

Developing a Proposed Model of Professional Judgment among Tax Auditors in Iran

Saeed Akbari¹, Rezvan Hejazi^{2,*} and Iraj Noravesh³



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¹ Ph.D. Student, Department of Accounting, Kish International Campus, University of Tehran, Tehran, Iran; 

² Professor, Department of Accounting and Auditing, Faculty of Management and Financial Sciences, Khatam University, Tehran, Iran; 

³ Professor, Department of Accounting, Faculty of Management and Accounting, University of Tehran, Tehran, Iran; 

* Correspondence: Hejazi33@gmail.com

Abstract: The objective of this study was to develop a model of professional judgment among tax auditors in Iran. The study was applied in terms of purpose and qualitative in nature and was conducted using a systematic grounded theory approach. Data were collected through semi-structured interviews with 13 tax auditors, managers, tax adjudication experts, tax consultants, and academics and were analyzed through open, axial, and selective coding. Purposive, snowball, and theoretical sampling continued until theoretical saturation was achieved. Data analysis resulted in the extraction of 108 open codes, 18 conceptual clusters, and 16 axial categories. The core category was identified as “institutionalizing accountable professional judgment to transform law and evidence into fair and defensible tax assessments.” The findings indicated that auditor competencies and case characteristics shape both the capacity for and necessity of professional judgment, while legal, organizational, technological, and professional conditions, along with cognitive biases, influence its exercise. Decision structuring, multisource evidence evaluation, documentation, consultation, independent review, and technology governance enhance accuracy, defensibility, fairness, and trust in the tax system.

Keywords: professional judgment, tax auditing, grounded theory, accountability, tax fairness, technology governance.

1. Introduction

Professional judgment is one of the most fundamental cognitive and professional processes in auditing because auditors frequently operate in circumstances in which laws, standards, documentary evidence, organizational expectations, and the economic substance of transactions do not lead automatically to a single unequivocal conclusion. In such settings, professional judgment represents the process through which an auditor integrates technical knowledge, accumulated experience, evidential information, legal and regulatory requirements, and professional reasoning to arrive at a decision that can be justified and defended. The importance of this process becomes particularly pronounced in tax auditing, where the auditor is required not only to evaluate accounting records and financial information but also to interpret tax legislation, assess the substance of transactions, determine the credibility and sufficiency of evidence, and reconcile potentially conflicting information. Professional judgment therefore extends beyond the mechanical application of tax rules and encompasses a structured process

of analysis, interpretation, evaluation, and decision-making. Within auditing scholarship, professional judgment has long been understood as a multidimensional construct influenced by characteristics of the decision maker, the nature of the task, and the surrounding environment [1]. Theoretical discussions have similarly emphasized that judgment in auditing involves cognitive processes through which professional knowledge and evidence are transformed into decisions under conditions of uncertainty and incomplete information [2]. Consequently, understanding the determinants and mechanisms of professional judgment is critical for improving audit quality, strengthening accountability, and reducing unjustified variation across auditors and cases.

The significance of professional judgment is even greater in tax auditing because tax decisions have immediate financial, legal, organizational, and social consequences. A tax auditor may be required to determine whether an expense is deductible, whether a transaction has genuine economic substance, whether the taxpayer's records are reliable, whether third-party information overrides the taxpayer's documentation, or whether a particular statutory provision applies to a complex transaction. These decisions can rarely be reduced to simple computational procedures, particularly when evidence is incomplete or inconsistent, when legislation permits multiple interpretations, or when transactions involve new business models and technological arrangements. Tax auditors must therefore move between technical accounting knowledge and legal interpretation while maintaining professional skepticism and awareness of the rights of taxpayers and the fiscal interests of the government. Research conducted in the Iranian context has already demonstrated that professional judgment among auditors is shaped by interacting individual, professional, and environmental dimensions, indicating that high-quality judgment cannot be explained solely by technical expertise [3]. More specifically, research on Iranian tax auditors has shown that professional judgment can be influenced by cognitive and contextual biases, emphasizing that judgment outcomes may diverge even when auditors are exposed to broadly similar evidence [4]. These findings underline the need to conceptualize professional judgment in tax auditing as an integrated system rather than a single personal attribute.

One of the principal foundations of sound professional judgment is specialized knowledge. The ability to identify the relevant tax issue, recognize evidential inconsistencies, distinguish accounting form from economic substance, and apply legal requirements appropriately depends on the auditor's command of taxation, accounting, auditing, and the taxpayer's business environment. Evidence from audit research indicates that task-specific knowledge can materially improve audit quality because specialists are better able to identify relevant risks, evaluate complex evidence, and apply professional expertise to domain-specific problems [5]. In the context of tax auditing, this implies that general auditing competence may not be sufficient when the auditor must evaluate specialized tax accounts, statutory provisions, or industry-specific transactions. Experience is likewise an important source of judgment capability. Repeated exposure to tax cases may enable auditors to develop tacit knowledge regarding common patterns of noncompliance, evidential weaknesses, recurring disputes, and the practical consequences of different interpretations. Recent evidence from tax administration suggests that audit quality in an increasingly digital environment is associated with both experience and technology readiness, demonstrating that professional expertise and technological capability are becoming increasingly interdependent [6]. Thus, contemporary tax auditors require both traditional professional competence and the capacity to operate effectively within data-intensive administrative systems.

Professional skepticism constitutes another central element of professional judgment. Skepticism requires auditors to maintain a questioning mindset, critically assess the reliability of evidence, remain alert to inconsistencies, and avoid accepting management or taxpayer explanations without sufficient corroboration. The

contemporary auditing environment has reinforced the importance of skepticism as a mechanism for ensuring that professional judgment remains evidence-based rather than becoming routine, confirmatory, or overly dependent on prior assumptions. International auditing standard-setting has increasingly emphasized that professional skepticism should be embedded throughout the auditor's evaluation of evidence, particularly where fraud risk, uncertainty, or management representations are involved [7]. Empirical research also indicates that skeptical action is not determined by personal disposition alone; rather, it emerges from the interaction between auditor characteristics, engagement circumstances, evidential cues, and organizational factors [8]. Within tax auditing, skepticism may be especially important because taxpayers and their representatives may possess information unavailable to the auditor, documents may be incomplete or strategically presented, and the auditor may need to reconcile competing explanations of the same transaction.

At the same time, professional skepticism itself is vulnerable to psychological pressures. Cognitive dissonance may arise when newly obtained evidence conflicts with an auditor's initial expectations or previously formed conclusions. Under such circumstances, auditors may consciously or unconsciously reinterpret evidence in ways that preserve their original position. Research has shown that cognitive dissonance can affect the exercise of professional skepticism, illustrating that professional judgment is not immune to psychological mechanisms even among trained auditors [9]. Similar concerns arise from dual-process theories of cognition, which distinguish relatively rapid, intuitive processing from slower, more analytical reasoning. Human decision makers routinely rely on both forms of cognition, and the interaction between them can produce efficient decisions but can also generate systematic biases under conditions of complexity, uncertainty, or time pressure [10]. Tax auditors, who often face substantial caseloads, deadlines, ambiguous laws, and large volumes of information, may therefore be especially susceptible to anchoring, confirmation bias, availability effects, overconfidence, or defensive judgment.

A substantial body of auditing research has documented judgment biases and examined their persistence across different technological and organizational contexts. A long-term review of auditor judgment research demonstrates that biases have remained a central concern in auditing for decades, while emerging technologies have introduced new forms of interaction between human cognition and information systems [11]. Evidence framing is one mechanism through which judgment may be influenced. The manner in which audit evidence is presented, organized, or characterized can affect how auditors interpret and weight information, even when the underlying evidence is substantively similar [12]. Prior information can also shape later judgments. Behavioral evidence indicates that previously encountered audit-report information may influence subsequent financial decision-making, highlighting the potential for anchoring and path dependence in professional evaluations [13]. These findings are particularly relevant for tax auditing, where auditors may inherit earlier assessments, review historical taxpayer records, or receive system-generated risk indicators before independently evaluating the current case.

Strategies that deliberately encourage consideration of alternative explanations may help counteract these cognitive vulnerabilities. Experimental evidence suggests that prompting auditors to think about alternative explanations can strengthen professional skepticism by reducing premature closure and encouraging a broader evaluation of evidence [14]. Such findings have direct implications for the structure of tax-audit judgment. A judgment process that requires explicit definition of the tax issue, separation of facts from interpretations, identification of applicable legal criteria, development of competing hypotheses, and evaluation of both supporting and contradictory evidence may be less vulnerable to intuitive or confirmatory errors. Similarly, requirements to document the reasoning pathway can make judgments more transparent and reviewable because the auditor must demonstrate how evidence, legal provisions, and the final tax adjustment are connected. In this sense,

documentation should not be viewed merely as an administrative requirement but as a cognitive and governance mechanism that strengthens accountability.

The interaction between professional judgment and indicators of taxpayer misconduct is also important. Research involving tax officers has found that skepticism is related to professional judgment and that the intensity of fraud indicators can influence this relationship [15]. This suggests that tax auditors' decisions are partly shaped by how strongly case information signals potential misstatement, concealment, or noncompliance. However, strong fraud cues can have a dual effect. On the one hand, they may appropriately increase professional skepticism and motivate additional verification. On the other hand, they may create an initial presumption of wrongdoing and thereby intensify confirmation bias if the auditor subsequently searches only for evidence that supports the initial suspicion. Accordingly, high-quality tax judgment requires a balance between alertness to fraud risk and procedural safeguards that ensure contradictory evidence and taxpayer explanations are genuinely considered.

The digital transformation of tax administration has added another layer of complexity to professional judgment. Integrated tax systems, third-party databases, electronic invoices, automated risk scoring, data analytics, and artificial intelligence can substantially expand the amount of information available to auditors. These technologies may improve targeting, identify anomalies, reduce manual processing, and support more consistent audit procedures. International guidance on tax audit administration emphasizes the importance of structured audit programs, risk-based case selection, evidence management, governance, and systematic audit processes for strengthening tax administration effectiveness [16]. However, greater access to digital information does not eliminate the need for professional judgment. Rather, it changes the information environment within which judgment occurs. Auditors must assess data quality, understand the origin and limitations of system alerts, determine whether automated indicators are relevant to the legal issue under review, and retain responsibility for the final conclusion.

The experience of technology-mediated and remote auditing further illustrates the dependence of audit quality on information infrastructure. Evidence regarding audits conducted during the pandemic shows that IT infrastructure played an important role in supporting remote audit processes and shaping auditors' ability to obtain and evaluate evidence [17]. More broadly, research on auditor judgment in the digital era indicates that decision outcomes may be affected by the auditor's mindset, the medium through which information is accessed, and the mode through which auditing activities are performed [18]. These developments create new opportunities but also new risks, including automation bias, excessive reliance on system-generated signals, reduced attention to contextual information, and diminished willingness to challenge algorithmic recommendations. Consequently, technology governance must become part of the professional judgment framework. Human validation of system outputs, explainability of alerts, electronic decision trails, periodic system validation, data-quality controls, and appropriate access governance are increasingly necessary to ensure that technological tools enhance rather than displace professional reasoning.

Professional judgment is also embedded within organizational structures. Auditors do not make decisions in isolation; their behavior is influenced by performance evaluation systems, workload, hierarchical relationships, supervisory expectations, access to specialists, review procedures, and institutional incentives. In tax organizations, these factors may become particularly consequential when performance is evaluated through assessment amounts or collection outcomes. Such arrangements can create tension between revenue-generation objectives and the expectation that tax liabilities should be determined objectively and proportionately to the evidence. The professional judgment literature consistently emphasizes the importance of the environment in addition to

individual and task characteristics [1]. Organizational pressures may alter the depth of evidence search, willingness to consult others, extent of documentation, and readiness to revise an initial position. A robust professional judgment system therefore requires governance mechanisms that support professional independence, encourage consultation in complex cases, institutionalize second-level review, and reduce the likelihood that performance pressures become substitutes for evidential reasoning.

The Iranian tax environment provides a particularly relevant setting for examining these interactions. Tax auditors operate within a legal and administrative context characterized by extensive statutory provisions, executive regulations, circulars, judicial and quasi-judicial interpretations, and continuing developments in electronic taxation. These conditions can widen the scope for judgment, especially where legal provisions are ambiguous, implementation guidance changes over time, or different authorities adopt divergent interpretations. Iranian research has specifically attempted to develop models of professional judgment for tax auditors and has identified multiple interacting determinants, demonstrating that tax judgment is shaped by knowledge, experience, behavioral characteristics, organizational conditions, and characteristics of tax cases [19]. Earlier research on independent auditors in Iran likewise showed that professional judgment emerges from a network of professional, individual, environmental, and task-related components rather than from a single competency [3]. Nevertheless, the continuing digitalization of tax administration, growing use of electronic taxpayer information, and emergence of data-driven auditing require a more updated framework that simultaneously incorporates technological governance, cognitive biases, organizational pressures, evidential structures, legal conditions, and accountability mechanisms.

The need for such a framework is reinforced by the distinction between professional judgment and personal discretion. Legitimate professional judgment should be grounded in relevant law, sufficient and appropriate evidence, transparent reasoning, and reviewable documentation. Personal discretion, by contrast, may reflect individual preference, unexamined assumptions, organizational pressure, or inconsistent treatment of similar cases. The legitimacy of tax administration depends substantially on limiting arbitrary variation while retaining sufficient professional flexibility to address complex and heterogeneous transactions. The purpose of a judgment framework should therefore not be to eliminate auditor discretion but to structure it. Professional judgment must be sufficiently flexible to accommodate unusual circumstances while remaining sufficiently disciplined to support consistency, accountability, and taxpayer rights. Qualitative inquiry is especially useful for identifying these processes because it allows researchers to examine how experienced practitioners interpret complex situations, describe tacit knowledge, explain organizational constraints, and articulate mechanisms that are difficult to capture through predetermined quantitative measures. Qualitative research emphasizes information-rich cases and iterative engagement with participants as an appropriate means of developing contextually grounded conceptual explanations [20].

From a broader theoretical perspective, professional judgment in tax auditing can therefore be conceptualized as an outcome of interactions among the person, the task, the organizational and legal environment, and the technological infrastructure. Individual capabilities include technical knowledge, professional experience, critical thinking, skepticism, ethical orientation, and independence of judgment. Task characteristics include transaction complexity, evidence completeness, conflicting information, materiality, and taxpayer cooperation. Contextual influences include regulatory ambiguity, organizational governance, workload, performance incentives, access to consultation, and information systems. Intervening cognitive mechanisms can either support or undermine judgment, while strategies such as structured reasoning, multisource evidence evaluation, consideration of

alternatives, documentation, consultation, independent review, and technology governance may convert individual competence into accountable organizational practice. Existing research offers evidence for many of these elements separately, but the continuing challenge is to integrate them into a coherent explanatory model tailored to tax auditing. Such integration is important because reforms focused on only one component—for example, auditor training, automation, or additional regulation—may have limited effectiveness if the broader network of organizational, cognitive, evidential, and technological conditions is ignored.

Accordingly, developing a grounded model of professional judgment can contribute both theoretically and practically. Theoretically, it can clarify how causal, contextual, and intervening conditions interact with professional strategies to produce different judgment outcomes. Practically, it can provide a foundation for auditor training, performance evaluation, case-review systems, technology governance, knowledge management, and the design of instruments for subsequent empirical validation. Such a model may also help explain why technically knowledgeable auditors can reach different conclusions, why digital systems sometimes improve consistency while at other times generate automation dependence, and why organizational incentives can either support or undermine professional independence. By conceptualizing professional judgment as an accountable, evidence-based, law-based, and reviewable process, the model can shift attention away from judgment as an opaque individual ability toward judgment as an institutional capability that can be developed, monitored, supported, and improved.

Therefore, the aim of this study was to develop a grounded theory model of professional judgment among tax auditors in Iran by identifying its causal and contextual conditions, intervening factors, strategies, and consequences.

2. Methods and Materials

The present study was applied in terms of purpose and qualitative in nature and was conducted using the systematic grounded theory strategy. This strategy was selected because the professional judgment of tax auditors is a multidimensional phenomenon dependent on experience, legal requirements, case characteristics, organizational structures, and the technological environment, and its dimensions therefore need to be derived from the perspectives of professional actors. The participant population consisted of tax auditors and senior tax auditors, managers and experts working in tax audit and tax adjudication units, certified tax consultants, and faculty members familiar with auditing and tax law. Participants were initially selected through purposive sampling and subsequently through snowball sampling. As the categories emerged, theoretical sampling continued to complete the properties and conceptual relationships of the categories. The inclusion criteria comprised relevant professional experience, adequate command of tax laws and regulations, prior involvement in cases requiring professional judgment, and the ability to articulate professional experiences. Data were collected through in-depth, semi-structured interviews with 13 experts. The interview guide included open-ended questions concerning the factors shaping judgment, the process of evaluating evidence, legal and organizational conditions, pressures and biases, strategies for enhancing judgment, and the consequences of tax decisions. The interviews were conducted both face-to-face and online and, with the informed consent of participants, were recorded and transcribed verbatim. Data collection and analysis proceeded concurrently, and theoretical saturation was established in the thirteenth interview. Saturation was considered achieved when new interviews no longer generated new codes, categories, or conceptual relationships and primarily confirmed or elaborated on previous findings. This procedure was

consistent with the logic of theoretical sampling and informational adequacy in qualitative research (Corbin & Strauss, 2008; Patton, 2015).

Data analysis was conducted according to the systematic model of Strauss and Corbin through three stages of open, axial, and selective coding. Each interview transcript was read several times and segmented into meaningful statements. During open coding, preliminary concepts were extracted while maintaining close correspondence with participants' expressions. Repetitive or synonymous codes were subsequently merged through constant comparison, and the conceptual boundaries among closely related codes were specified. During axial coding, related codes were organized into concepts, subcategories, and major categories, and their relationships were examined in terms of causal conditions, the central phenomenon, contextual conditions, intervening conditions, strategies, and consequences. During selective coding, the major categories were integrated around the core category, and the theoretical narrative of the study was developed. MAXQDA software was used to organize, retrieve, and compare the data. Throughout all analytical stages, the constant comparative method, analytic memo writing, repeated reference to interview transcripts, and examination of cases that differed from the dominant pattern were employed. To enhance the credibility of the findings, the face validity of the interview guide was reviewed by experts, and a pilot interview, member checking, peer review, and independent coding of a portion of the interviews were employed. Coding disagreements were resolved by returning to the interview texts and conducting analytic discussion. Confirmability was ensured by retaining the interview guide, interview transcripts, initial codes, analytic memos, and the rationale underlying the merging or separation of codes. Participant diversity and transparent reporting of the selection criteria and analytical procedures also enhanced the transferability of the findings. Ethical principles, including voluntary participation, informed consent, confidentiality of information, removal of identifying information, and assignment of codes to interviewees throughout the study, were observed.

3. Findings and Results

To assess the scientific, professional, and organizational diversity of the qualitative sample, the demographic and professional characteristics of the 13 interviewed experts were examined. The participants included tax auditors, managers and experts in tax audit and adjudication, certified tax consultants, and relevant academics. They were selected initially through purposive sampling and subsequently through snowball sampling, while theoretical sampling continued until saturation was reached. Of the participants, 10 were men and 3 were women, representing 76.9% and 23.1% of the sample, respectively. In terms of age, one participant was aged 35 years or younger, seven were between 36 and 45 years of age, and five were older than 45 years. Thus, 92.3% of the participants were older than 35 years. Regarding educational attainment, one participant held a bachelor's degree, eight held master's degrees, and four held doctoral degrees, meaning that 92.3% of the participants had postgraduate education. Furthermore, nine had studied accounting, two had studied financial management, and two had studied law or tax law. This composition enabled examination of the accounting, financial, managerial, and legal dimensions of professional judgment. In terms of total work experience, one participant had fewer than 10 years, seven had between 10 and 20 years, and five had more than 20 years of experience. In addition, two participants had fewer than 10 years, four had between 10 and 15 years, and seven had more than 15 years of specialized experience in taxation. Accordingly, 84.6% of the participants had at least 10 years of specialized experience in tax auditing, examination, consulting, or adjudication. The predominance of experienced and highly educated participants ensured that the data were grounded in encounters with complex cases, regulatory ambiguity, conflicting evidence, organizational pressures, cognitive biases, and interactions with taxpayers.

Overall, the participants' diversity in age, education, specialization, and organizational affiliation enabled the inclusion of operational, legal, managerial, supervisory, and academic perspectives and provided an appropriate foundation for conceptual richness, trustworthiness of the findings, extraction of codes, and development of the study's paradigmatic model. The results are presented in Table 1.

Table 1. Demographic Characteristics of the Interviewees

Characteristic	Criterion	Frequency	Percentage
Gender	Male	10	76.9
	Female	3	23.1
Total		13	100
Age	35 years or younger	1	7.7
	36–45 years	7	53.8
	Older than 45 years	5	38.5
Total		13	100
Educational degree	Bachelor's degree	1	7.7
	Master's degree	8	61.5
	Doctoral degree	4	30.8
Total		13	100
Field of study	Accounting	9	69.2
	Financial management	2	15.4
	Law or tax law	2	15.4
Total		13	100
Type of employing organization	Iranian National Tax Administration	7	53.8
	Iranian Association of Certified Tax Consultants or tax service firms	3	23.1
	University	2	15.4
	Combined organizational affiliation	1	7.7
Total		13	100
Work experience	Fewer than 10 years	1	7.7
	10–20 years	7	53.8
	More than 20 years	5	38.5
Total		13	100
Specialized experience in taxation	Fewer than 10 years	2	15.4
	10–15 years	4	30.8
	More than 15 years	7	53.8
Total		13	100
Interview mode	Face-to-face	10	76.9
	Online	3	23.1
Total		13	100
Interview duration	20 minutes or less	2	15.4
	21–30 minutes	8	61.5
	More than 30 minutes	3	23.1
Total		13	100

The results presented in Table 2 indicate that the validity of the qualitative findings and the instrument derived from them was examined through a set of complementary procedures. At the first stage, expert evaluation and pilot implementation of the interview guide resulted in modification of the sequence of questions, simplification of ambiguous wording, removal of inappropriate overlap, and addition of probing questions. Concurrent data collection and analysis, constant comparison across interviews, requests for real-world examples, and the use of direct quotations also made the relationship between the raw data and final categories traceable. Theoretical

saturation was established in the thirteenth interview because the final data did not generate new concepts or relationships and primarily confirmed previously developed categories. To assess coding stability, three interviews representing diverse organizational affiliations were selected, and 75 meaning units were independently examined by two coders. Agreement was obtained on 68 units, producing a Holsti coefficient of 90.7%. This value exceeded both the minimum acceptable threshold of 70% and the desirable level of 80%, thereby supporting the clarity of code definitions and reproducibility of the analysis. The seven observed disagreements were resolved by referring back to the complete interview transcripts, examining the context of the responses, and comparing them with the operational definitions of the codes. Member checking, peer review, and maintenance of an audit trail reduced the likelihood of dominance by the researcher's personal interpretations and enhanced the confirmability of the findings. Participants' feedback contributed to refining the boundaries between causal and contextual conditions, distinguishing organizational pressures from individual biases, and clarifying the distinction between professional judgment and discretionary decision-making. These revisions also enhanced the conceptual coherence of the paradigmatic model. Reporting expert characteristics and the legal and organizational context of the study made it possible to evaluate the transferability of the results. For assessment of the content validity ratio, 13 experts evaluated the necessity of each concept. The minimum acceptable CVR was set at 0.54, and acceptance of each concept required at least 10 "essential" ratings. Concepts falling below this threshold were not mechanically eliminated; instead, they were reviewed against the interview evidence and subsequently revised, merged, or removed. In evaluating the content validity index, the relevance, clarity, and simplicity of the items were also assessed. Items with an I-CVI of 0.79 or higher were accepted, whereas lower values were subjected to revision. Following revisions, the I-CVI values of the final items ranged from 0.85 to 1.00. The mean indices were 0.93 for relevance, 0.92 for clarity, and 0.91 for simplicity. The S-CVI/Ave was 0.93, exceeding the desirable benchmark of 0.90. Overall, the convergence of qualitative evidence and numerical indicators demonstrated that the final concepts and items possessed satisfactory credibility, dependability, confirmability, transferability, and content validity and could therefore provide a reliable foundation for questionnaire development and validation of the professional judgment model for tax auditors.

Table 2. Summary of the Evaluation of Validity, Reliability, and Trustworthiness of the Qualitative Findings

Evaluation Dimension	Implementation Procedure	Evaluation and Acceptance Criterion	Result
Face and content validity of the interview guide	Review of questions by faculty members and experts and implementation of a pilot interview	Clarity, relevance, logical sequence, comprehensiveness, absence of overlap, and capacity to elicit in-depth responses	The sequence of questions was revised, ambiguous wording was simplified, and probing questions were added.
Credibility and data adequacy	Concurrent data collection and analysis, constant comparison, probing questions, and use of direct quotations	Continuation of interviews until no new code, category, or relationship emerged	Theoretical saturation was established in the thirteenth interview.
Intercoder reliability	Independent coding by two coders of three interviews containing 75 meaning units	Minimum agreement of 70% and desirable level above 80%	A total of 68 agreements and 7 disagreements were recorded. The Holsti coefficient was 90.7%.
Review and confirmability	Member checking, peer review, and maintenance of an audit trail	Consistency of interpretations with experts' experiences and traceability of the analytical process	Category boundaries were refined, and the confirmability and conceptual coherence of the findings were enhanced.
Transferability	Reporting expert characteristics, selection criteria, research context, and analytical procedures	Provision of sufficient description of the legal, organizational, and professional environment of the study	The information required to judge applicability of the findings to

			comparable settings was provided.
Content validity ratio	Evaluation of the necessity of concepts by 13 experts at three levels	Minimum CVR of 0.54 and at least 10 “essential” ratings	Accepted concepts were retained. Concepts below the acceptance threshold were revised, merged, or removed.
Item content validity index	Evaluation of item relevance, clarity, and simplicity by 13 experts using a four-point scale	Acceptance at 0.79 or above, revision between 0.70 and 0.79, and elimination or rewriting below 0.70	Final I-CVI values ranged from 0.85 to 1.00. Mean relevance was 0.93, clarity 0.92, and simplicity 0.91.
Overall content validity of the instrument	Calculation of the average item-level content validity index	Desirable S-CVI/Ave of 0.90 or higher	The S-CVI/Ave was 0.93, confirming the overall content validity of the instrument.

The grounded theory findings were derived from analysis of semi-structured interviews with 13 experts in tax auditing. The data were analyzed in accordance with the systematic Strauss and Corbin approach, using constant comparison across three stages of open, axial, and selective coding. During open coding, meaningful statements and preliminary codes were extracted. During axial coding, similar codes were organized into concepts, subcategories, and major categories, and the relationships among them were identified according to causal conditions, the central phenomenon, contextual conditions, intervening factors, strategies, and consequences. During selective coding, the categories were integrated around the professional judgment of tax auditors. The findings emphasized the roles of individual competencies, knowledge, experience, ethics, evidence quality, the legal and organizational environment, technology, collection pressures, time constraints, and cognitive biases. Case-based training, multisource evidence, consultation, review, and documentation emerged as effective strategies, while the consequences included enhanced quality and defensibility of tax assessments, improved tax fairness, fewer disputes, stronger compliance, and balanced protection of the rights of both the government and taxpayers.

Table 3. Open Codes and Conceptual Clusters Extracted from the Interviews

No.	Preliminary Position in the Paradigmatic Model	Initial Conceptual Cluster	Refined Open Codes
1	Central phenomenon	Reasoned, law-based, and reviewable professional judgment	Clear definition of the tax issue; integration of knowledge and experience with evidence; reasoned interpretation of legal provisions; examination of decision alternatives; conclusions proportionate to the evidence; documentation and reviewability of judgment
2	Causal conditions	Specialized tax and accounting knowledge	Mastery of the Direct Taxation Act; mastery of the Value Added Tax Act; knowledge of the Point-of-Sale Terminals and Taxpayer System Act; mastery of accounting standards; understanding of auditing principles and evidence evaluation; knowledge of the taxpayer's industry and business model
3	Causal conditions	Professional experience and learning	Experience with similar cases; experience across different industries; experience in tax adjudication and defense; learning from overturned assessments; development of tacit tax knowledge; continuous updating of professional knowledge
4	Causal conditions	Cognitive and analytical abilities	Critical thinking; professional skepticism; identification of tax issues; analysis of financial and nonfinancial information; resolution of conflicting evidence; decision-making under ambiguity
5	Causal conditions	Behavioral and ethical characteristics	Honesty and integrity; objectivity in examination; independence of judgment; professional accountability; confidentiality of information; respect for taxpayers' legal rights
6	Causal conditions	Case characteristics and quality of evidence	Complexity of the transaction; completeness of books and documentation; reliability of third-party information; existence of conflicting evidence; materiality and risk of the tax issue; degree of taxpayer cooperation and access to information

7	Contextual conditions	Legal and regulatory environment	Ambiguity and interpretability of laws; continuous regulatory changes; multiplicity of circulars and directives; conflicts among legal provisions and practices; instability in legal interpretations; influence of rulings by the Supreme Tax Council and the Administrative Justice Court
8	Contextual conditions	Organizational structure and governance system	Performance evaluation based on assessment or collection amounts; hierarchical supervision; case allocation procedures; access to specialists; quality of case review; organizational support for professional independence
9	Contextual conditions	Information and technological infrastructure	Access to the integrated tax system; use of Taxpayer System data; access to third-party information; data quality and integrity; explainability and traceability of system alerts; use of data analytics and artificial intelligence
10	Intervening factors	Organizational and professional pressures	Audit time pressure; high caseload; pressure to achieve collection targets; preferences of superiors; fear of decision-related responsibility; shortages of resources and training opportunities
11	Intervening factors	Cognitive biases	Anchoring on initial impressions; confirmation bias; availability bias; overconfidence; automation bias; defensive conservatism
12	Intervening factors	Taxpayer interaction and environmental influences	Information asymmetry; delayed submission of documents; ambiguity or inconsistency in taxpayer explanations; adversarial communication with taxpayers; pressure from the taxpayer or the taxpayer's representative; external influence and conflicts of interest
13	Strategies	Structuring the judgment process	Precise definition of the problem; separation of facts from interpretation; determination of the applicable legal criterion; formulation of competing hypotheses; comparison of alternatives and consequences; selection of a conclusion proportionate to the evidence
14	Strategies	Evidence evaluation and documentation	Use of multisource evidence; validation of evidence sources; reconciliation and resolution of data discrepancies; search for contradictory evidence; documentation of taxpayer explanations and defenses; establishment of links between evidence and tax adjustments
15	Strategies	Consultation, review, and learning	Consultation with specialists; second-level case review; group decision-making in complex cases; case-based training; learning from adjudication rulings; development of a tax knowledge and experience repository
16	Strategies	Technology governance and data analytics	Human verification of system outputs; transparency regarding the origin and logic of alerts; data quality control; targeted use of analytical tools; maintenance of an electronic decision trail; periodic system validation and access control
17	Consequences	Technical and legal consequences of tax auditing	Accurate determination of taxable income; consistency of decisions across similar cases; enhanced defensibility in adjudication; reduction in overturned assessments; reduction in discretionary variations; enhanced efficiency and targeting of audits
18	Consequences	Organizational, behavioral, and social consequences	Strengthened tax fairness; increased taxpayer trust; improved voluntary compliance; reduced disputes and adjudication costs; protection of lawful government revenues; balanced protection of taxpayer rights and auditor accountability

During the open coding stage, data obtained from the 13 semi-structured interviews were decomposed, conceptualized, compared, and labeled according to the logic of systematic grounded theory and the Strauss and Corbin approach. The interview transcripts were read several times to identify the logic of the responses and the professional context underlying the participants' perspectives. The texts were then divided into smaller meaning units, and each statement was independently examined in terms of its relationship with the professional judgment of tax auditors. The unit of analysis was the "meaningful statement," and each response could generate several meaning units and several open codes. A label was assigned to each unit that remained close to the participant's expression while also possessing sufficient abstraction for theory development. Coding therefore was not limited to restating the experts' words; the latent meanings of their statements, the conditions under which judgments were formed, reinforcing or constraining factors, strategies, and decision consequences were also examined. The interview guide contained 10 central questions, and the 13 interviews generated a total of 130 primary responses.

Additional follow-up and probing questions were also asked. The codes were refined through four stages: initial recording, merging repetitive and synonymous codes, specifying the conceptual boundaries of related codes, and stabilizing coherent codes relevant to the research problem. The principle of constant comparison was applied throughout the analysis, and each new code was compared with codes from the same interview and other interviews to determine whether it should remain independent, be merged, or be further developed. Frequency was not the sole criterion for retaining codes. Less frequently mentioned concepts with substantial explanatory power, such as automation bias, defensive judgment, stakeholder influence, inconsistency among tax rulings, and unequal access to consultation, were also retained. This process resulted in 108 refined open codes organized into 18 initial conceptual clusters. In the final interviews, most new data confirmed or elaborated on existing concepts, and no entirely new category emerged. This pattern confirmed conceptual adequacy and theoretical saturation.

The examples indicated that variation in outcomes across similar cases resulted from professional experience, interpretations of the law, time pressure, collection targets, anchoring, excessive reliance on system alerts, and inadequate documentation. Expressions referring to predetermined decision-making, searching for confirmatory evidence, and disregarding contradictory evidence were integrated into the code “confirmation bias.” Failure to document the reasons for accepting or rejecting expenses, contradictory evidence, and taxpayer explanations also generated codes related to inadequate documentation, disconnection between evidence and conclusions, personalization of decisions, and reduced defensibility during tax adjudication. In contrast, clear problem definition, determination of legal criteria, balanced evaluation of evidence, consideration of taxpayer explanations, expert consultation, and documentation of the reasoning pathway were identified as characteristics of desirable professional judgment. Mastery of laws, knowledge of accounting standards, experience with similar cases, industry knowledge, data analysis, professional skepticism, independence of judgment, and respect for taxpayer rights constituted auditor competencies. Transaction complexity, incomplete documentation, conflicting information, quality of third-party data, and taxpayer cooperation represented characteristics of cases and evidence. The multiplicity of circulars, regulatory changes, conflicting interpretations, caseload, amount-based performance evaluation, restricted access to consultation, and weaknesses in review procedures constituted the legal and organizational environment. Excessive reliance on systems, poor data quality, lack of traceability of alerts, and inadequate data analytics skills revealed technological dimensions. The strategies included structuring the issue, separating facts from interpretation, using multisource evidence, examining competing hypotheses, documenting taxpayer explanations, consultation, independent review, case-based training, and learning from overturned rulings. The consequences included greater accuracy and consistency of assessments, stronger defensibility of decisions, fewer objections, increased taxpayer trust, and balanced protection of the rights of both the government and taxpayers. The central code at this stage was “reasoned, law-based, evidence-based, and reviewable professional judgment.” This concept regards judgment as a structured process through which auditors distinguish facts from interpretations, evaluate law and evidence, and present documented conclusions. The resulting clustering was preliminary, and the final relationships among the clusters were established during axial coding.

Table 4. Axial Coding Process

Paradigmatic Component	Axial Category	Main Subcategories	Explanation of Relationship With the Central Phenomenon
Central phenomenon	Reasoned, law-based, evidence-based, and reviewable professional judgment	Problem definition, legal interpretation, evidence evaluation, examination of alternatives, conclusion, and documentation	A process through which knowledge, experience, evidence, and legal requirements are transformed into a defensible tax decision.
Causal conditions	Professional competence of the tax auditor	Specialized knowledge, relevant experience, analytical ability, professional skepticism, independence of judgment, and professional ethics	The auditor's level of competence determines the initial capacity to identify the issue, evaluate evidence, and make a decision.
	Case characteristics and quality of evidence	Transaction complexity, completeness of documentation, conflicting evidence, materiality of the issue, taxpayer cooperation, and third-party information	Task complexity and evidence quality determine the extent to which judgment is required and the level of difficulty involved.
Contextual conditions	Legal and regulatory environment	Legal ambiguity, regulatory changes, multiplicity of circulars, conflicting practices, and rulings of tax authorities	The legal environment determines the limits of discretion and the scope available for auditor interpretation.
	Organizational structure and governance system	Performance evaluation criteria, case allocation, hierarchical supervision, access to experts, and quality review	Organizational structures may strengthen or constrain independence, accountability, and the quality of the judgment process.
	Information and technological infrastructure	Taxpayer System, third-party information, data quality, traceability, and analytical tools	Technological infrastructure shapes the scope of available evidence and the quality of case analysis.
Intervening factors	Organizational and professional pressures	Time pressure, caseload, collection targets, superior preferences, fear of responsibility, and resource shortages	Organizational pressures may restrict the scope of examination and direct judgment toward predetermined outcomes.
	Cognitive biases	Anchoring, confirmation bias, availability bias, overconfidence, automation bias, and defensive conservatism	Biases distort how evidence is selected, weighted, and interpreted.
	Taxpayer interaction and environmental influences	Information asymmetry, delayed document submission, adversarial communication, external pressure, and conflicts of interest	The quality of interactions and extent of external influence may alter independence and the adequacy of information used in judgment.
Strategies	Structuring the judgment process	Problem definition, separation of facts from interpretation, determination of legal criteria, competing hypotheses, and consequence evaluation	Structuring transforms professional discretion into an orderly and accountable process.
	Evidence evaluation and documentation	Multisource evidence, validation, discrepancy resolution, contradictory evidence, taxpayer defense, and linking evidence to adjustments	This strategy enhances the reliability and defensibility of the resulting tax assessment.
	Consultation, review, and learning	Expert consultation, second-level review, group decision-making, case-based training, and experience repository	This strategy compensates for limitations in individual knowledge and helps prevent recurrence of judgment errors.
	Technology governance and data analytics	Human validation, data quality control, explainability, electronic audit trail, system validation, and access control	Technology governance enables the use of data without transferring judgment responsibility from the human auditor to the system.
Consequences	Quality and legitimacy of tax decisions	Accuracy of assessment, consistency of practice, defensibility, fewer overturned decisions, and audit efficiency	Implementation of the strategies strengthens the technical and legal robustness of decisions.
	Organizational capability and accountability	Reduced discretionary inconsistency, organizational learning, interunit coordination, retention of experience, and targeted resource allocation	Judgment is transformed from fragmented individual performance into a controllable organizational capability.
	Tax fairness, trust, and compliance	Protection of government and taxpayer rights, fewer disputes, public trust, voluntary compliance, and predictability	High-quality judgment strengthens the legitimacy and effectiveness of the tax system.

Selective coding, as the final stage of grounded theory analysis, was conducted to select the core category and systematically integrate the major and subsidiary categories. At this stage, the researcher moved beyond separate descriptions of the concepts and developed a theoretical narrative explaining why professional judgment emerges, the context in which it occurs, the factors that strengthen or constrain it, the strategies employed by actors, and its consequences. According to the Strauss perspective, the core category should constitute the theoretical focal point of the study, with all other categories deriving meaning through their relationship with it. Accordingly, the raw data, open codes, analytic memos, and relationships derived from axial coding were reviewed again. The core category was selected through constant comparison of the 16 axial categories, renewed examination of the 13 interview transcripts, and evaluation of the explanatory power of each category. The selected category needed to occupy the center of the conceptual network, recur throughout the data, possess an appropriate level of abstraction, connect the components of the paradigmatic model, and retain explanatory power across diverse legal, organizational, and technological conditions. It also needed to be compatible with the study objectives and facilitate the transformation of qualitative findings into measurable components. Competing categories, including professional competence of the auditor, evidence quality, tax fairness, and organizational pressures, each explained part of the phenomenon but were unable to simultaneously encompass its individual, task-related, legal, organizational, cognitive, and technological dimensions. Accordingly, “institutionalizing accountable professional judgment to transform law and evidence into fair and defensible tax assessments” was selected as the core category. Institutionalization refers to transforming structured judgment into a stable practice embedded in examination, training, review, and performance evaluation. Accountability refers to the capacity to explain, review, and revise decisions on the basis of law and evidence rather than unconditional defense of a decision once made.

In the theoretical integration, the causal conditions demonstrated that the auditor’s knowledge-based, experiential, analytical, and ethical competencies generate the initial capacity for judgment, whereas case complexity, incomplete documentation, conflicting information, and materiality of the issue create the need for judgment. Knowledge and experience, without objectivity, integrity, and accountability, may be used to support a biased outcome. Contextual conditions included the legal environment, organizational structure, and information infrastructure. Legal ambiguity, regulatory changes, conflicting circulars, and divergent rulings by tax authorities expand the scope for interpretation. Performance evaluation criteria, case allocation practices, quality of review, and access to specialists also influence decisions. Technology and electronic data broaden the available evidence base; however, data quality, traceability of alerts, and auditors’ competencies determine whether information systems function as tools that strengthen judgment or as sources of error. Intervening factors further explained the gap between professional capacity and actual performance. Time pressure, caseload, collection targets, preferences of superiors, and adversarial interactions with taxpayers can constrain the search for evidence. Anchoring, confirmation bias, overconfidence, and automation bias can also distort interpretation of information. In response, four categories of strategies were identified. First, judgment was structured through problem definition, separation of facts from interpretation, determination of legal criteria, and consideration of competing hypotheses. Second, multisource evidence evaluation, searching for contradictory evidence, documenting taxpayer explanations, and documenting the relationship among evidence, law, and tax adjustments were emphasized. Third, expert consultation, independent review, case-based training, learning from overturned rulings, and development of an experience repository were identified. Fourth, technology governance emphasized data quality control, explainability of alerts, maintenance of electronic audit trails, and preservation of the auditor’s ultimate

responsibility. The combination of these strategies transforms judgment from an individual ability into an organized, trainable, and controllable process.

The consequences were formulated at three levels. At the case level, accountable judgment enhances the accuracy of tax assessments and their defensibility in adjudication. At the organizational level, it reduces discretionary inconsistency and dependence on particular individuals and strengthens learning from errors. At the tax-system level, it contributes to greater fairness, taxpayer trust, and balanced protection of the rights of both the government and taxpayers. A fair assessment does not imply leniency or tax maximization; rather, it refers to determining the legally appropriate amount of tax consistent with economic reality and based on a transparent relationship among evidence, law, and reasoning. The findings demonstrated that auditors' specialized and ethical competencies create the capacity for judgment; however, case complexity, regulatory ambiguity, professional pressures, cognitive biases, and inadequate data can distort the application of that capacity. Decision structuring, balanced evidence evaluation, consultation, review, and technology governance transform this capacity into accountable and defensible tax assessments. The theoretical proposition states that professional judgment results in fair, consistent, and defensible tax assessments when auditor competencies are applied within a law-based and data-enabled environment through structured evidence evaluation, bias control, consultation, documentation, and review. Therefore, tax decisions are not the direct product of auditors' knowledge alone but rather the result of interactions among individual competencies, case characteristics, the legal and organizational context, technology, environmental pressures, and control strategies. The final model explains these relationships and provides a foundation for training, evaluating, and enhancing the professional judgment of tax auditors.

Table 5. Integration of Categories During the Selective Coding Stage

Theoretical Component	Integrated Category	Role in the Theoretical Narrative
Core category	Institutionalizing accountable professional judgment to transform law and evidence into fair and defensible tax assessments	The theoretical focal point of the model linking conditions, strategies, and consequences
Fundamental capacity	Specialized knowledge, relevant experience, analytical capability, professional skepticism, independence of judgment, and professional ethics	Creates the potential ability to define problems, evaluate evidence, and make decisions
Driver of the need for judgment	Transaction complexity, conflicting evidence, incomplete documentation, materiality of the issue, and regulatory ambiguity	Determines the extent to which professional judgment is required and the level of decision difficulty
Context of occurrence	Legal environment, organizational structure, governance system, and information infrastructure	Determines the limits of discretion, information quality, and the feasibility of accountable judgment
Distorting or moderating factors	Time pressure, collection targets, superior preferences, cognitive biases, external influence, and conflicts of interest	Increase or reduce the gap between auditors' professional capacity and their actual performance
Operational strategies	Decision structuring, evidence evaluation, documentation, consultation, review, and technology governance	Transform individual auditor capabilities into an orderly, trainable, and controllable process
Proximal consequence	Accurate, reasoned, consistent, and defensible tax assessment	Enhances the technical and legal quality of decisions at the case level
Organizational consequence	Reduced discretionary inconsistency, organizational learning, interunit coordination, and increased accountability	Transforms individual judgment into a sustainable organizational capability
Ultimate consequence	Tax fairness, fewer disputes, trust, compliance, and balanced protection of government and taxpayer rights	Strengthens the legitimacy and effectiveness of the tax system

The final model derived from the open, axial, and selective coding processes is presented in Figure 1. The final model demonstrates that achieving desirable professional judgment involves a multilevel and context-dependent

process. Within this model, a tax decision is not the direct and automatic product of an auditor's knowledge. Knowledge and experience must be applied through systematic evidence evaluation, bias control, consultation, documentation, and review. The quality of this process is also influenced by the legal environment, organizational structure, technology, and professional pressures.

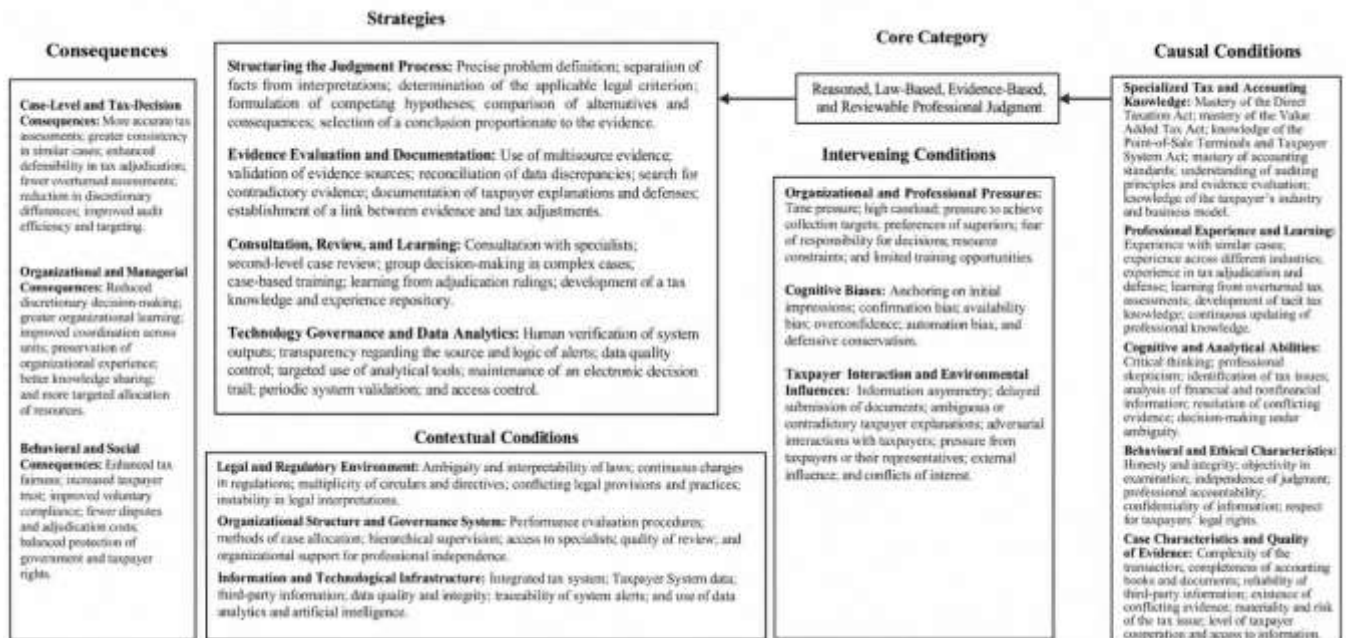


Figure 1. Research Model Developed Through Grounded Theory and the Interview Process

4. Discussion and Conclusion

The present study sought to develop a grounded theory model of professional judgment among tax auditors in Iran and showed that professional judgment is not a discrete personal skill or an automatic consequence of technical knowledge, but rather a multilevel process formed through the interaction of auditor competencies, case characteristics, legal and organizational contexts, technological infrastructure, professional pressures, cognitive biases, taxpayer interactions, and deliberate control strategies. The analysis yielded 108 refined open codes, 18 initial conceptual clusters, and 16 axial categories and ultimately identified the core category as “institutionalizing accountable professional judgment to transform law and evidence into fair and defensible tax assessments.” This central finding indicates that high-quality tax judgment depends not merely on whether an auditor possesses knowledge and experience, but on whether these capabilities are translated into a structured, evidence-based, reviewable, and accountable decision process. This interpretation is consistent with the person–task–environment perspective in auditing research, according to which judgment quality emerges from interactions among individual auditor characteristics, the nature of the decision task, and contextual conditions [1]. It is also aligned with theoretical accounts that conceptualize professional judgment as a complex cognitive process in which knowledge, experience, evidence, and professional requirements must be integrated rather than applied mechanically [2].

The first major finding concerned the causal role of professional competence. Specialized tax and accounting knowledge, professional experience, analytical capabilities, professional skepticism, independence of judgment, and ethical characteristics were identified as foundational capacities that enable tax auditors to recognize problems, interpret legislation, evaluate evidence, and formulate defensible conclusions. This finding supports previous Iranian research showing that professional judgment among independent auditors is strongly related to

professional competence, individual characteristics, accumulated experience, and environmental influences [3]. It also corresponds directly with findings indicating that task-specific knowledge improves audit quality because auditors with relevant specialized knowledge are better able to identify risks and evaluate complex information [5]. In tax auditing, this relationship is especially important because auditors must combine accounting expertise with legal interpretation, knowledge of tax regulations, awareness of industry characteristics, and an understanding of the economic substance of transactions. The present study therefore extends prior findings by suggesting that competence should be understood as an integrated portfolio of technical, cognitive, experiential, and ethical capabilities rather than solely as knowledge of tax laws.

Professional experience and continuous learning also emerged as influential components of judgment capacity. Participants emphasized experience with similar cases, exposure to different industries, involvement in tax adjudication and defense, learning from overturned assessments, and the development of tacit tax knowledge. This result is consistent with evidence showing that experience contributes significantly to tax audit quality, particularly when auditors operate in increasingly digital environments [6]. Experience enables auditors to identify recurring patterns, recognize atypical transactions, anticipate evidentiary problems, and compare current cases with prior cases. However, the present findings further indicate that experience is beneficial when combined with continuous updating of professional knowledge and openness to revising earlier interpretations. Experience can otherwise become a source of excessive confidence, habitual reasoning, or anchoring. This dual role of experience is compatible with broader research on judgment and decision-making, which shows that expertise may facilitate efficient pattern recognition while also creating vulnerability to automatic or intuitive processing under certain circumstances [10].

Another important finding concerned professional skepticism as a mechanism linking competence to evidence evaluation. The participants described critical thinking, questioning of initial impressions, examination of contradictory evidence, and reluctance to rely unquestioningly on system-generated indicators as necessary components of professional judgment. This result is strongly aligned with contemporary auditing standards and professional guidance emphasizing that skepticism should permeate the auditor's evaluation of evidence and should not be reduced to a formal requirement [7]. Empirical research has similarly shown that skeptical actions arise from an interaction between auditor characteristics and engagement circumstances rather than from personality alone [8]. The current findings reinforce this perspective because skepticism was found to depend not only on personal disposition but also on time pressure, availability of evidence, organizational expectations, technological design, and opportunities for consultation and review. Thus, professional skepticism in tax auditing should be viewed as both an individual capability and an organizationally supported behavior.

The findings also showed that case characteristics and evidence quality constitute causal conditions that determine both the need for judgment and the difficulty of the judgment task. Transaction complexity, incomplete accounting records, conflicting evidence, the materiality and risk of the tax issue, reliability of third-party information, and taxpayer cooperation were among the most important factors. This finding is consistent with the proposition that judgment cannot be assessed independently of task characteristics [1]. Cases involving clear documentation and unambiguous legal requirements may require relatively limited discretion, whereas complex transactions involving incomplete evidence or conflicting interpretations impose substantially greater cognitive demands. The result also supports research showing that the framing and presentation of audit evidence can influence auditors' judgments even when the underlying information remains similar [12]. This suggests that the

quality of tax judgment depends not only on the amount of evidence available but also on how evidence is organized, contextualized, interpreted, and compared.

The contextual conditions identified in the model—particularly the legal and regulatory environment—were also central to explaining variation in judgment. Participants emphasized ambiguity in tax laws, frequent changes in regulations, multiplicity of circulars and directives, conflicts among interpretations, and instability in administrative and judicial practices. These factors expand the scope within which auditors must exercise interpretation and therefore increase the importance of professional judgment. Similar findings have been reported in prior Iranian research, where tax auditors' judgments were shown to be influenced by regulatory complexity and contextual characteristics of tax administration [19]. The present study adds to this literature by demonstrating that legal ambiguity should not simply be regarded as a background condition; rather, it actively shapes the range of acceptable interpretations and can increase the likelihood of inconsistent decisions unless accompanied by structured reasoning, documentation, review, and access to authoritative guidance.

Organizational structure and governance were likewise identified as critical contextual influences. Performance evaluation systems, hierarchical supervision, case allocation procedures, access to specialists, quality of review, and organizational support for professional independence were all found to affect judgment quality. This finding helps explain why auditors with similar levels of technical knowledge may nevertheless produce different decisions. Organizational incentives can either encourage comprehensive evidence evaluation or create pressures for rapid, amount-oriented, or defensively conservative decisions. The present findings are compatible with prior Iranian evidence showing that professional judgment is susceptible to organizational and environmental influences [4]. They also extend earlier professional judgment models by showing that judgment quality depends on whether the organizational environment treats professional discretion as a controlled and accountable process rather than as an individual and largely unreviewed activity [3].

Technological infrastructure represented another major contextual component. The participants regarded integrated tax systems, electronic taxpayer information, third-party data, data analytics, and artificial intelligence as potentially valuable resources for expanding the evidential base and improving targeting. However, they also emphasized data quality, traceability of system alerts, human verification, and explainability. This result is consistent with international tax administration guidance emphasizing the importance of structured audit programs, risk-based processes, data management, and governance in contemporary tax auditing [16]. It is also supported by research demonstrating that IT infrastructure can materially affect auditors' ability to obtain and evaluate evidence, especially in remote and technology-mediated audit environments [17]. The current study therefore suggests that digitalization does not reduce the importance of professional judgment; instead, it changes its object. Auditors must now judge not only traditional accounting evidence but also the reliability, relevance, and interpretability of data generated or filtered by technological systems.

This issue is especially relevant in relation to automation bias. One of the intervening conditions identified in the study was excessive reliance on system-generated outputs and warnings. Research on auditor judgment in the digital era similarly shows that the mode and medium through which evidence is presented can influence auditor reasoning and decision behavior [18]. A wider review of five decades of auditor judgment research has also highlighted how technological developments create new forms of bias rather than eliminating longstanding cognitive vulnerabilities [11]. The current findings support this conclusion by showing that automated alerts can become anchors that shape subsequent evidence search, especially under high workload and limited time.

Technology governance was therefore identified as an essential strategy, requiring human validation, explainability, data-quality controls, electronic decision trails, periodic system validation, and access control.

Cognitive biases constituted another important intervening category. Anchoring, confirmation bias, availability bias, overconfidence, automation bias, and defensive conservatism were identified as mechanisms capable of distorting evidence selection, weighting, and interpretation. This result is consistent with dual-process theories, which explain how intuitive and analytical processes interact and why decision makers are vulnerable to predictable biases under uncertainty and cognitive load [10]. It also aligns with evidence that prior information can influence subsequent audit judgments [13]. The participants' accounts of predetermined conclusions, selective search for confirming evidence, and neglect of contradictory information closely parallel findings showing that auditors' decision-making can be affected by cognitive dissonance and the psychological tendency to preserve previously adopted beliefs [9]. Thus, professional judgment quality depends not only on increasing knowledge but also on designing processes that actively expose auditors to disconfirming information.

The identified strategy of considering competing hypotheses and contradictory evidence is especially important in this regard. Participants indicated that high-quality judgment requires defining the problem precisely, separating facts from interpretations, identifying the applicable legal criterion, considering alternative explanations, and selecting conclusions proportionate to the evidence. This finding closely corresponds with experimental evidence showing that prompting auditors to consider alternative explanations can enhance professional skepticism [14]. Such structured reasoning can counter premature closure and confirmation bias by obliging the auditor to consider explanations that conflict with the initial hypothesis. In tax audits, this practice is particularly valuable because evidence of irregularity may initially appear to support a presumption of noncompliance while subsequent documentation or legal interpretation may provide a legitimate alternative explanation.

The relationship among fraud indicators, skepticism, and judgment found in prior tax research also helps explain the current findings. Tax officers' professional skepticism has been shown to influence judgment, with fraud-indicator intensity playing an important mediating role [15]. The present study similarly found that suspicious indicators, contradictory taxpayer explanations, and information asymmetry can intensify scrutiny. However, it also showed that such conditions may increase the risk of judgment becoming one-sided if auditors fail to search for contradictory evidence. Therefore, skepticism should not be equated with suspicion alone. It should instead involve a balanced evaluation process in which potentially adverse evidence is investigated rigorously while taxpayer explanations and exculpatory evidence are also examined.

The strategies identified in the study—structuring judgment, evaluating multisource evidence, documenting reasoning, consulting specialists, undertaking second-level review, promoting case-based learning, and governing technology—collectively transform individual professional competence into organizational capability. This represents one of the principal theoretical contributions of the model. Rather than treating professional judgment as a private mental process, the model positions it as an institutional practice that can be taught, reviewed, documented, and improved. This interpretation is consistent with qualitative research logic, which seeks to understand professional practices through the meanings and experiences of knowledgeable participants and to develop explanatory models grounded in those experiences [20]. It also extends the professional judgment model developed for Iranian tax auditors by emphasizing institutionalization, accountability, technological governance, and traceability as central mechanisms through which judgment quality can be sustained [19].

Finally, the consequences identified in the model demonstrate that professional judgment has implications beyond the technical correctness of individual tax assessments. At the case level, accountable judgment was

associated with more accurate assessments, greater consistency across similar cases, stronger defensibility in adjudication, and fewer overturned decisions. At the organizational level, it was associated with reduced discretionary inconsistency, organizational learning, knowledge retention, improved coordination, and better resource allocation. At the system level, it was linked to tax fairness, taxpayer trust, voluntary compliance, fewer disputes, and balanced protection of the rights of the government and taxpayers. These consequences reinforce the conclusion that professional judgment is closely related to the legitimacy of tax administration. A tax assessment is defensible not merely when it produces higher revenue but when it reflects a transparent connection among evidence, applicable law, and professional reasoning. Accordingly, the central category identified in this study – institutionalizing accountable professional judgment – captures the broader meaning of the findings: professional judgment becomes valuable when individual expertise is embedded within legal, organizational, evidential, and technological mechanisms that make the decision explainable, reviewable, and proportionate.

The present study has several limitations that should be considered when interpreting its findings. First, because the study employed a qualitative grounded theory design and relied on 13 experts, its purpose was conceptual depth and theoretical development rather than statistical generalization. Although theoretical saturation was reached and the participants represented diverse professional roles, the findings remain grounded in the specific institutional and regulatory context of tax auditing in Iran. Second, the data were based primarily on participants' retrospective descriptions of professional experiences, which may have been influenced by selective recall, social desirability, or reluctance to discuss organizational pressures and sensitive decision-making practices in detail. Third, because professional judgment involves internal cognitive processes, interviews cannot capture all automatic or unconscious mechanisms underlying actual decisions. Fourth, the study did not directly observe auditors while they evaluated real tax cases and therefore could not independently compare reported decision processes with actual behavior. Finally, rapid changes in digital tax administration, automated risk assessment, electronic information systems, and artificial intelligence may alter some technological dimensions of the proposed model over time.

Future studies should quantitatively validate the proposed model using a large and representative sample of tax auditors and examine the relationships among the identified constructs through structural equation modeling or other multivariate techniques. Researchers could develop standardized measures for professional competence, cognitive biases, organizational pressures, technology governance, evidence evaluation, accountability, and judgment outcomes and assess the reliability and validity of these measures across different tax offices and professional groups. Experimental studies could investigate how auditors respond to ambiguous legal provisions, conflicting evidence, system-generated risk alerts, time pressure, collection targets, and alternative-explanation prompts. Longitudinal research could examine whether case-based training, second-level review, or changes in performance evaluation systems improve judgment quality over time. Comparative studies across countries could determine which components of the model are context-specific and which are transferable across different legal and tax-administration systems. Future research should also investigate human–AI interaction in tax auditing, including automation bias, algorithmic explainability, trust calibration, and the circumstances under which auditors appropriately override system recommendations.

Tax authorities should treat professional judgment as an organizational capability that requires systematic governance rather than as an individual attribute expected to develop solely through experience. Training programs should integrate tax law, accounting, evidence evaluation, professional skepticism, cognitive debiasing, ethical decision-making, data analytics, and case-based exercises. Complex or high-risk cases should be supported

through specialist consultation, structured second-level review, and multidisciplinary decision-making where appropriate. Audit files should explicitly document the tax issue, applicable legal criterion, supporting and contradictory evidence, taxpayer explanations, alternative hypotheses considered, and the rationale linking evidence to the final adjustment. Performance evaluation systems should avoid overemphasizing assessment or collection amounts and should also consider decision quality, defensibility, documentation, fairness, and adherence to review procedures. Digital tax systems should provide traceable and explainable alerts, undergo periodic validation, and preserve clear human accountability for final decisions. Establishing organizational repositories of precedent, overturned assessments, adjudication decisions, and lessons learned can further reduce inconsistent judgments and promote continuous professional learning.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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