the internal interactions of the system.

Dependent quadrant: Auditors' individual characteristics ($G$) are located in this quadrant. This variable has low influence and high dependency, meaning that it has little impact on the system but is significantly affected by other factors. This variable acts as a dependent factor in the system and its role is more shaped by the influence of other variables.

Autonomous quadrant: None of the variables are included in this quadrant, which indicates that there are no variables with low influence and dependence in the system.

This analysis shows that the system under study is mainly influenced by independent and linked variables, while dependent variables play a lesser role. Supervisory structures ($B$) The role of supervisory structures in shaping auditor behavior as the most influential variable in the independent quadrant plays a major role in shaping the system. The client's leadership and management characteristics ($F$) and the impact of institutional structures ($C$) also have a significant impact on the system as other key factors in the independent quadrant. On the other hand, ethical requirements ($A$), professional and organizational characteristics of auditors ($H$), financial and operational characteristics of the client ($E$) and the economic environment ($D$) as linking factors shape the internal interactions of the system. Auditors' individual characteristics ($G$) are also, as a dependent factor, more affected by other variables.

## 5 Discussion and Conclusion

Auditing, as an art and science in which accuracy and fairness are combined, is not only a tool for measurement and control, but also a mirror in which the health and credibility of an economic and social system are reflected. But this mirror sometimes becomes dusty and needs to be revised. Presenting a model for the major issues of auditing is an attempt to remove this dust and present a clearer and more transparent picture of reality. In this path, fundamental questions arise: What factors cause the auditing process to deviate from its original path? How can a sustainable balance be established between technical accuracy and ethical requirements? And can a model be presented that not only leads to the solution of existing problems, but also serves as a beacon to illuminate the path of the future? These are questions that require not only in-depth knowledge in the field of accounting and auditing, but also a philosophical and multidimensional view of the nature of truth, justice, and accountability. The aim of this research was to construct an interpretive structural modeling of the factors of major auditing issues. In this research, based on the argumentative support of the methodology, qualitative and quantitative analyses were used separately based on the type of data collection. The results of the present study indicated 4 overarching themes (regulatory frameworks and professional requirements, institutional and environmental structures, specific client characteristics, and personal and professional frameworks of the auditor), 8 organizing themes (ethical requirements and accountability of auditors, the role of regulatory structures in shaping auditor behavior, the impact of institutional structures on auditor behavior, the economic environment and its impact on the audit process, financial and operational characteristics of the client, leadership and management characteristics of the client, individual characteristics of auditors, and professional and organizational characteristics of auditors), and 55 basic themes. In order to measure the reliability of the identified organizing themes, Delphi analysis was used to explain them in the context of major audit issues. Based on the average evaluation of the first and second phases of Delphi, it was determined that all dimensions were approved, and in this way, the possibility of measuring them through interpretive structural analysis was provided. Therefore, based on the fourth research question, an attempt was made to identify the most influential themes of the major audit issues model. In analyzing the results obtained, it should be stated that, as indicated in the model, the supervisory structures variable (B) was the most influential theme of the major audit issues model. The network of themes identified in the present study shows that the model for determining and identifying major audit issues has a hierarchical and multi-level structure. At the macro level, four overarching themes were identified as the main pillars of the model, which are: (1) regulatory frameworks and professional requirements that reflect the role of the legal environment and professional standards, (2) institutional and environmental structures that reflect the impact of the socio-economic context, (3) specific client characteristics that relate to the nature of the entity under review, and (4) the auditor's personal and professional frameworks that include the personal and organizational characteristics of auditors. These main themes are divided into eight organizing themes at the intermediate level, including the ethical requirements and accountability of auditors, the role of regulatory structures, the impact of the economic environment, the financial and governance characteristics of the client, and the professional characteristics of auditors. At the lowest level, there are 55 basic themes that specify the details and objective indicators of each of the dimensions of the model. This

hierarchical structure clearly shows that major auditing issues are a complex and multidimensional phenomenon that is shaped by the interaction of environmental (macro), organizational (meso), and individual (micro) factors, and for its comprehensive understanding, all these levels must be considered systematically. Each of these themes is then explained in depth and in a scholarly manner to clearly explain their role in shaping major audit issues. The first overarching theme, regulatory frameworks and professional requirements, serves as the cornerstone of the audit system. Regulatory structures, by establishing legal frameworks and professional standards, drive auditors towards greater transparency and accuracy. These structures not only influence auditor behavior, but also reduce the risks associated with financial misstatements by establishing oversight mechanisms. Ethical requirements, as one of the pillars of this theme, require auditors to always adhere to professional principles and work conscience when faced with complex financial issues. This theme shows that without strong regulatory frameworks and ethical requirements, it will not be possible to effectively identify and disclose major audit issues. The second overarching theme is that institutional and environmental structures, as external factors, have a significant impact on audit processes. Institutional structures, including local and international laws, play a key role in shaping audit practices. These structures not only influence auditor behavior, but also help reduce financial risks and increase transparency by establishing oversight mechanisms. On the other hand, the economic environment, as an external factor, also has a significant impact on audit processes. Economic fluctuations, recessions, inflation, and financial crises can all affect the accuracy and quality of audit reports. This theme shows that institutional structures and the economic environment, as key factors, play a decisive role in identifying and managing major audit issues. The third overarching theme is that client-specific characteristics, as an internal factor, have a significant impact on audit processes. The client's financial characteristics, such as company size, profitability, and leverage, have a direct impact on the number and type of major issues identified by auditors. Larger, more leveraged companies typically face more complex issues that require more detailed investigation. On the other hand, the client's governance and management characteristics, such as management quality and board structure, also play an important role in improving the interactions between auditors and the client. This theme shows that client characteristics, as one of the internal factors, have a significant impact on audit processes and the identification of major issues. The fourth overarching theme, the auditor's personal and professional frameworks, as one of the main pillars of the audit system, play a decisive role in identifying and disclosing major issues. The personal characteristics of auditors, such as experience, expertise, and technical knowledge, have a direct impact on the accuracy and quality of audit processes. Auditors with more experience and expertise are usually better able to identify complex financial issues. On the other hand, professional and organizational characteristics of auditors, such as the size of the audit firm and quality control systems, also play an important role in improving audit processes. This theme shows that auditors, as the main actors in the audit process, have a decisive role in identifying and disclosing major issues.

As the most influential factor in disclosing major audit issues, oversight structures play a pivotal and decisive role in shaping auditor behavior and improving the quality of audit processes. By establishing legal frameworks and professional standards, these structures push auditors towards greater transparency, accuracy, and accountability. Through oversight requirements, auditors are required to always adhere to professional principles when dealing with complex financial issues and to prevent any conflict of interest or misuse of financial resources. By setting detailed policies and guidelines, oversight structures help auditors systematically identify and manage risks associated with financial misstatements. These structures not only influence auditor behavior, but also help reduce errors and increase public confidence in audit reports by establishing strong oversight mechanisms, such as periodic inspections and transparent reporting. In addition, by creating an accountable and transparent environment, oversight structures encourage auditors to fully and accurately disclose major audit matters, even if these matters directly negatively affect the client's interests. By reducing management pressures and increasing auditors' independence, these mechanisms allow them to identify and report complex financial matters without fear of consequences. By establishing international and local standards, oversight structures also help to harmonize audit processes globally, thereby increasing the quality and comparability of audit reports. By setting precise criteria for identifying and disclosing major matters, these standards help auditors to analyze and report financial matters in a systematic and evidence-based manner. Finally, oversight structures help to reduce the risks associated with corruption and fraud by establishing continuous and accurate oversight mechanisms, and in this way, play a key role in improving the quality and accuracy of audit processes. Together, these factors identify supervisory structures as the most influential factor in the disclosure of major audit matters. The results of this study are consistent with previous findings in the area of disclosure of major audit matters and, at the same time, go a step further by providing a comprehensive model. For example, in line with Camacho-Minano [6], it is shown that financial crisis conditions lead auditors to disclose more major matters. Also, in line with Cameran and Campa [7], and Özcan [23], it is confirmed that larger audit firms and highly leveraged companies are more likely to disclose major matters. This study is also in line with Ferreir & Morais [11] and Shao [25], who emphasized the role of auditor and client characteristics in the disclosure of major matters. Furthermore, consistent with Elshafie [10], it is shown that poor financial reporting quality and financial statement

restatements increase auditors' motivation to disclose material issues. Finally, consistent with Lynch et al. [20], it confirms that auditors are more inclined to disclose material issues when faced with companies with tax problems. This research provides a novel framework by integrating regulatory, institutional, individual, and environmental factors and highlights the key role of regulatory structures as the most influential factor in this process.

Given the importance of the obtained result for standard setters, it is suggested that, given the key role of supervisory structures in identifying and disclosing major audit issues, new standards be developed that emphasize transparency, accuracy, and accountability of auditors. These standards should include detailed guidelines for identifying major issues, especially in companies with high financial risk. It is also suggested that continuous monitoring mechanisms and periodic inspections be strengthened to improve the quality of audit reports. For audit firms, it is suggested that they invest in specialized training and update quality control systems to increase the ability of auditors to identify and disclose major issues. Firms should focus in particular on the experience and expertise of auditors in specific industries so that they can identify complex financial issues more accurately. For auditors, it is suggested that they always adhere to ethical and professional principles and act with accuracy and transparency when faced with complex financial issues. Auditors should avoid conflicts of interest and engage constructively with the client's governance bodies to effectively identify and disclose significant issues. For future research, it is suggested that more research be conducted on the impact of new technologies, such as artificial intelligence and big data analytics, on the identification and disclosure of significant audit issues. Also, examining the impact of organizational culture and ethical values on auditor behavior can help to better understand the factors affecting the quality of audit reports. In addition, it is suggested that research be conducted on the impact of environmental changes, such as global crises and economic developments, on audit processes. This research can help to develop new standards and improve audit processes. Finally, it is suggested that studies be conducted on the role of international interactions and the coordination of auditing standards at the global level to achieve a unified framework for identifying and disclosing significant audit issues. In this study, as in any qualitative study, the following limitations can be presented:

- The most important limitation of qualitative research, especially interview-based research, is the impossibility of long-term sustainability of the identified dimensions and their generalization to all study contexts. Because the breadth of the dimensions examined in the field of auditing profession is probably not discoverable by conducting several interviews, and the identified dimensions can be explored relatively.
- Although this study relied on a deductive/inductive cycle to theorize and develop a model of major auditing issues, the inductive nature of its methodology imposes limitations on the statistical generalizability of its results.
- This study generalizes a set of specific results to a number of broader theories (and not to broader conditions and situations). Therefore, the statistical generalizability of its results faces significant limitations.

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