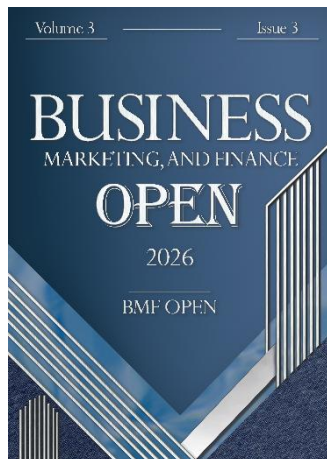





# Identification and Analysis of Barriers to the Realization of Synergy Between the Supreme Audit Court of Iran and Internal Auditing in the National Iranian South Oil Company

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**Abstract:** This study aims to identify and analyze the barriers hindering the realization of synergy between the Supreme Audit Court of Iran and internal auditing within the National Iranian South Oil Company. The research employs a qualitative approach based on grounded theory. Data were collected through semi-structured interviews with experts in auditing and financial supervision and analyzed using open, axial, and selective coding methods. The findings indicate that barriers to achieving synergy fall into seven main categories: structural and organizational barriers, legal and regulatory barriers, cultural and behavioral barriers, human resource constraints, technological and information system barriers, political and managerial challenges, and finally, financial resource limitations. The results reveal that the presence of these barriers reduces the effectiveness of collaboration and synergy between the Supreme Audit Court and internal auditing, thereby affecting the efficiency of the supervisory system in large state-owned enterprises. The precise identification of these barriers can provide a foundation for designing corrective strategies and enhancing institutional synergy to promote transparency, accountability, and financial integrity in public sector organizations.

**Keywords:** Supreme Audit Court of Iran, internal auditing, synergy barriers, financial supervision, National Iranian South Oil Company

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## 1. Introduction

In recent decades, the complexity of financial systems, the expansion of public sector activities, and the rise in stakeholder expectations regarding transparency and accountability have transformed auditing from a traditional verification mechanism into a strategic governance instrument. This evolution has underscored the importance of synergy between internal auditing and supreme audit institutions as complementary components of financial oversight systems. The Supreme Audit Court of Iran, as the highest external oversight body, and internal auditing units, as the first line of defense within public organizations, both play crucial roles in ensuring fiscal discipline, compliance, and performance improvement [1, 2]. However, the lack of effective coordination between these two entities has been identified as a major barrier to achieving an integrated and efficient auditing ecosystem [3].

The need for synergistic interaction between external and internal auditors stems from the growing emphasis on accountability and governance reforms in public institutions [4, 5]. Supreme audit bodies traditionally focus on the legality and efficiency of public spending, while internal auditors emphasize risk management, internal controls, and process improvement [6]. When these functions operate in isolation, duplication of effort, inefficiency, and informational gaps occur, which diminish overall audit effectiveness [7]. Creating a collaborative framework between the Supreme Audit Court and internal audit systems can enhance information sharing, reduce redundancy, and foster proactive identification of financial irregularities.

Empirical research indicates that the success of oversight systems depends not only on structural integration but also on behavioral, technological, and organizational alignment among the actors involved [8, 9]. For example, internal auditors within public institutions often face challenges in maintaining independence and professional objectivity due to managerial interference or unclear reporting hierarchies [10]. Similarly, the Supreme Audit Court operates under statutory frameworks that may limit its flexibility in coordinating with internal audit functions [11]. These constraints create operational silos that hinder the realization of systemic synergy.

Scholars argue that promoting synergy between oversight institutions contributes directly to enhanced financial transparency, improved decision-making, and greater public trust [12, 13]. Transparency and accountability, as foundational principles of governance, are closely linked to the efficiency of auditing mechanisms and the clarity of financial reporting [14]. When oversight systems are fragmented, opportunities for corruption, mismanagement, and resource leakage increase [15]. Hence, the integration of auditing functions has been recognized as a necessary step toward strengthening the governance architecture of public institutions [16].

The theoretical underpinnings of audit synergy are grounded in institutional and agency theories. Agency theory posits that auditing serves as a mechanism to align the interests of principals (citizens and the state) with those of agents (managers and officials) [17]. Institutional theory, on the other hand, emphasizes the role of regulatory norms, organizational culture, and professional standards in shaping audit behaviors and structures [9]. The interaction between these perspectives highlights that synergy in auditing is not merely a procedural alignment but a multidimensional process influenced by legal, cultural, and technological factors.

From a technological perspective, digital transformation has significantly reshaped the auditing landscape. The advent of artificial intelligence (AI), machine learning, and data analytics has introduced new possibilities for detecting anomalies, assessing risks, and improving audit coverage [18]. AI-based audit tools can process large datasets to identify patterns of fraud and financial irregularities that human auditors might overlook, thereby enhancing the accuracy and timeliness of both internal and external audits. However, the adoption of such technologies requires strong collaboration between the Supreme Audit Court and internal audit departments to standardize data sharing, analytical protocols, and reporting frameworks [19].

Despite technological advancements, several challenges persist in Iran's auditing environment. Studies show that the structural and legal fragmentation of oversight institutions undermines the efficiency of financial supervision [11, 20]. Internal auditing departments often suffer from inadequate independence, insufficient funding, and lack of technical expertise, while the Supreme Audit Court operates under bureaucratic constraints that limit the flexibility of its oversight activities [21]. These systemic issues have impeded the formation of a unified monitoring mechanism capable of ensuring real-time accountability.

Cultural and behavioral barriers also play a significant role. Resistance to change, lack of inter-organizational trust, and the persistence of non-transparent managerial practices have been repeatedly cited as obstacles to collaboration between internal and external auditors [22, 23]. The presence of hierarchical and traditional

organizational cultures discourages openness and mutual learning among oversight bodies, leading to a compartmentalized audit environment [7]. Overcoming such cultural inertia requires leadership commitment, consistent training programs, and reforms in communication channels [10].

The human resource dimension is equally critical. Auditor competence, professional ethics, and continuous education have been identified as core determinants of audit quality [17, 23]. In the Iranian context, the shortage of skilled auditors—especially those trained in advanced analytics and digital auditing—has restricted the capacity for integrated oversight [24]. Furthermore, internal audit units often face high workloads and limited autonomy, reducing their ability to coordinate effectively with external auditors [16]. This human resource gap underscores the necessity of capacity-building programs that align technical skills with ethical and organizational values.

The international literature also emphasizes that synergy between supreme audit institutions and internal auditing is central to the modernization of public financial management [6, 8]. Countries that have institutionalized collaborative frameworks—such as information-sharing agreements, joint audit planning, and synchronized reporting systems—report higher levels of efficiency and reduced redundancy in oversight processes [9]. These experiences demonstrate that synergy not only enhances technical effectiveness but also reinforces the legitimacy and credibility of public sector audits.

Within Iran, the Supreme Audit Court holds a constitutional mandate to ensure legality, transparency, and efficiency in the use of public funds [2]. However, the increasing complexity of public financial systems, combined with decentralized administrative structures, requires a more dynamic and cooperative approach to oversight [12, 13]. Internal auditing units embedded within ministries and state-owned enterprises, such as the National Iranian South Oil Company, possess granular operational insights that can complement the Supreme Audit Court's macro-level evaluations [1]. Coordinating these layers of oversight can yield comprehensive monitoring mechanisms that detect irregularities early and facilitate preventive rather than corrective controls.

Research also shows that effective synergy can strengthen institutional integrity by reducing opportunities for corruption and ensuring consistent application of auditing standards [4, 15]. When both oversight bodies share common methodologies and information systems, discrepancies in judgment, redundancy in reporting, and conflicts of authority can be minimized [3, 5]. However, this requires a supportive legal framework, political will, and a culture of professional collaboration [11, 20].

Moreover, the globalization of auditing standards, particularly the adoption of International Standards for Supreme Audit Institutions (ISSAIs) and International Standards on Auditing (ISAs), demands closer alignment between national oversight institutions and internal auditors [6]. Compliance with these standards ensures comparability, enhances transparency, and supports international credibility in financial reporting [24, 25]. Therefore, harmonizing internal and external audit practices in accordance with global frameworks is not only a national priority but also a strategic necessity for maintaining financial integrity and governance efficiency.

In this context, the synergy between the Supreme Audit Court of Iran and internal auditing represents more than an operational collaboration; it embodies a strategic alignment toward achieving financial transparency, accountability, and public trust. This study aims to identify and analyze the barriers hindering the realization of synergy between the Supreme Audit Court of Iran and internal auditing within the National Iranian South Oil Company.

## 2. Methodology

In this study, the grounded theory approach was employed as the research methodology—a method known in the academic literature by terms such as “grounded theory,” “data-based theory,” or “emergent theory,” and recognized as one of the most systematic and valid qualitative research methods. This approach was first introduced by Glaser and Strauss (1967), providing a rigorous framework for collecting and analyzing qualitative data. It enables researchers to extract operational concepts and theories directly from empirical data.

Unlike the main dissertation, which aimed to develop a model of synergy between the Supreme Audit Court of Iran and the internal auditing function of the National Iranian South Oil Company, the focus of this paper is on identifying and analyzing the barriers that prevent such synergy from being achieved. In other words, this study seeks to answer the question: *What factors hinder effective and coordinated collaboration between these two vital supervisory institutions?* Recognizing these barriers provides a valuable opportunity to enhance the effectiveness of financial oversight and strengthen public trust, while offering a deeper and more analytical exploration of a key dimension of the previous dissertation’s findings.

This research is cross-sectional in nature and exploratory in purpose. Data were collected through semi-structured interviews with experts and specialists in the field of financial supervision, supported by library-based studies to provide a rich contextual background for analysis. Data analysis was conducted through the three stages of open, axial, and selective coding, allowing for a systematic and conceptual classification of the identified barriers.

The reasoning approach of this study is inductive, meaning that the final analysis emerged from real experiences and empirical data rather than being shaped by predefined hypotheses. Participants, based on their professional experiences, shared valuable insights and narratives regarding the obstacles to synergy, enabling the researcher to identify key structural and functional factors that restrict effective interaction between the Supreme Audit Court and internal auditing.

For participant selection, theoretical (snowball) sampling was used, and the interview process continued until conceptual saturation was achieved. Ultimately, 12 experts—each with over 15 years of relevant professional experience and holding either a master’s or doctoral degree—were interviewed. The findings revealed that after the eleventh interview, no significant new data emerged, and by the thirteenth interview, theoretical saturation had been substantially achieved.

This study provides a deep and detailed perspective on the barriers hindering synergy between two critical supervisory institutions. The findings indicate that identifying these barriers is the first step toward improving the effectiveness of financial oversight and enhancing public confidence. They also form a solid foundation for strategic decision-making and reforming collaboration processes between the Supreme Audit Court and internal auditing.

**Table 1. Characteristics of the Expert Panel**

Row	Organizational Position	Number	Years of Experience	Field	Interview Duration
1	Internal Auditor	3	25	Accounting	50 minutes
2	Auditor at the Supreme Audit Court	3	15	Accounting	45 minutes
3	Senior Managers	2	25	Accounting	40 minutes
4	Head of Financial Affairs	3	20	Accounting	50 minutes
5	Senior Accountant	2	15	Accounting	65 minutes

### 3. Findings and Results

Coding is one of the key analytical stages in qualitative research through which data, once conceptualized, are systematically interconnected to pave the way for theory development. In this process, data analysis occurs simultaneously with data collection and sampling and cannot be separated from them. In the present study, the data obtained from interviews were examined and analyzed through three stages of coding: open coding, axial coding, and selective coding.

#### **Open Coding**

In the initial stage of data analysis, open coding was used—a method within grounded theory applied to extract concepts from data (Strauss & Corbin, 1998). In this study, the data obtained from semi-structured interviews were analyzed line by line and sentence by sentence to identify key points, initial concepts, and their dimensions. Through this detailed analysis, the researcher extracted 65 conceptual labels, which, based on their similarities and semantic relationships, were grouped into preliminary categories. Some of these extracted categories and key concepts are presented in Table 2, providing an overview of the range of synergy barriers within the studied organization.

#### **Axial Coding**

After identifying the initial concepts, the process moved to axial coding to clarify the relationships among similar concepts and categories. In this stage, concepts with the closest semantic and structural similarity were integrated into broader, more comprehensive categories, thereby creating a cohesive structure for analyzing synergy barriers. A screening process was also conducted to remove concepts with lesser analytical relevance. To validate these selections, all final categories and codes were reviewed by five experts in auditing and financial supervision, who were asked to identify the less significant codes. The results of this review formed the foundation for the final analytical stage and the presentation of findings.

Through this analytical process, the study achieved a precise identification and classification of the barriers to synergy between the Supreme Audit Court of Iran and internal auditing. The results demonstrated that these barriers constitute a combination of structural, organizational, and behavioral factors that should be addressed to improve inter-organizational collaboration.

#### **Selective Coding**

In this study, selective coding was employed to identify and analyze the barriers to achieving synergy between the Supreme Audit Court of Iran and internal auditing in the National Iranian South Oil Company. Drawing on the framework of Strauss and Corbin (1998), the relationships between the extracted categories and the central category were examined. The central category, which formed the basis of the analysis, was defined as the *barriers to synergy in the interaction between the Supreme Audit Court and internal auditing*.

Based on the data analysis, the subcategories were organized into five main dimensions: causal, contextual, intervening, strategic, and consequential conditions. This classification allowed the researcher to analyze the barriers from a comprehensive and organized perspective and to better understand the complex relationships among different factors. At this stage, each subcategory was examined in detail using the data from semi-structured interviews and field notes to specify the barriers accurately.

The analyses indicated that the barriers to synergy are not limited to a single factor but are instead a combination of structural, behavioral, organizational, and environmental elements that restrict the achievement of effective coordination and collaboration. The use of selective coding enabled the researcher to elucidate the interconnections

among various barriers and their impact on the synergy process without the need to propose a final model or modify the dissertation's structure.

Accordingly, the findings were presented in a clear and organized manner, showing that in the process of achieving synergy, recognizing, deeply understanding, and carefully analyzing the barriers hold crucial importance.

Interviewees referred to 65 minor components that could act as deterrent factors to synergy between the Supreme Audit Court of Iran and internal auditing in the oil and gas sector. After determining and carefully analyzing the content of these factors, they were condensed in the second phase into 23 axial codes classified under seven categories, as summarized below (it should be noted that, to avoid excessive length, only the extracted axial codes are presented, and the detailed open codes have been omitted).

As evident from the content of the inhibiting factors, many interviewees emphasized multiple domains and dimensions affecting the realization of synergy.

**Table 2. Influential Inhibiting Factors in the Synergy Process Between the Supreme Audit Court of Iran and Internal Auditing**

Selective Code	Axial Codes
Structural and Organizational Barriers	Institutional coordination disruption / Complex organizational structure / Heavy bureaucracy
Legal and Regulatory Barriers	Legal limitations in supervision / Ambiguity in supervisory laws / Restricted access to information
Cultural and Behavioral Barriers	Resistance to change / Lack of trust in supervisory processes / Culture of non-transparency
Human Resource Constraints	Shortage of specialized human resources / Need for specialized training / Lack of skilled personnel in new technologies / Insufficient staff at operational levels
Technological and Information System Barriers	Insufficient use of information technology / Incompatibility of information systems / Lack of access to online data
Political and Managerial Challenges	Impact of managerial changes / Insufficient support from executive authorities / Political interference in supervisory processes
Financial Resource Limitations	Insufficient budget for supervision / High supervision costs / Lack of financial resources for new technologies / Inadequate allocation of funds to internal auditing

### **Inhibiting Factors in the Synergy Process Between the Supreme Audit Court of Iran and Internal Auditing**

In the process of achieving effective synergy between the Supreme Audit Court of Iran and internal auditing, the identification and analysis of intervening conditions hold strategic importance. These conditions are, in fact, factors that influence the implementation and effectiveness of synergy and can act either as facilitators or as barriers (Amir Azad et al., 2018). Even with favorable causal conditions, the presence of structural, cultural, legal, and managerial barriers or limitations can disrupt effective interaction between these two supervisory bodies. Analyzing these factors helps policymakers and senior executives of oversight institutions gain a deeper understanding of the barriers that hinder structured cooperation and design effective corrective actions.

Achieving real and effective synergy between the Supreme Audit Court and internal auditing in large and strategic organizations, such as subsidiaries of the Ministry of Petroleum, cannot rely solely on formal structures and regulations. It requires an intelligent confrontation with a set of multidimensional and complex barriers that constrain interaction and coordination processes.

At the structural level, the formation of synergy in environments characterized by traditional, hierarchical, and siloed structures faces serious challenges. Such structures slow down the free flow of information and inter-institutional decision-making, creating duplication and overlap of responsibilities, thereby reducing responsiveness to violations and undermining the effectiveness of oversight.

From a legal perspective, the absence of a comprehensive and transparent legal framework that clearly defines the duties, authorities, and relationships among supervisory institutions has led to overlapping responsibilities, ambiguous boundaries, and contradictory interpretations. This gap prevents the optimal use of supervisory capacities and weakens effective interaction.

From a cultural standpoint, resistance to change, fear of transparency, and the dominance of conservative attitudes act as soft but deep-rooted obstacles to collaboration. In the absence of an organizational culture based on learning, openness to criticism, and professional dialogue, constructive interaction becomes difficult. Overcoming this cultural barrier requires educational policy-making, continuous capacity building, and tangible support from senior management.

Operationally, the shortage of specialized human resources and weak information technology infrastructure have reduced the analytical capacity and responsiveness of supervisory bodies. The lack of advanced information systems and analytical skills results in delays in detecting violations and a decline in reporting quality.

In addition, political and managerial challenges—including external pressures, policy instability, and executive interference—undermine the independence of supervisory institutions and weaken the foundation for stable and professional collaboration. The continuation of this situation threatens both public trust and the efficiency of oversight mechanisms.

Furthermore, budgetary constraints serve as bottlenecks for the development and implementation of technology, human resource training, and joint supervisory processes. Without sufficient resource allocation, oversight capacity-building remains merely rhetorical.

Overcoming this situation requires an integrated, strategic, and system-oriented approach—one that views the Supreme Audit Court and internal auditing not as parallel units but as complementary arms working together to realize transparency, accountability, and improved financial governance. Achieving this vision elevates synergy from a procedural level to an institutionalized, sustainable, and purposeful collaboration. Such transformation, alongside financial governance reform in the oil industry, can serve as a national model for other sectors—a model grounded in political will, legal infrastructure, human capital, and an organizational culture rooted in transparency and cooperation. This, in turn, would foster public trust and enhance the country's financial integrity.

It is noteworthy that, based on the collective perspectives of the interviewees, the most significant barriers include structural and organizational obstacles, legal and regulatory challenges, cultural and behavioral barriers, human resource constraints, technological and information system barriers, political and managerial challenges, and financial resource limitations.

### **Structural and Organizational Barriers**

**Institutional Coordination Disruption:** One of the main issues raised in the interviews was the lack of coordination between various supervisory and executive bodies. Experts emphasized that in complex systems such as the National Iranian South Oil Company, different supervisory entities—particularly the Supreme Audit Court and internal auditing—often fail to act in harmony. This lack of coordination, especially during times when rapid responses to financial or operational issues are needed, creates serious challenges in the oversight process and reduces its effectiveness. One auditor from the Supreme Audit Court noted, “When coordination between institutions is weak, audits may be conducted incompletely or followed up in a partial and ineffective manner.”

**Complex Organizational Structure:** In large organizations—especially state-owned enterprises such as the National Iranian South Oil Company—a complex organizational structure often leads to dispersed responsibilities and overlapping functions. According to several interviewees, the existence of multiple managerial layers

constitutes a significant barrier to effective oversight. Such complexity creates ambiguity in authority and responsibility, leading to delays in supervisory processes. As one auditing manager stated, “The presence of multiple organizational layers blurs accountability, making supervision more complicated and time-consuming.”

**Heavy Bureaucracy:** Heavy bureaucracy in government organizations was another recurring issue highlighted by experts. Particularly in oil companies and supervisory bodies such as the Supreme Audit Court, inefficient administrative systems and cumbersome procedures delay financial audits. Many interviewees acknowledged that implementing any change or following up on oversight matters often requires passing through numerous procedural stages that consume excessive time and ultimately reduce the impact of supervision. One expert remarked, “Cumbersome bureaucracy causes even urgent and essential audits to be delayed, and this is a serious concern.”

### **Legal and Regulatory Barriers**

**Legal Limitations in Supervision:** Legal limitations in supervisory processes were among the most frequently cited issues by participants. These restrictions, particularly in the area of financial supervision, sometimes prevent audits from being conducted comprehensively. In the oil and gas industry, certain restrictive laws and regulations can make access to information difficult or even impossible. One auditor from the Supreme Audit Court mentioned, “Legal limitations on supervisory procedures may hinder access to financial documents and transparency, creating serious challenges for effective oversight.”

**Ambiguity in Supervisory Laws:** Ambiguity in supervisory laws was another problem raised in the interviews. Many experts complained about the lack of clarity in some supervisory regulations and guidelines, which leads to differing interpretations and, consequently, reduced oversight effectiveness. As one specialist explained, “Supervisory laws must be clear and precise, because any ambiguity in them can lead to poor decision-making and weak monitoring.”

**Restricted Access to Information:** A serious problem in supervisory processes is the limited access to essential information. According to many experts, effective supervision requires complete and timely access to relevant data. Within the National Iranian South Oil Company, restricted access to financial information—particularly in sensitive projects—was repeatedly emphasized. One auditor from the Supreme Audit Court stated, “The lack of access to up-to-date and reliable information can render supervision ineffective and allow critical issues to remain hidden.”

### **Cultural and Behavioral Barriers:**

**Resistance to Change:** Resistance to change—especially in supervisory contexts—is one of the key cultural barriers present in organizations. In many interviews, experts acknowledged that employees in some organizations, due to fear of change or unfamiliarity with new supervisory methods, resist adopting changes. Such resistance can seriously obstruct the improvement of supervisory processes. One auditor from the Supreme Audit Court stated, “Many employees resist organizational changes or new supervisory methods, and this affects the effectiveness of oversight.”

**Lack of Trust in Supervisory Processes:** A lack of trust in internal and external supervisory processes was a fundamental problem cited by many interviewees. Some individuals believe that supervisory processes are not always implemented correctly, and this distrust can lead to disregard for these processes. One expert remarked, “If employees do not trust supervisory processes, oversight will, in effect, be rendered ineffective.”

**Culture of Non-Transparency:** A culture of non-transparency within organizations—particularly public sector entities—is another major barrier to effective oversight. Many experts admitted that a lack of transparency in financial and operational information, especially in large oil projects, creates serious problems for supervision. One



interviewee noted, “If there is not sufficient transparency in operational processes, no form of oversight can effectively identify problems.”

**Human Resource Constraints:**

**Shortage of Specialized Human Resources:** Experts and interviewees indicated that one of the major issues in supervisory processes is the shortage of specialized human resources in auditing and oversight. In many cases, the absence of experts in these fields slows supervisory processes and leads to missed opportunities for improvement and remediation. One auditor from the Supreme Audit Court stated, “The shortage of specialized personnel—especially in technical domains—prevents oversight from being conducted effectively and efficiently.”

**Need for Specialized Training:** Another important issue is the need for specialized training in auditing and financial oversight. Experts emphasized that supervisory staff should complete diverse and up-to-date training programs so they can utilize new tools and methods of oversight. One interviewee said, “Ongoing training for supervisory personnel is essential so they can carry out oversight processes with greater precision and speed.”

**Shortage of Human Resources Specialized in New Technologies:** A shortage of human resources specialized in new technologies was also identified as an important barrier in supervisory processes. Particularly in digital oversight and the use of advanced information systems, many auditors acknowledged a need for personnel with specialized expertise. One auditing manager stated, “To employ new technologies in supervisory processes, specialized and well-trained human resources must be available.”

**Insufficient Human Resources at Operational Levels:** A shortage of human resources at operational levels has also slowed and reduced the effectiveness of supervision. This issue was especially pronounced in large-scale and sensitive projects, particularly in the oil and gas industry. One interviewee stated, “If there are not enough personnel at operational levels, supervisory processes will not be carried out in full.”

**Technological and Information System Barriers:**

**Insufficient Use of Information Technology:** Many experts pointed to the insufficient use of information technology in supervisory processes. Particularly in organizations such as the National Iranian South Oil Company, improper or inadequate utilization of information technology has resulted in many financial records and documents not being reviewed effectively. One auditor from the Supreme Audit Court said, “Failure to use information technology in a timely manner can render oversight slow and inefficient.”

**Incompatibility of Information Systems:** Another serious problem in many organizations is the incompatibility among different information systems. In numerous cases, organizational information systems cannot communicate in an integrated manner, which can lead to the loss of important information and a decline in oversight quality. One expert stated, “Information systems that are not interoperable make precise oversight impossible.”

**Lack of Access to Online Data:** Access to online data is one of the essential needs for effective supervision. Many experts highlighted the problem of not having access to up-to-date, online information. One interviewee said, “If we do not have access to online and up-to-date information, we cannot properly follow supervisory processes, and many problems may go unidentified.”

**Lack of Access to Online and Up-to-Date Data:** Another problem cited by interviewees was the lack of access to online and up-to-date data. Rapid, online access to data—especially in urgent situations—is critical for effective supervision. When data are not available online, a great deal of time must be spent gathering information and preparing the required reports. One expert commented, “Not having access to online data—especially in sensitive projects—means that a great deal of time is spent collecting information, and supervision faces delays.”

**Political and Managerial Challenges:**

**Impact of Managerial Changes:** Frequent and rapid changes at managerial levels are a major challenge that has been raised in many organizations—including the National Iranian South Oil Company and the Supreme Audit Court—in achieving stability in supervisory processes. Many interviewees emphasized that continual changes in leadership and managerial structures can disrupt the follow-up of supervisory matters and reduce their effectiveness. One expert stated, “Any change at managerial levels—particularly at the start of a transition—can create ambiguity in processes and reduce coordination.”

**Insufficient Support from Executive Authorities:** Another problem mentioned by interviewees was inadequate support from executive authorities for conducting effective supervision. When senior executives do not back supervisory processes, this leads to weaker impact of oversight and reduced follow-through on violations. As one interviewee put it, “If executive authorities do not sufficiently support supervisory activities, even the best oversight plans cannot be effective.”

**Political Interventions in Supervisory Processes:** Political interventions in supervisory processes are another challenge cited by many interviewees. Such interventions can result in certain issues being overlooked or supervision being influenced by political factors. One auditor from the Supreme Audit Court remarked, “At times, political interventions can prevent transparent and impartial oversight, which is one of the greatest challenges in the oversight domain.”

#### **Financial Resource Limitations:**

**Insufficient Budget for Supervision:** One of the greatest barriers to effective supervision is the lack of sufficient budget for these activities. Many experts admitted that, under current economic and financial conditions, allocating adequate budgets for supervisory activities—particularly in large projects—is difficult. One auditing manager stated, “The failure to allocate appropriate budgets for oversight leads to the postponement of many supervisory projects and activities, reducing the quality and effectiveness of supervision.”

**High Costs of Supervision:** High supervisory costs were another issue raised in the interviews. Particularly in large oil and industrial projects, the costs of supervision increase significantly, which can prevent precise and timely oversight. One expert said, “In large oil projects, the costs of supervision are very high, and in some cases, companies prefer to reduce or postpone oversight due to the expense.”

**Lack of Financial Resources for New Technologies:** Experts also indicated that a shortage of financial resources for deploying new technologies is a major problem in supervisory processes. As one interviewee stated, “New technologies, such as advanced information systems, can markedly improve oversight, but due to financial constraints, the use of these technologies often remains incomplete.”

**Failure to Allocate Resources to Internal Auditing:** A lack of resources allocated to internal auditing was another issue raised in the interviews. According to some experts, internal auditing—particularly in oil companies—often faces shortages of financial and human resources, which can severely affect the efficiency of this function. One auditor from the Supreme Audit Court stated, “Internal auditing must be fully supported with financial and human resources in order to conduct effective and precise supervision, but unfortunately these resources are not fully allocated.”

#### **Validation of Findings and Evaluation of Research Quality**

In many studies, researchers in the field of qualitative research sometimes consider the validity and reliability of findings to be exclusive to quantitative studies. However, in reality, the trustworthiness of data and the accuracy of results hold particular importance in qualitative research. In studies that are exploratory in nature and based on participants’ experiences, factors such as the researcher’s precision and sensitivity, methodological coherence, the

selection of relevant and appropriate samples, and the concurrent conduct of data collection and analysis play a crucial role in ensuring scientific credibility.

This study, focusing on identifying and analyzing the barriers to synergy between the Supreme Audit Court of Iran and internal auditing, employed an independent expert review method to enhance data quality and ensure the accuracy of findings. In this process, three faculty members and specialists in accounting—who had not participated in data collection—reviewed the findings derived from the interviews. The evaluation conducted by these experts included assessing the accuracy of concepts, the clarity of arguments, the coherence of results, and their consistency with the actual data.

The feedback and corrective suggestions received were analyzed and aligned with the initial data before being incorporated into the final conclusions to ensure that the findings were fully reliable and accurately reflected the participants' experiences. This process not only increased the scientific validity of the study but also enabled a more precise and transparent identification of the real barriers to interaction and synergy between the two supervisory institutions.

Moreover, this validation approach allows readers to be confident that the results represent an accurate reflection of experts' experiences and the practical realities of organizations. Thus, beyond improving scientific quality, the study also provides practical applicability and guidance for future research, without requiring the presentation of an operational model or framework.

#### **4. Discussion and Conclusion**

The findings of this study revealed that the synergy between the Supreme Audit Court of Iran and internal auditing units within the National Iranian South Oil Company faces significant structural, legal, cultural, technological, managerial, and financial barriers. These multidimensional obstacles impede effective coordination, reduce the efficiency of oversight processes, and limit the realization of integrated financial governance. Specifically, the results demonstrated that overlapping responsibilities, bureaucratic complexity, insufficient transparency, and limited access to timely financial data have weakened the alignment of external and internal audit mechanisms. This fragmentation has led to duplication of effort, communication gaps, and delayed responses to financial irregularities, consequently diminishing the overall effectiveness of public sector oversight [1, 3].

At the structural level, the study found that bureaucratic rigidity and the lack of coordination among supervisory institutions were among the most influential barriers. The hierarchical and compartmentalized nature of public sector organizations creates an environment where information sharing between internal and external auditors is often obstructed. This finding aligns with [7], who highlighted that traditional bureaucratic structures in Iranian public institutions hinder the operational independence of internal auditors and their ability to engage in collaborative oversight. Similarly, [6] emphasized that in public sector auditing, the effectiveness of information systems auditors depends heavily on the level of organizational integration and communication between oversight bodies. Thus, the structural fragmentation observed in this study is consistent with prior research, indicating that the absence of an integrated auditing framework reduces institutional responsiveness and transparency.

The findings further revealed that legal and regulatory inconsistencies significantly constrain synergistic collaboration between the Supreme Audit Court and internal auditing functions. Ambiguities in audit-related legislation and the lack of a unified legal framework have led to conflicting interpretations of authority, unclear role boundaries, and inconsistent enforcement of accountability mechanisms. This result corresponds with the conclusions of [11] and [20], both of whom found that the legal foundations of Iran's auditing system are outdated

and fail to define the interrelationship between oversight institutions effectively. Additionally, [5] observed that the accountability system in Iran's public auditing domain suffers from fragmentation, resulting in redundant supervision and overlapping audit scopes. The current findings reinforce these earlier observations and underscore the urgent need for legal harmonization to ensure that the Supreme Audit Court and internal auditing units can cooperate within a coherent regulatory framework.

From a cultural and behavioral perspective, the study identified resistance to change, lack of inter-institutional trust, and a culture of non-transparency as major impediments to synergy. Many respondents expressed skepticism toward reform initiatives or the introduction of new audit technologies, citing fears of accountability and exposure. This aligns with [4], who argued that the absence of a culture of openness and professional trust significantly undermines financial accountability in public organizations. [22] also noted that in the Iranian context, internal auditors' efforts to improve financial oversight are often constrained by institutional cultures that prioritize formality over transparency. Similarly, [10] highlighted that organizational environments lacking psychological safety inhibit internal auditors from engaging in proactive whistleblowing or open communication with external oversight bodies. Together, these findings indicate that cultural reform is as critical as legal and structural reform in fostering sustainable synergy.

Human resource constraints were another critical dimension of the results. The shortage of specialized auditors, inadequate technical training, and insufficient staff at operational levels collectively diminished the effectiveness of audit cooperation. These findings are consistent with those of [23], who found that auditor competence, time pressure, and professional attitudes directly influence internal audit quality and independence. [17] similarly emphasized that psychological and professional competencies are decisive in shaping auditors' ability to perform effectively in complex oversight environments. Moreover, [24] demonstrated that auditors' professional identity and judgment quality depend on adequate training and support from leadership, reinforcing the notion that human capital development is central to audit synergy. In this study, limited investment in training and low motivation among auditors were cited as reasons for weak cooperation between institutions, echoing these prior conclusions.

Technological and informational challenges emerged as a key modern constraint. The results indicated that the underutilization of information technology, lack of integrated digital systems, and inadequate access to online and real-time financial data severely limited the ability of auditors to detect anomalies and share findings promptly. [19] found similar evidence that information technology plays a critical role in improving auditing efficiency but remains underdeveloped in Iranian executive agencies. Furthermore, [18] demonstrated that artificial intelligence and deep learning technologies could enhance anomaly detection in financial data, thus supporting more proactive internal auditing. However, as this study found, such tools remain largely inaccessible due to budgetary limitations and insufficient technical expertise. [9] similarly observed that even in European contexts, the adoption of digital auditing tools in the public sector requires comprehensive change management and skill-building among auditors, highlighting a universal challenge mirrored in Iran's public audit system.

Political and managerial challenges also surfaced as substantial barriers. Frequent managerial turnover, insufficient support from executive authorities, and political interference in oversight processes were identified as major factors undermining audit independence and continuity. Respondents reported that political influence often leads to selective enforcement of audit findings and reluctance to disclose sensitive results. This observation is consistent with [15], who found that political pressures and corruption in financial institutions distort lending practices and obscure accountability mechanisms. [14] also emphasized that governance quality and political stability are crucial determinants of financial performance and transparency in the Iranian capital market. Likewise,

[3] showed that organizational synergy and financial transparency are significantly weakened when oversight agencies lack political support. The present study thus reinforces the conclusion that depoliticizing auditing processes and institutionalizing managerial continuity are prerequisites for sustainable synergy.

Financial limitations were another recurring theme. The shortage of allocated budgets for oversight activities, high costs of monitoring in large-scale projects, and insufficient funding for technological upgrades collectively constrained both internal and external auditing functions. This is aligned with [12], who found that financial transparency and public trust in oversight institutions are closely tied to resource adequacy. Without sufficient financial support, even the most advanced audit frameworks cannot function effectively. Moreover, [16] emphasized that underfunded internal auditing units in government organizations fail to meet professional standards, ultimately compromising financial reporting reliability. Similarly, [1] reported that resource scarcity is a significant barrier to implementing joint audit initiatives between the Supreme Audit Court and internal auditing departments.

The findings also underscore the systemic interdependence among the identified barriers. Structural rigidity exacerbates cultural resistance, while limited human capital and financial resources hinder the adoption of technological innovations. This interconnectedness supports the perspective of [9], who noted that effective public auditing requires multi-level coordination between structural, cultural, and technological domains. It also resonates with [6], who argued that the success of information systems auditing depends on the synergy of organizational design, auditor competence, and institutional support. Furthermore, [3] found that enhancing synergy between oversight institutions not only improves financial transparency but also strengthens strategic decision-making capacities—a finding confirmed by the present study's participants.

In the Iranian public sector context, the study's results demonstrate that the barriers to synergy are not limited to operational inefficiencies but are deeply rooted in institutional design and governance practices. [11] and [20] both emphasized that reforming Iran's audit oversight system requires a shift from compliance-based supervision to performance-oriented auditing. The current findings corroborate this need, revealing that the prevailing audit culture still prioritizes fault-finding over collaboration and learning. Moreover, [4] and [13] argued that the principles of good governance—particularly transparency, accountability, and participation—must guide reform efforts to enhance oversight efficiency. The lack of these principles in practice, as evidenced in the current study, has led to fragmented accountability and reduced institutional trust.

The results also reinforce the argument that synergy is a multidimensional construct encompassing technical, relational, and institutional aspects. [2] asserted that the Supreme Audit Court's effectiveness in financial oversight depends on its capacity to collaborate with internal auditors who possess detailed operational knowledge. [16] supported this view by showing that internal auditors serve as critical intermediaries between management and external oversight bodies. In line with these studies, this research concludes that sustainable synergy requires continuous communication, mutual respect, and shared objectives among auditors across institutional levels.

Finally, the findings highlight the growing relevance of international standards and technological innovation in modern auditing. [25] emphasized that developing a model for professional judgment among independent auditors is essential to ensure consistency and comparability in audit outcomes. Similarly, [18] argued that integrating AI-based analytical tools into auditing processes can significantly enhance the detection of anomalies and strengthen institutional credibility. These findings collectively suggest that the future of public auditing in Iran depends on embracing innovation, reforming regulations, and nurturing a professional culture of collaboration and ethical responsibility.

This study, while comprehensive, is subject to several limitations. First, its qualitative design relies primarily on interviews with experts in auditing and financial oversight, which may limit the generalizability of the findings to other sectors or countries. The perspectives gathered, though diverse, reflect subjective interpretations of institutional practices within the specific context of the National Iranian South Oil Company and the Supreme Audit Court. Second, the study's focus on organizational barriers may have underemphasized broader socio-political factors, such as policy instability and external economic constraints, which also affect audit cooperation. Third, resource limitations prevented the inclusion of quantitative validation or longitudinal tracking of the identified barriers. Finally, while efforts were made to ensure credibility through expert review and triangulation, potential researcher bias in interpreting qualitative data cannot be completely ruled out.

Future studies could expand on these findings by employing mixed-method designs to measure the relative impact of structural, cultural, and technological factors on audit synergy quantitatively. Comparative analyses across different public and private sectors, or between national and international oversight institutions, could also yield deeper insights into how governance structures influence auditing cooperation. Furthermore, longitudinal research examining the evolution of audit synergy following legislative or technological reforms would provide valuable evidence on causal relationships. Investigating the role of leadership styles, inter-organizational trust, and digital transformation maturity could also help explain variations in synergy outcomes. Additionally, cross-country comparative research with other developing economies may illuminate contextual differences and best practices in achieving institutional synergy.

For practitioners and policymakers, the findings underscore the need to establish a unified legal and procedural framework that defines clear lines of authority and collaboration between the Supreme Audit Court and internal auditing bodies. Investments in auditor training, digital infrastructure, and data-sharing systems should be prioritized to enhance efficiency and transparency. Creating a joint coordination committee between external and internal auditors could institutionalize communication and reduce duplication of effort. Furthermore, embedding ethical auditing values, promoting a culture of openness, and depoliticizing oversight processes are essential for sustaining long-term trust and accountability. Ultimately, fostering synergy requires not only technical and regulatory reforms but also cultural transformation—where auditing is perceived not as a punitive activity but as a shared mechanism for improving governance and public value.

### **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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