

# A review of studies related to audit quality by meta-analysis method

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## Abstract

The chaotic economic conditions in the world have led to more public attention to the issue of financial reporting and, of course, the importance of access to information with maximum confidence for users. Accordingly, reliable and quality financial reports topped the demand of users. Considering the importance of the issue, the role of auditors in financial audits and providing audits with the highest level of quality was felt more than before. Accordingly, audit quality was introduced as a key concept in accounting and auditing. Researchers have always sought multiple dimensions of audit quality. Accordingly, the present study has been performed with the aim of analyzing audit quality through the method of "meta-analysis of theoretical foundations". Therefore, the present article tends to systematically review the findings of studies in this field using the meta-analysis method and analyze them based on the formation process and output achievement. For this purpose, by referring to the valid documents available on websites and reviewing the data of English sources from 2007 to 2021 and Persian sources from 2010 to 2020, 46 articles were identified among the many primary articles related to the research topic. Finally, after reviewing the theoretical foundations of the research and reviewing the research background, according to the research gap in the field of analysis of audit quality studies based on topics such as: audit quality, audit costs, company ownership structure, quality of audit services, financial reporting, auditor specialty, audit committee, corporate governance, transparency of financial information, audit independence, financial fraud, internal audit, company internal control, and qualitative research method in auditing, and lack of model to provide recommendations for decision-making on audit quality, It is possible to realize the innovation of the present research in closing the mentioned research gaps.

**Keywords:** meta-analysis technique, audit quality, audit studies

## INTRODUCTION

The financial information presented in the form of basic financial statements is in fact the eloquent but silent language of legal entities that reflects the financial situation, financial performance. Since information users include the owners of capital, management, and other users inside and outside the organization, there is a need to ensure financial performance and reporting and metrics. Accordingly, a review

and verification unit called the audit unit was established, which has its own rules, principles and instructions (Edi,2019) and (He, et al. 2017). All users of financial information, whether individuals or investment groups that decide to buy or sell shares of an institution, or credit institutions and companies that decide to approve a loan application, or other interested persons need to make sure the financial statements are reliable. (Edi, 2019) and (Buslepp, et al. 2019) and (Mashayekhi and

Mehrani. 2017). Since the goals of the producers of this information are not the same as the goals of the users, independent individuals are required to comment on the reliability of the financial statements. Of course, in addition to technical and professional competencies for assessment, these individuals must also act honestly. These people are called independent auditors (Mashayekhi and Mehrani. 2017) and (Idi, 2019). The auditor's report should clearly state that the audit was performed in accordance with accepted standards. Therefore, the introductory paragraph describes the type and nature of the independent auditor's audit (Edi, 2019), (Chang, et al. 2019) and (Mashayekhi and Mehrani. 2017). The scope of the review indicates the methods that the auditor has deemed necessary to implement in the current circumstances and has been able to implement them. The reader of the report needs this description to ensure that the audit was performed in accordance with auditing standards (Edi, 2019), (He, et al. 2017), (Nalewaik & Mills. 2015) and (Mashayekhi and Mehrani. 2017). It is always assumed that the auditor adheres to auditing standards unless otherwise stated (Maran Jori and Mohammadi, 2020) and (Amin et al., 2020) and (Buslepp, et al. 2019). Examining these systems, monitoring and controlling their implementation and submitting corrective suggestions is specifically the responsibility of the internal audit unit (Chang, et al. 2019) and (Sayadi, 2019). In recent years, the focus of many audits has undergone significant changes in the public and private sectors, because the financial statements alone do not meet the information needs of management (Pourghanbari et al., 2019). Managers in the private and public sectors seek to obtain more information in order to evaluate and judge the quality and operational progress (Edi, 2019) and (Pourghanbari et al., 2019). Auditors are not unfamiliar with the words efficiency and effectiveness, because they try to conduct their audits efficiently and effectively in the audit process. These forms can also be considered as the most important part of the management process of any public and private business unit (Zhao & Zhang. 2008) and (Lowensohn, et al. 2007); and that we can mention the important objectives of auditing including performance appraisal, identifying opportunities to improve operations and suggestions for improving operations (Pourghanbari et al., 2019). Public sector

managers must be accountable to the people and their representatives and provide the tools for this accountability based on credible information. The nature of the public and private sectors requires that in addition to reviewing financial statements and commenting within the framework of financial auditing principles and criteria, audit control is also necessary in this section (Nalewaik & Mills. 2015) and (Javanmiri, 2019).

On the other hand, the wave of "scandals" and "collapse" of the world's largest corporations and financial institutions led to the creation of "new rules in the structure of corporate governance", one of the most important of which was the need for an audit committee (Ali Khani et al., 2021). Internal reporting of financial violations is one of the most effective methods of identifying violations in organizations (Kordestani and Rajab Dori, 2021). Identifying the factors affecting the reporting of violations according to the spectator phenomenon can provide a basis for preventing the occurrence of financial violations (Ganji, 2018) and (Bandyo, et al. 2014). In fact, the "Audit Committee" as one of the main mechanisms of corporate governance, is responsible for reviewing the initial audit program and interacting with independent auditors in the financial reporting process (Amin et al., 2020). Therefore, it is expected to affect the scope of the audit and the auditor's effort, and consequently the audit and non-audit fees (Maran Jori and Mohammadi, 2020) and (Amin et al., 2020). On the other hand, the formation of audit units is a useful tool to improve these systems and guide the organization towards its goals. In our country, the management of most economic resources is the responsibility of the government and the quality of its management has major effects on the fate of the nation (Javanmiri, 2019) and (Sadat Ghaffari et al., 2020). The professional judgment of the auditor and the decision-making in the audit of financial statements is very important because it directly affects the quality of the audit (Eulerich, et al. 2019) and (Tanani and Rajabi, 2019). Therefore, it is necessary to identify and study the factors affecting the professional judgment of the auditor (Sadat Ghaffari et al., 2020) and (Cho, et al. 2020) and (Tanani and Rajabi, 2019). "Quality control and internal audit (ICAQ)" in companies can also be affected by the characteristics of the company, the quality of audit and supervision of

companies (Ghaderi et al., 2019). Establishing an appropriate system of internal control and auditing in companies will lead to improving accountability and financial transparency (Mashayekhi and Mehrani, 2017) and (Ghaderi et al., 2019). Internal controls are used as a tool for this evaluation (Javanmiri, 2019). In competitive environments, it is necessary for managers to take advantage of the performance appraisal process to guide affairs in the direction of work progress and in the direction of the goals and strategies of the organization in a conscious manner (Mashayekhi and Mehrani, 2017) and (Javanmiri, 2019) and (Allah Dini and Chehrzad, 2019). Performance auditing is a clear expression of the observance of economic efficiency and effectiveness in the performance of all large and small ideals. Every day, a new form of economic relations emerges and individuals, companies and institutions are in contact with each other and their financial changes affect each other and these activities become more complex day by day (Edi, 2019) and (He, et al. 2017). These factors determine the role of accounting as providers of financial information by exploiting accounting standards for more users (Cho, et al. 2020) and (Nalewaik & Mills, 2015). On the other hand, auditing is important in terms of preparing a report in which the auditor provides his opinion on whether the mentioned financial statements provide a favorable and comprehensive picture of the financial situation of the institution or not (Edi, 2019).

Given the above and the importance of audit quality, this research implements a research approach that helps the researcher to achieve a good combination of quantitative and non-contradictory studies in the past, explain the contradictions and identify moderating structural variables in the results of previous studies (Hay, et al. 2013) and (Habib, et al. 2013). In fact, meta-analysis protects the researcher from relying on the results of an individual study or relying on non-quantitative traditional and experimental reviews, and allows him to combine data from several studies. Today, meta-analysis in many fields of science, especially in social sciences and medicine, has been widely accepted by the scientific community around the world, and the rapid growth of meta-analysis studies is a proof of this claim. Despite its popularity, meta-analysis has not been widely used in the accounting literature

in several respects (Garcia-Meca, et al. 2010) and (Hamid, et al. 2014). In fact, the primary research question in this study is: What are the main and key concepts of audit quality studies?

## 2- Theoretical foundations of research

As a critical factor in the financial field, "Financial fraud" is a serious threat to public confidence in the financial information and financial reporting process (Yazdani, 2021) and leads to heavy costs and consequences for various groups. Therefore, creating a strong corporate governance system plays a key role. In this regard, the effectiveness of the audit committee as one of the important tools of corporate governance, plays a pivotal role in preventing and reducing the risk of fraud and making appropriate actions (Yazdani, 2021) and (Kharuddin, et al. 2021).

One of the most common definitions of audit quality is the one given by DiAngelo in 1981. He defines the quality of an audit as "market assessment" of the likelihood that the auditor will first detect material misstatement of the employer's financial statements or accounting system and that it will report the material misstatements detected. The probability that the auditor will discover significant distortions depends on the auditor's competence and the probability that the auditor will report significant distortions will depend on the auditor's independence (Ganji, 2018), (Alhababsah & Yekini, 2021) and (Kurdistani and Rajab Dori, 2021). In another definition of this concept, DeAngelo states the actual quality of auditing based on users' perceptions or the so-called market inference of auditing quality. This definition is used to express the true quality of the audit with the basic premise that the perception of the quality of the audit reflects the true quality of the audit. In 1988, Palmrose defined audit quality in terms of the auditor's credibility. Since the auditor's purpose is to provide confidence in the financial statements, the quality of the audit means that the audited financial statements are free from material misstatement. In fact, this definition emphasizes the results of the audit, i.e. the reliability of the audited financial statements reflects the high quality of the audit (Bandyo, et al. 2014) and (Ali Khani et al., 2021). This definition leads to the question: "How do users assess the reliability

of audited financial statements?" This definition of audit quality is based on audits performed because the level of reliability of the audited financial statements cannot be determined prior to the audit. As a result, Palmrose's definition emphasizes the true quality of the audit. The important point about defining audit quality is to pay attention to the stakeholder group. Thus, the possible views of the stakeholder group on the quality of auditing indicate the following: (Alhababsah & Yekini, 2021) and (Kurdistani and Rajab Dori, 2021) and (Bandyo, et al. 2014) and (Ali Khani et al., 2021) and (Zhao & Zhang, 2008).

1- The concept of quality from the perspective of investors

2- The concept of quality from the perspective of the audit committee

Considering the type of stakeholder perspective (in the first perspective) indicates that the individual should be more accurate in relation to shareholders, in order to determine whether their set of actions has been approved and implemented in the company; Because one of the most important detrimental effects on the views of others about the quality of auditing is to pay attention to these issues. Therefore, understanding each other's points of view and considering and applying specific points of view may affect the perceptions and opinions of others; Because the understanding of the

concept of audit quality is considered a vital issue in the effort to increase audit quality. Conceptually, the quality of auditing can be observed in three specific formats, the basic aspects of which include (data) inputs, outputs and contextual factors (Yazdani, 2021) and (Kharuddin, et al. 2021) and (victim and old, 2018). In this regard, there are many inputs separate from the standard audit process. One of the factors in the set of inputs is the auditor himself, and this input includes the auditors' skills, experience, ethics and values, and their way of thinking. Another important input is to perform up-to-date and online audits and to perform audits with the desired and correct process, which is related to issues such as the accuracy of the audit method that will result from the use of audit tools, as well as the availability of sufficient technical support, all of which are in order to support and achieve the audit quality goal. The outputs provided by the audit process also play an important role in the quality of the audit. Most outputs are measured as quality assessment criteria by shareholders and other stakeholders. In addition, the improvement and transparency of ISA auditing standards has essentially led to a revision of half of the International Standards (IAASB). In a more general perspective, these efforts have led to the improvement of ISA standards in the following areas: (Taheri and Sharafati, 2020) and (Lowensohn, et al. 2007) and (Yazdani, 2021) and (Kharuddin, et al. 2021) :

Table 1. Objectives of the Association of International Standards on Auditing

Paying attention to the overall approach of auditing as an integrated audit: inducing a focus on objectives, promoting thoughtful auditing, and emphasizing the importance of skepticism.	IAASB Objectives
Considering aspects of the financial statements that would generally be exposed to greater risk of professional miscalculation by the auditor, for example, regarding estimates and estimate of fair value associated with transactions.	By utilizing the services provided by other units, especially the audit team, it should be ensured that the auditors are satisfied that they have done the best they can during their audit by using the basics.
Paying attention to the quality of audit evidence, especially in emphasizing information and documents outside the organization and reviewing and assessing documents.	Audit communications and interactions emphasizing the importance of open and constructive dialogue between auditors, management, to help reassure that significant and relevant issues have been identified in the

	results of audits and to draw users' attention to a clear and meaningful path. .
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Important impact of IAASB standards on quality of ISA auditing standards will play a pivotal role in contributing to audit quality by providing a globally and accepted standard (Ganji, 2018). Correct and accurate evaluation forms the basis of any investment and is one of the important issues for most investors and shareholders (Taheri and Sharafati, 2020). In fact, incorrect evaluation has created a risk that leads to lack of motivation in investors and shareholders. One of the causes of incorrect evaluation is the lack of correct information or in other words asymmetry of information by companies (Ganji, 2018) and (Taheri and Sharafati, 2020). "Internal control" is a process that is influenced by the board, management and other people in the business unit (Saedi et al., 2020). This process should provide reasonable assurance about the achievement of objectives such as the effectiveness and efficiency of operations, the ability to rely on financial reporting and compliance of the activities of the organization and working groups with the rules (Saedi et al., 2020) and (Chang, et al. 2019), considering the importance of internal control systems in the company and the effect that the existing weaknesses have on the performance of the company (Saedi et al., 2020). In internal audit, the report is only available to the organization's senior executives and other staff and the general public will not be informed (Eulerich, et al. 2019) and (Gaosong & Leping. 2021). In general, internal auditing is a very important part in organizational categories, especially large companies with complex financial processes. Proper and purposeful performance of the internal audit process can prevent large financial deviations and waste of resources and assets (Buslepp, et al. 2019) and (Liu & Huang. 2020). An organization's internal control structure includes policies and procedures that are developed to provide relative assurance of achieving organizational goals. Relative certainty means that no internal control structure is ideal and an entity's internal control costs should not exceed its expected benefits (Chang, et al. 2019) and (Buslepp, et al. 2019).

Given the current situation in today's world, rapid changes in technology and the role of information and communication in the

development of organizations, the optimal management of resources in economic units has become highly important (Edi, 2019). Auditing a company's financial information is to prepare a plan for auditing and to coordinate the audit, as well as to ensure that all auditing operations are performed (Mashayekhi and Mehrani. 2017) and (Izquierdo, et al. 2019) and (Su & Wu. 2017). The audit program can be set as standard for similar institutions in any case, such as dealing with debtors of fixed assets and the like (Kelton & Montague. 2017) and (Mashayekhi and Mehrani. 2017) and (Izquierdo, et al. 2019). Utilizing the internal audit process in the organization increases the desired control and internal audit. Internal audit is an independent, assuring, realistic and consulting activity that is designed to increase the value and improve the operations of the organization (Edi, 2019) and (Mashayekhi and Mehrani. 2017). Internal auditing helps the organization to achieve its goals by providing a systematic and methodical approach to evaluate and improve the effectiveness of management, risk management and control processes (Mashayekhi and Mehrani. 2017). Auditors consider the presence of executive directors on the board and audit committees as audit risk, and may have to improve their audit procedures, leading to increased audit fees (Bhuiyan, et al. 2019). Previous studies have found a positive relationship between board quality and audit fees, meaning that higher board quality requires higher audit quality (Mashayekhi and Mehrani. 2017). However, another explanation is that when the quality of the board is underestimated, auditors seek special privileges to compensate for overtime hours and to employ experienced and trained auditing staff (Bhuiyan, et al. 2019). The "disclosure" concept is a broad financial issue that has been studied from various aspects in the field of accounting (Jaberi, 2019) and (Idi, 2019) and (Mashayekhi and Mehrani. 2017). Due to the importance of transparency of companies' financial information in the capital market, auditing researchers seek to examine the factors affecting disclosure quality (Dennis, et al. 2019), (Kelton & Montague. 2018), (Jaberi, 2019) and (Edi , 2019) and (Mashayekhi and Mehrani. 2017). On the other hand, as a valuable

professional service (Mohammadi and Mohammadi, 2018) and (Mashayekhi and Mehrani, 2017), "auditing" requires a fee according to which the auditor can earn economic benefits from providing these services (Chen, 2016) and (Mohammadi and Mohammadi, 2018) and (Mashayekhi and Mehrani, 2017). In fact, government officials need auditors to provide information on how to evaluate complex financial estimates; Because users are confronted with this information provided by the accountant in addition to the information provided by management (Dennis, et al. 2019). On the other hand, according to the definition provided by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the Journal of Internal Control and Auditing - Integrated Framework, internal control and audit is a process to provide reasonable assurance of achieving the three objectives: (Edi, 2019) and (Mashayekhi and Mehrani, 2017) and (Liu & Huang, 2020) and (Chang, et al. 2019) and (Buslepp, et al. 2019): "Effectiveness and efficiency of operations", "Reliability of financial reporting", and "Observance of applicable laws and regulations". The first group refers to the basic objectives of an entity, including objectives related to the performance, profitability, and protection of assets. The second group is related to the process of preparing and providing reliable financial reports for general purposes. The third group = deals with the rules and regulations governing the various activities of the economic unit. Each of these groups, while having common aspects, address different needs that provide areas of explicit and precise focus to meet different needs (Edi, 2019) and (Mashayekhi and Mehrani, 2017). An organization's internal control and audit structure includes policies and procedures that are in place to ensure relative assurance of the achievement of organizational goals. Relative reliability means that no internal control and audit structure is ideal, and the costs of internal control and audit of a business unit should not exceed its expected benefits (Liu & Huang, 2020) and (Edi, 2019) and (Buslepp, et al. 2019).

In recent years, with the growth of research in various fields of science and society facing an explosion of information, thinkers have come to the conclusion that knowing and mastering all aspects is mostly impossible in this field.

Therefore, conducting combined research that puts the research extract on this particular subject in a systematic and scientific way for researchers, has become increasingly widespread (Ghorbanizadeh and Behfar, 2013). Meta-study is one of the methods that has been introduced to review, combine and evaluate previous researches in the last few years, which generally consists of four parts: meta-analysis (quantitative analysis of the content of initial studies), meta-synthesis (qualitative analysis of the content of preliminary studies), meta-theory (analysis of early study theories) and meta-method (methodology analysis of preliminary studies) (Bench & Day, 2010). The meta-analysis method is a qualitative study that examines the information and findings extracted from other qualitative studies related to the same subject. As a result, the sample for meta-analysis is selected from qualitative studies and based on their relationship with the research question (Zimmer, 2010). In this research, meta-analysis method will be used to systematically review previous research. Experimental data will then be analyzed and a comprehensive model for identifying audit quality components in Iran will be presented.

### 3- Research background

Audit quality has always been one of the most controversial topics in accounting-related texts and articles, and this section refers to some research conducted in this field. In 2021, Ali Khani et al. sought to examine the relationship between the characteristics of the audit committee and the readability of the audit report. The present study is applied in terms of purpose and descriptive-correlation in terms of method. The research is also based on panel data analysis. The statistical population of the present study includes the companies listed on the Tehran Stock Exchange during the years 2014 to 2018, and the sample size is equal to 72 companies. In this study, which uses panel data with fixed effects, the results of analyzing company data using multivariate regression show that the size of the audit committee and the independence and financial expertise of the audit committee members are not significantly related to the readability of the audit report measured by two fugue and text length indicators. Due to the lack of relationship between the size, independence and financial

expertise of the members of the audit committee and the readability of the audit report, the need to pay attention to the effectiveness of the characteristics of the audit committees is very important.

The study by Kordestani and Rajab Dori was conducted in 2021 with the aim of providing a model of factors affecting the internal reporting of financial violations. To answer the research question, meta-combination method, content analysis and semi-structured interview with experts (Delphi method) were used. A total of 61 articles related to the research topic were analyzed and 14 experts were interviewed. Analyzes show that 5 structures including individual (19 cases such as weakness of courage and fear of evaluation and judgment), interpersonal (including 4 cases such as unfamiliarity with the principles of social behavior and weakness in social responsibility), moral- cultural (including 9 cases such as weakness in piety and spirituality and lack of honesty and integrity), administrative-managerial (including 12 cases such as lack of legal and social support and lack of organizational transparency) and specificity of violations (including 7 cases such as number of informed people and uncertainty of the occurrence of violations) affect the internal reporting of financial violations due to the bystander effect.

In 2021, Yazdani sought to assess the importance of the audit committee's effectiveness in reducing the risk of corporate financial reporting fraud. For this purpose, to measure the risk of fraud, two criteria of the modified model of Altman and Dechow et al. (2011) have been used. To conduct this research, 87 companies listed on the Tehran Stock Exchange during the years 2018-2012 were studied in a descriptive-correlation method with logit regression. The results showed that in companies where the audit committee is more effective, the risk of fraud is less likely. This finding confirms a clearer understanding of the effectiveness of the audit committee in reducing the risk of fraud.

In 2020, Taheri and Sharafati studied the effect of audit quality on the stock valuation error of listed companies. In this regard, the data of 110 companies listed on the Tehran Stock Exchange have been collected using library and field methods in the period 2017-2020, and in this

study a hypothesis has been proposed that has been tested by combined data analysis. The results of studies and tests indicate that in general, there is no significant effect of audit quality variable on stock valuation error.

In 2018, Saedi et al. Examined the impact of weak internal control and investment opportunities on the audit expenses of companies listed on the Tehran Stock Exchange. The present research is applied in terms of purpose and the statistical population of the research includes the companies listed on the Tehran Stock Exchange. Using the document mining method, 147 companies are selected as the research sample and the time period is between 2009 and 2015. The method used to collect information is library and to test the hypotheses, multiple regression with panel data pattern has been used. The results show that there is a positive and significant relationship between internal control weakness and audit expenses, while there is no significant relationship between investment opportunities and the ratio of non-executive managers to audit expenses.

In 2020, Amin et al. sought to examine the relationship between the effectiveness of the audit committee and the audit and non-audit fees during the years 2013 to 2017 for 111 companies listed on the Tehran Stock Exchange. In this study, the dependent variables include audited and non-audited fees. The independent variable is the effectiveness of the audit committee. Multivariate regression and combined data using Stata software were used to test the hypotheses. The results show that there is no significant relationship between the effectiveness of the audit committee and the audit fee and the fee of non-audit services.

In 2020, Maran Jori and Mohammadi investigated the relationship between the supervision of the board of directors and the audit fee with the moderating role of the duality of the CEO in the companies listed on the Tehran Stock Exchange. In this research, for the supervision of the board of directors, features such as: the size of the board of directors and the financial expertise of the audit committee have been used and the criterion of audit fee is the natural logarithm of fee paid to auditors. This research was conducted for a period of 5 years in the years 92 to 96. The sample information of the studied companies was analyzed by

examining the availability of their information by using Excel software and analyzed by EViews software. The results showed that there is a negative and significant relationship between board size and audit fees. There is a positive and significant relationship between the size of the audit committee, the financial expertise of the members of the audit committee and the audit fees.

In 2020, Sadat Ghaffari et al. examined the effect of goal orientation, self-efficacy and complexity of work on auditors' judgmental performance. The research is of applied type and in terms of data collection, it is a descriptive-correlation-survey based on structural equation model. The study sample was selected from the employees of auditing firms in Mashhad. According to the available population size and the Cochran formula for determining the sample size, to increase the validity of the research, 350 questionnaires were distributed, of which 241 questionnaires were received and used as a basis for statistical analysis. The return rate of the questionnaires was set at 80%. To test the hypotheses, the probability value obtained from the model fit in the significant state of the parameters was used. The appropriateness of the proposed model was explained by the hypotheses in the standard estimation mode and the significance of the parameters was investigated using Smart PLS software. The results at 5% error level showed that there is a significant relationship between learning goal orientation and audit judgment performance. There is a significant relationship between goal orientation, trend performance and audit judgment performance. There is a significant relationship between the goal orientation of avoidance performance and the audit judgment performance.

Ghaderi et al. sought to investigate the impact of managers' ability on quality control and internal audit in 2019. In this regard, two criteria of managers' rewards and managers' efficiency have been used as indicators to identify managers' abilities. Also, to identify the quality of internal control and audit, the internal control and audit system weakness index has been used in the audit report. The research is of applied type using causal-post-event method. The statistical population of the research includes companies listed on the Tehran Stock Exchange and the research sample has been selected by

applying the conditions of research variables to 87 companies during the years 1385-2015. Due to the nature of the dependent variable, logit regression method has been used to test the hypotheses. The results of the present study indicate that there is no significant relationship between managers' remuneration and the quality of internal control and audit. Also, the negative relationship between the variables of managers' efficiency and weakness in the internal control and audit system indicates the improvement of the internal control and audit system in the shadow of managers' ability.

In 2019, Javanmiri examined that the nature of the public and private sectors requires that, in addition to reviewing financial statements and commenting within the framework of financial auditing principles and criteria, audit control is also required in this sector. Therefore, it is necessary for auditors to use the services of experts in various fields to evaluate the performance and quality of management decisions and to present their conclusions and corrective suggestions to improve management as much as possible.

In 2019, Sayadi seeks to examine the audit evidence to determine the appropriateness of the validity of financial statements and the professional judgment of internal audit, which is considered the main hypothesis of the research. Professional internal audit judgments are also a sub-hypothesis of the research. The auditor uses professional judgment to determine the necessary knowledge of the entity and its environment, including internal controls. The auditor has examined 117 companies during the years 1385 to 2018 to gain knowledge of the unit under review and its environment. In this study, it was found that audit evidence has a positive and significant relationship with financial statements and professional internal audit judgment.

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and significant relationship with financial statements and internal audit professional judgment.

Tanani and Rajabi in 2019 sought to investigate the impact of systems thinking on the professional judgment of the auditor. The statistical population of the study includes 270 auditors who are members of the Association of Certified Public Accountants. In order to test the research hypotheses, the structural equation method was used using LISREL software. The results indicate that system thinking with a coefficient of 92% has a positive and significant effect on the professional judgment of the auditor. Also, the results of testing the sub-hypotheses of the research showed that the variables of dynamic thinking, interaction, system logic, axial process, continuous learning and understanding of mental models have a positive and significant effect on the professional judgment of the auditor with 87%, 51%, 40%, 63%, 34% and 23% intensity respectively.

Allah Dini and Chehrzad in 2019 examined that auditors evaluate the quality of management decisions and present their conclusions and corrective suggestions to further improve management, while utilizing the services of experts in various fields.

Pourghanbari et al. in 2019 examined that financial statements alone do not reflect the status of the company and only express comments on the financial statements and operational auditing is effective in increasing efficiency, effectiveness and economic efficiency and can be complementary to financial audit reports.

In 2019, Arab et al. identified the effectiveness of the audit committee and the quality of the audit on the quality of voluntary disclosure in companies listed on the Tehran Stock Exchange. Therefore, the present study seeks to find an answer to the question: whether the effectiveness of the audit committee and the quality of the audit affect the quality of voluntary disclosure? In the present study, two indicators of audit firm size and audit fee have been used to measure audit quality. However, no evidence was found on the effect of audit firm size on the quality of voluntary disclosure as well as the interactive effect of audit committee

effectiveness and audit firm size on voluntary disclosure quality.

In 2009, Kroukinejad and Taebi sought the effect of voluntary disclosure of social responsibility on auditing fees in companies listed on the Tehran Stock Exchange. In order to measure the level of social responsibility disclosure, the content analysis method of board reports has been used. Therefore, the checklist consisting of 6 social components and 35 criteria, which include community responsibilities, diversity, human resources, customers, environmental issues, products and services, was assessed. According to the results, on average, about 45% of social responsibility indicators have been disclosed in the annual activity reports of the board of directors. The results indicate that the disclosure of corporate social responsibility does not have a significant effect on the audit fee of financial statements.

Abdi et al. in 2019 investigated the importance of disclosure of intellectual capital and its relationship with audit risk and also studied the effect of audit risk on audit fees and literature related to this issue. According to disclosure theory, better quality information reduces audit risk, thereby reducing information asymmetry in the market and consequently information risk for the company. In fact, voluntary disclosure of the company is considered as a mechanism to reduce information asymmetry between the company and investors outside the company, and in this regard reduces the agency costs that lead to improved transparency of corporate reporting. On the other hand, increasing audit fees in today's society is one of the problems of many companies.

In 2019, Jaberi has experimentally tested the effect of some independent audit mechanisms on the quality of financial disclosure of companies. For this purpose, the information of the companies listed on the Tehran Stock Exchange has been used during the financial period of 2010-2015. In this study, to examine the effect of independent auditing on improving the quality of financial information disclosure, three variables related to auditing have been included in the regression model, including type of auditing firm, type of auditor's opinion and auditing fee. The results show that the auditor's acceptable opinion and high audit fee have a positive effect on improving the quality of financial information disclosure, and conducting

an audit by the auditing organization compared to other member institutions of the Association of Certified Public Accountants also leads to better compliance with disclosure requirements, in accordance with accounting standards.

Mousavizadeh and Ghorbani in 2018 investigated the effect of auditor disclosure expertise in industry on the amount of intellectual capital disclosure in companies listed on the Tehran Stock Exchange. In order to measure the auditor disclosure expertise in the industry, the market share approach was used and to measure the disclosure of intellectual capital, according to the research by Lee et al. (2007) and iBiconel et al. (2013), a virtual variable was defined and items were designed for disclosure of structural capital, human capital and relational capital. The results of testing the research hypotheses indicated that the auditor's disclosure expertise in the industry has a positive and significant effect on the disclosure of intellectual capital in the period under review. Also, the results of testing the research hypotheses showed that the auditor's disclosure expertise in industry has a direct effect on the disclosure of structural, human and relational capital.

In 2018, Naderi and Hajieha investigated the relationship between the type of auditor and type of audit report by revealing significant weaknesses in internal control and auditing in companies listed on the Tehran Stock Exchange. To find the answer to the research hypotheses, the relationship between the audit size and the type of audit opinion with the dependent variable of the research, which is a significant weakness of internal control and audit, has been extracted from the independent auditor's report, and a sample of 129 companies listed on the Tehran Stock Exchange during the period 2015-2011 has been studied. Combined regression analysis showed that the size of the audit has a positive and significant relationship with the amount of disclosure of weaknesses with the importance of control and internal audit and the amount of disclosure of weaknesses with the importance of internal control and audit with the type of audit report. According to the results, large auditing firms further disclose significant weaknesses in internal control and auditing, and auditors recognize these weaknesses in their annual reports and take them into account in their audit comments.

Bahrami and Toski in 2018 studied the effect of the composition of the Board of Directors and the Audit Committee on improving the financial reporting disclosure in companies listed on the Tehran Stock Exchange. To study the relationship in the conditions of the Iranian capital market, in the period 2013-2017, the study population includes a statistical sample of 104 companies listed on the Tehran Stock Exchange. In order to analyze the information, the data obtained from the new Rahavard software have been used. Excel and E-Views8 software were used to test the hypotheses. The type of this research is of comparative causal type due to the study of the relationship between the variables. The method of data analysis is ordinary least squares (OLS). The results of the research hypothesis test showed that the size of the board of directors, the percentage of non-executive members of the board of directors, the duality of the managing director for the board of directors, the size of the audit committee and the number of meetings of the audit committee for the audit committee did not affect financial reporting disclosure. Therefore, the research hypothesis has not been confirmed at the error level of 0.05. As a result, corporate governance (board of directors and audit committee) does not improve financial reporting disclosure.

Mostafa Pour et al. in 2018 investigated the relationship between voluntary disclosure of management information, audit independence and internal controls with the moderating role of the conservative representation of management for companies listed in the Tehran Stock Exchange. In this direction, the researcher selected 110 companies listed on the Tehran Stock Exchange through systematic sampling for a period of ten years from the beginning of 1386 to the end of 2016, to test the classical hypotheses and test the proposed hypotheses. While using multiple linear regression with the use of panel data and random effects method, analytical findings indicated that there is a positive and significant relationship between voluntary disclosure of management information and audit independence with internal controls, and management conservatism does not significantly mitigate the relationship between discretionary disclosure of management information and audit independence with internal controls. These findings are in line with the findings of Zabihullah and Ling (2017).

Mohammadi and Mohammadi in 2018, sought the voluntary disclosure of social responsibility and the quality of audit fees in companies listed on the Tehran Stock Exchange. In this regard, a sample of 80 companies in the annual time range (2016-2017) was selected from the target community. In order to test the hypotheses, the three-stage least squares (3SLS) method has been used to estimate the simultaneous equations. Criteria for social responsibility include (activities in the field of employee health, charity environment) the quality criterion of absolute value of optional accruals in accordance with performance. The research findings show that there is no significant relationship between voluntary disclosure of social responsibility and audit fees. Also, the mediating effect of profit quality variable is not significant on the relationship between social responsibility and audit fees.

Abbaszadeh et al. in 2017 express the variables related to the auditor and the audit, including four variables: size, industry specialization, the tenure of the audit firm and also the delay in submitting the audit report, and explain that company-specific variables include size, leverage, adjusted earnings for the previous year, and profitability. Findings of audit quality studies show that there is little consensus about the first category of explanatory variables, so that the only significant relationship in this group of variables is the institution size and the audit report delay. The audit report delay and the institution size have a positive relationship with the expertise of the auditing industry and the period of the audit tenure has a negative relationship with the decisions of the auditor. But the effect of none of the variables related to auditor and auditing in Iranian studies was significant. In contrast, for company-specific variables, there is more importance to the effect of firm size and profitability on the issuance of adjusted audit opinion.

Bazrafshan et al. in 2015 state that in the field of scientific research, although it may be expected that the independent audit committee will improve the financial reporting process, but the results of research are accompanied by contradictions and inconsistencies. In order to integrate the results of different researches and identify the factors that modulate the relations between the variables of independence and quality, in audit quality studies, meta-analytical

methodology has been used, which is one of the quantitative statistical methods. Al-Habaseh et al. in 2021, have identified and examined the relationship between the audit committee and the quality of the audit based on empirical analysis, taking into account industry expertise, legal expertise and gender diversity. One of the results of the research is that observing the "report of the audit committee" on the financial statements as the final product of the audit will have a positive effect on measuring the quality of the audit. So that if we consider this product clearly as the result of a proper audit process, the audit communications and interactions with opposing groups, and cases of internal control deficiencies will be more and more transparent. Because these issues basically affect the quality of the audit.

In 2021, Gaussung et al. proposed a model for measuring the effectiveness of internal auditing based on the construction of an audit index and empirical analysis system. In fact, they stated that the auditor is required to perform audits to obtain audit evidence about the operation of the internal controls. Proper accounting and internal auditing is one of the management responsibilities that requires proper supervision and control for the effectiveness of internal auditing.

In 2020, Bojan et al. identified and examined the relationship between bad female CEOs, the quality of financial reporting, and audit costs. In fact, they stated that bad female CEOs have an auditing policy for corporate executives. They should pay attention to increasing their awareness of the perceived audit risk arising from the professional and personal characteristics of managers when hiring them to serve on the company's board of directors.

In 2020, Liu et al. examined and modeled the relationship between audit service compliance, voluntary acceptance of SOX 404, and correction of internal control and audit weaknesses based on evidence from foreign companies in the United States. In fact, they argued that the auditor's report should indicate that the audit provides a reasonable basis for commenting on the correction of weaknesses in internal control and auditing.

In 2019, Ulrich et al. presented a model for analyzing the factors affecting the perceptual exploitation of the internal audit function by the

executive management and the audit committee. In fact, they stated that the audit committee's review of audit evidence is effective in determining the appropriateness of the validity of financial statements and the professional judgment of internal auditors.

In 2019, Chang et al. evaluated the impact of internal audit features on the effectiveness of internal control and audit on organizational operations and compliance. In fact, they stated that, based on the characteristics of the internal audit activity, the audit was planned and performed to ensure reasonable assurance that there were no significant errors or misstatements in the financial statements.

In 2019, Bojan et al. identified and modeled the impact of internal audit features on the effectiveness of internal control over the management accounting of listed companies. In fact, they stated that the study examines the relationship between audit fees and the presence of "bad" executives on corporate boards and audit committees. This study examines whether the presence of "bad" managers on the company's board of directors and audit committees affects auditors' perceptions of customer risk. Therefore, we examine the relationship between audit fees and the involvement of managers in financial failures and dishonesty in the past.

In 2019, Boselp et al. examined and modeled the relationship between incorrect classification of audit costs as a measure of quality control and internal audit. In fact, they stated that in the audit report based on quality control and internal audit, the audit was performed based on a sample examination of the evidence supporting the disclosure information in the financial statements.

In 2019, Dennis et al. analyzed the relationship between the value of managers' and auditors' disclosures about measurement uncertainty. In fact, the government now needs auditors to provide information on how to evaluate complex financial estimates. Because users are confronted with this information provided by the auditor in addition to the information provided by management, we jointly examine the importance of the value of these disclosures. In particular, users protect against price increases when auditor disclosures have visual implications. However, according to market

signaling theory, voluntary management disclosure undermines price protection. This suggests that management can reduce the negative effects of evaluation that result from auditor disclosure, and suggests that visual cues in audit reports can force managers to increase disclosure.

In 2019, Izquierdo et al. analyzed the reasons for the failure of the business by exploiting the disclosures of the audit report. In fact, despite the growing interest of researchers in the topic of "business failure", much of the existing literature has used accounting ratios to predict why companies are failing. Our results show that the disclosure of the audit report significantly explains the reasons for the failure of the business. Managers, auditors, government, and other users may find audit reporting useful as a tool for predicting job failure.

In 2019, Khorudin et al. analyzed the expertise in the auditor partner industry and audit pricing in the UK. In fact, the mandatory disclosure of a partner's name in the audit reports of British companies began in April 2008. Given that the identity of the auditing partner is now visible to users of financial statements, it can be argued that there may be an incentive to distinguish between the level of collaboration in audit services and the quality of auditing. This study examines whether the auditor's disclosure expertise in the UK is relevant to the expertise of the firm, office or partner. In fact, specialization in the auditing industry is a strategy for differentiating financial services adopted by auditing firms in order to differentiate themselves from competitors in meeting customer demands for better quality financial reporting. It also provides evidence that some of the cost premiums obtained by auditing firms and recorded in the previous literature may be the product of the expertise of an individual auditing partner.

In 2018, Colton and Montago analyzed the unintended consequences of auditors' and executives' disclosure of uncertainty on non-professional investor judgments. Indeed, despite the ability of audit firms to highlight uncertainty and downside risk, we find that disclosure of management of a financial domain does not have a positive EOM effect on investors' willingness to invest unless management provides a broad scope. Our results have important implications for auditors, producers, and users of financial

statements, as we find that auditors are strengthened and management reporting may have unintended consequences for investors' perceptions of management credibility and investment decisions.

In 2017, Hey et al. evaluated the environmental performance audit with the triple emergence of an industrial park in Beijing. In fact, they stated that the objectives of operational auditing in the environmental performance of an industrial park include: 1- Performance appraisal, 2- Identifying opportunities to improve operations, 3- Providing suggested ways to improve operations.

In 2016, Chen et al. analyzed the impact of mandatory disclosure requirements and types of auditor fee disclosure on revenue management in Taiwan. In fact, the Taiwanese authorities amended the disclosure rules for auditor fees three times between 2002 and 2012. In addition, firms that disclose their auditor's fees in the form of individual amounts have lower "accrual-based earnings management" than existing companies in the form of cost range. The general findings are consistent with the notion that increased transparency of auditor fee information is associated with increased auditor independence, and therefore supports Dye's theory (1991).

In 2015, Nilwack and Mills examined and modeled the relationship between project performance auditing based on advanced protocols for the three bottom line results of enterprise project performance. In fact, they stated that auditing helps project managers evaluate the organization's various operations and evaluate its efficiency and effectiveness, identify opportunities to improve operations, and provide management solutions to help management increase economic efficiency in project performance.

In 2014, Bandio et al. designed a model of the relationship between mandatory audit partner rotation, audit market focus, and audit quality based on evidence from China. One of the results of the research is that at a broader level of auditing, i.e. the auditing market, there are broader factors that affect the quality of auditing. For example, the way companies are run is another important factor that facilitates the quality of auditing, especially when it affects environmental conditions and the level of

transparency and ethical behaviors within the organization.

In 2013, Ahmed et al. examined the empirical background on the effects of IFRS application. They focused on the effects of IFRS on investors (value relationship), managers (profit quality and discretionary liabilities), and financial analysts (forecast accuracy). Modifying factors considered include differences in rules, accounting and auditing procedures, and the degree of compliance between local GAAP and IFRS, choice of options (voluntary, non-voluntary), models for value communication, and earnings management metrics and analysts' forecasts. The overall findings of the meta-analysis show that the book value of equity does not increase after the selection of IFRS, while the value relationship of earnings does not increase when evaluated using price models. In addition, voluntary commitments do not reduce employment after IFRS, but the accuracy of analysts' forecasts increases dramatically. By examining the moderating variables, they provide evidence that progress in value for money is evident when a price model is used instead of a profit model. In addition, the model used to calculate liabilities modulates the effect of applying IFRS on discretionary accruals. The relationship between the use of IFRS and accruals is very positive when using the Larker and Richardson 2004 accrual models and the 2008 Gingin and Stolvy accrual models. In addition, the meta-analysis shows that these relationships are not adjusted according to the legal principle of the judiciary, accounting and auditing procedures, or the degree of deviation between GAAP and IFRS.

In 2013, Hey re-examined the combined relationships between internal audit quality, corporate governance, and audit fees by combining more recently published research. The addition of newer research reveals a positive and significant relationship between internal control, corporate governance, and audit fees compared to Hey et al. (2006). This study, conducted with a wider sample of separate studies, provides more reliable meta-analytic findings. Meta-analytic studies focusing on audit and accounting quality include Kinney and Martin (1994), Lin & Huang (2010) and Habib (2012).

In 2012, Habib examined the relationship between non-audit fees and accounting quality

for 45 experimental studies. The concept of accounting quality has several characteristics, including the level of unusual accruals, the ability to provide an acceptable audit opinion, the conservatism of earnings, the restatement of revenues, and the rate of return on earnings. This study shows that non-audit fees and lower accounting quality have a significant positive (negative) relationship with earnings management (ability to provide quality auditing). In addition, the analysis shows that the profit response rate is related to the level of non-audit fees. Overall, the author concludes that non-audit services are associated with reduced accounting quality.

In 2010, Lin and Huang examined the relationship between audit quality and earnings management. The focus of their discussion was four audit characteristics including auditor specialization, tenure, size and independence. Preliminary meta-analytic results show that these characteristics are negatively related to earnings management, while audit independence according to audit earnings does not have a significant effect on earnings management. The authors considered geographical location (US and non-US) as a moderating variable. This modifying variable was tested only for audit scope based on the limited number of studies for the other four audit quality characteristics. The meta-analysis results show that auditor size has a negative and significant relationship with earnings management for research in the United States, while this relationship is significant for research outside the United States in the sense that geographical location modulates the relationship between auditor size and earnings management. In 2010, Lin and Huang examined the relationship between audit committee, board characteristics, and earnings management. The results show that the independence and expertise of the board of directors are related to profit management. There are similar negative relationships between earnings management and independence, size, experience, and number of Audit Committee meetings. Finally, co-ownership between members of the audit committee has a positive effect on earnings management.

In 2008, Zhao et al. identified and examined the relationship between the advantage of an audit

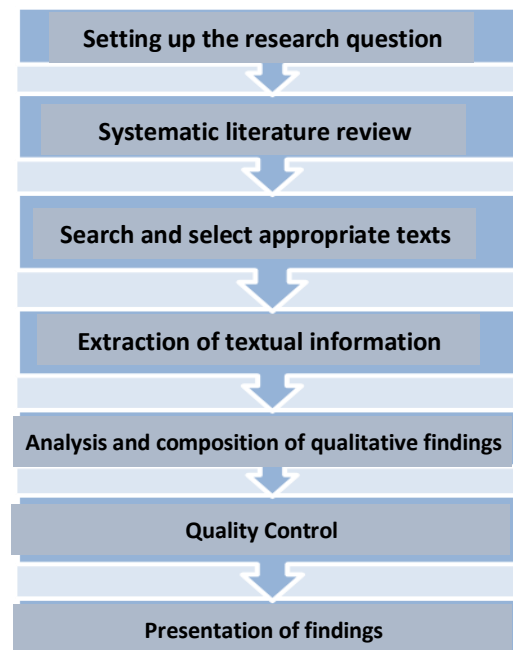
business scale and the quality of an audited asset reduction rate. One of the results of the research is that the factors of the audit business scale each have their own effects that directly or indirectly affect the quality of the audit. In addition, the attitude of the opposing groups and its importance can be effective in the quality of the audit, in case of creating constructive and transparent discussions with the auditors.

In 2007, Lawson et al. designed a model for the role of auditor expertise, perceived audit quality, and audit costs in the local government audit market. One of the results of the research is that the rules and regulations in the local government auditing market are among the factors that can affect the quality of auditing. Especially when rules and regulations create a clear framework and are effectively institutionalized within the audit process. Proper use of the financial reporting framework in promoting and disclosing financial information can affect the quality of the audit as well as the level of perception of external quality by external entities, although these effects are not unilateral.

#### **4- Research method**

The present study is applied in terms of purpose and qualitative in terms of data collection, which has been performed using library research method, secondary and meta-analytical studies and based on the study of information resources in the field of auditing quality. In this study, information analysis was performed in 3 stages. In the first stage, by reviewing the research literature, a list of articles related to this field was prepared. In the second stage, the article abstracts were extracted and articles were categorized. By extracting key elements, the final composition was implemented and analysis and summarization were performed. The meta-analysis method is used in studies mostly based on qualitative analysis. Hypercombination has been used as a suitable method to obtain a comprehensive combination of audit quality factors. To take advantage of this research method, the seven-step method by Sandlowski and Barroso (2007) was utilized (Figure (1)).

Figure (1): Successive steps of the meta-combination method (Sandlowski and Barroso, 2007)



### Research question

The main question of the present study is what are the components of audit quality in Iran? Also, based on the study of previous researches, an in-depth analysis of these factors in the international and national space has been tried in this research and a classification has been presented for them.

### Review of research literature

At this stage, using the research keywords, a systematic search was made of the materials published in various and reputable scientific journals, as well as public sources and sites of reputable foreign and domestic organizations with the aim of determining valid and relevant documents in a timely manner. In order to conduct the research after designing the research question, a systematic search based on the keyword audit quality from the databases including Science Direct, Emerald Insight, MagIran, IranDoc, Noormags, Civilica and SID was performed between 2007 to 2021. Therefore, data collection tools in the first part include databases and computer networks. Related articles are also collected on internet sites with the help of taking notes.

### - Search and selection of appropriate texts

In the search process, various components such as article title, abstract, content, details (author name, year), etc. were considered and articles that were not appropriate to the question and purpose of the research were removed. Criteria for acceptance and rejection of studies included research language, study period, study conditions, study population and type of study. The necessary criteria and characteristics for selecting articles include: 1) registration of research in reputable databases, 2) using audit quality in the relevant research, and 3) providing information in the article and the necessary quality to extract analysis and composition in research. As shown in Figure (2), the number of initial articles for meta-synthesis was more than 260 articles, of which, after reviewing the titles of the indexed articles according to the subject, question, purpose of the research, 220 articles were examined in more detail. The 220 articles were evaluated through the COREQ 32-item index, which is a tool for evaluating the resources reviewed in qualitative methods (Tang et al., 2007). Finally, according to the mentioned criteria, 46 more important articles with higher quality were selected for information extraction as described in Figure (2). Due to the repeated

reviews of the final texts, in the meta-analytical method, the researches were reviewed many times in order to extract the desired information.

In the present study, using content analysis, 46 selected studies were reviewed and their information was extracted as code.

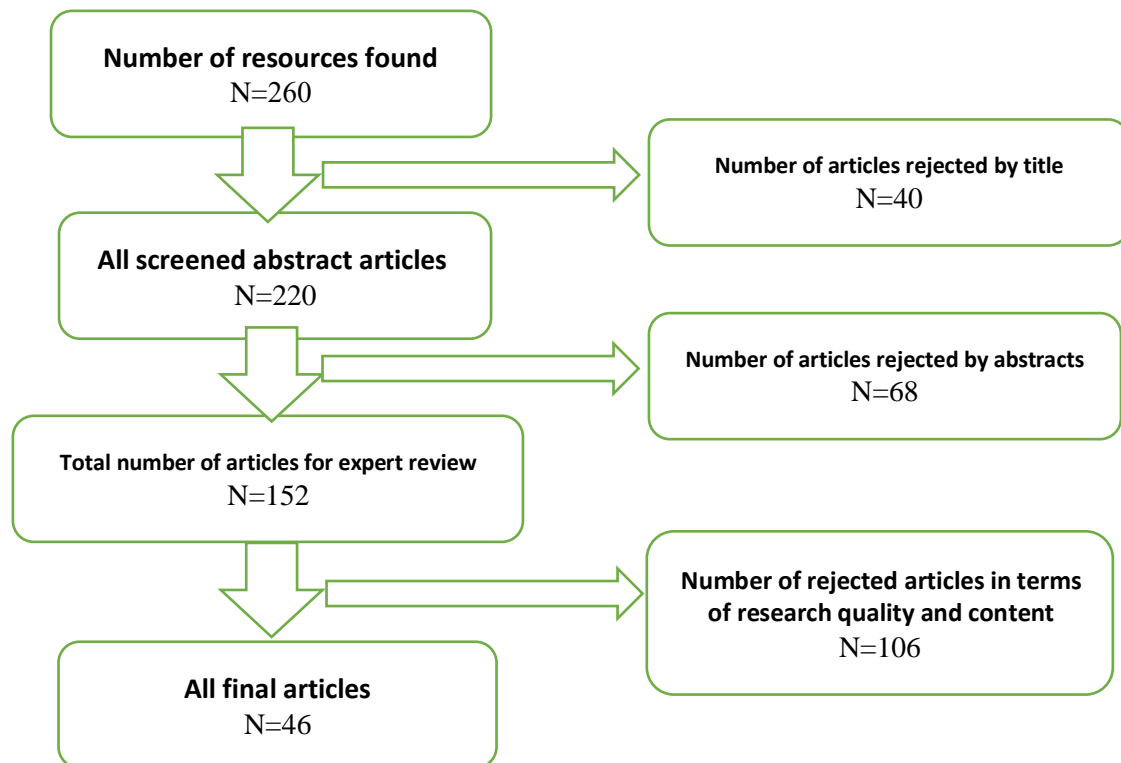


Figure 2: A summary of the screening process to select the final articles

### - Extracting textual information

Selected articles were studied several times in the meta-analysis method in order to obtain the findings of the contents in which the main and initial studies were performed. After collecting and reviewing the required variables, they are classified as semantic units and specific codes. In this article, for the analysis stage and also to present the final meta-analysis findings, the field

analysis method has been used. Context analysis is a method for determining, analyzing, and expressing patterns (contexts) within data that organizes data and describes it in detail, and can even go beyond that and interpret various aspects of the research subject ( Thomas, 2003). According to the studies conducted in the field of audit quality, the identified internal and external researches are presented in Table (1).

Table (1): Information of identified researches on components of audit quality

No.	researchers	Year	No.	researchers	Year
1	Al-Habaseh et al	2021	24	Kurdistan and Rajab Dori	2021
2	Gaussung et al	2021	25	Yazdani	2021
3	Bojan et al	2020	26	Taheri and Sharafati	2020



4	Liu et al	2020	27	Saedi et al	2020
5	Ulrich et al	2019	28	Amin et al	2020
6	Chang et al	2019	29	Maran Jori and Mohammadi	2020
7	Bojan et al	2019	30	Sadat Ghaffari et al	2020
8	Buselp et al	2019	31	Ghaderi et al	2019
9	Dennis et al	2019	32	Javanmiri	2019
10	Izquierdo et al	2019	33	Sayadi	2019
11	Khorudin et al	2019	34	Allah Dini and Chehrzad	2019
12	Calton and Montago	2018	35	Pourqanbari et al	2019
13	Hey and colleagues	2017	36	Arab et al	2019
14	Chen et al	2016	37	Kroki Nejad and Taebi	2019
15	Nilwack and Mills	2015	38	Abdi et al	2019
16	Bandio et al	2014	39	Jaberi	2019
17	Ahmed et al	2013	40	Mousavizadeh and the victim	2018
18	Hey	2013	41	Naderi and Hajjis	2018
19	Habib	2012	42	Bahrami and Tuski	2018
20	Lin and Huang	2010	43	Mostafa Pour et al	2018
21	Zhao et al	2008	44	Mohammadi and Mohammadi	2018
22	Lonson et al	2007	45	Abbaszadeh et al	2017
23	Ali Khani et al	2021	46	Bazrafshan et al	2015

#### - Analysis and composition of qualitative findings

The purpose of meta-analysis is to create a new and integrated interpretation of the findings. At this stage, the researcher searches for new topics that have emerged among the studies. This is called a case study. Once the subject is identified, the researcher provides a classification that best describes the subject (Sandlowski and Barroso, 2007). Finally, after reviewing the theoretical foundations of the research and reviewing the research background, considering the research gap in the

field of analysis of audit quality studies based on topics such as: audit quality, audit costs, company ownership structure, quality of audit services, financial reporting, auditor expertise, audit Committee, Corporate Governance, Transparency of Financial Information, Audit Independence, Fraud and Financial Violations, Internal Audit, Company Internal Control, and Qualitative Research Methodology in Auditing, and Lack of Model to Provide Recommendations for Audit Quality Decision Making, it is possible to realize the innovation

of the present research in bridging the mentioned research gaps.

### **-Quality Control**

In the meta-analysis method, to ensure the quality of research findings, one of the main tools to achieve the highest level of theoretical and practical validity is to use the opinion of experts in confirming and validating the research achievements. In the present study, we provided the extracted concepts to several experts in the field of audit quality. In the data grouping stage, the criteria of previous research were considered as codes and by considering the semantic similarities between the codes, they were integrated and concepts were created. In the final step, to evaluate the quality and ensure reliability, the results were provided to the experts. Kappa coefficient was used to evaluate the reliability of the research. Cohen (1960) invented the kappa formula to calculate the expected agreement (Equation (1)).

$$1) \text{ Kappa} = (p_o - p_e) / (1 - p_e)$$

Where  $P_o$  is the agreement rate observed and  $P_e$  is the expected agreement rate. The kappa value fluctuates between zero and one, and the closer it is to one, the more agreement there is between reviewers. In this paper, the kappa index was calculated to be 0.91, indicating a high agreement among reviewers. In this article, as mentioned, all 46 studies and components included have been approved by experts in terms of quality.

### **- Presentation of findings**

The researcher compiles and organizes the research results based on the research question. In this step, all the results and findings obtained from the previous steps are presented.

## **5- Discussion and conclusion**

One of the most important results of the research entitled "Audit quality in recent years (from 2007 to 2021)" is that, if the results and findings in the outputs of this research are used properly, a comprehensive (due to the review of research related to the field of audit quality) and accurate (due to the use of structural critical thinking

approach to more accurately express the relationships between some concepts in audit quality studies) understanding was achieved. The aftermath of the global financial crisis and other turbulent events in the international economy over the past decade has led to criticism from leading auditing associations on the importance of credible, high-quality financial reporting. They have also re-emphasized the role and importance of the quality of audit services with a new and innovative perspective and in the field of financial reporting, its quality depends on achieving the quality of financial reporting and the audit process. In general, the correctness of each of these cycles was considered as one of the factors in the supply chain of financial reporting. As one of the groups and factors that play a key role in the financial reporting supply chain, we can mention the independent (external) auditor who plays a major role in supporting the quality of financial reporting worldwide, both in the capital market, public sector and private sector. It is very important to pay attention to the existence of legal and regulatory infrastructure for this sector, because the result of all these measures and activities in achieving the objectives set to protect the public interest is only through increasing the quality of audit services. Therefore, considering the nature of audit quality is very important for the International Auditing and Assurance Standards Board (IAASB) and IAASB directly supports the quality of audit services through the development of International Standards on Auditing (ISAs) and the International Standard on Quality Control (ISQC) optimizes the quality of audit services. So that these standards are always considered as a support foundation for high quality auditing. However, it is important that auditing standards be given special attention as one of the components affecting audit quality and as a factor recognized by professional associations and authorities. However, other factors including users 'perceptions, auditors' skills and competencies, regulatory and environmental measures and criteria are known as other factors and other actors influencing the quality of audit services. Because audit texts are constantly evolving, it is essential to keep pace with changes in the business environment, financial reporting standards, and regulations and technology, which is inherently an element of the audit process and is constantly evolving and changing over time. Because otherwise, and

in case of incompatibility and homogenization with changes, it is not possible to achieve audit quality. This means that improvements in each element of audit quality should not prevent further efforts to advance other quality elements. On the other hand, other results and findings of this study can include "meta-analysis of theoretical foundations" to group and display knowledge in the field of audit quality, audit costs, company ownership structure, quality of audit services, financial reporting, auditor expertise, audit committee, corporate governance, transparency of financial information, audit independence, financial fraud and misconduct, internal audit, internal control of the company, and the method of qualitative research in auditing.

Now that we obtained the results, we can offer a strategy for what needs to be implemented to accomplish and perform quality auditing. Overall, these results are an experienced guide to achieving audit quality goals based on past studies. Basically, the issue of audit quality is one of the concepts that is the field of extensive research and due to its great importance, it is very important and decisive for organizations and companies and this research is appropriate to their needs. This research is based on audit quality studies in recent decades. Therefore, the results of this research and the suggestions made based on this research are practical. Considering that in this article, research related to audit quality has been performed in general, it is suggested that this research is implemented in a specific area in a centralized manner. It should be noted that qualitative research with all its advantages is associated with weaknesses such as generalizability and credibility. Therefore, in order to increase the generalizability of this research, it is necessary for researchers to evaluate the proposed model in other similar areas of innovation, research and marketing. Also, the quantitative approach of linear structured equations can be used to evaluate the validity of the model and develop the generalizability of the model findings, and to rank the obtained factors based on multi-criteria decision methods, ANP, fuzzy ANP, Demetel, etc. methods can be used.

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