

RESEARCH THE STRUCTURE AND IMPROVEMENT OF ACCOUNTING AND AUDITING METHODS BASED ON ANALYZING THE COMPANY'S CONSOLIDATED FINANCIAL STATEMENTS

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Abstract

The goal of this research is to look at how a company's consolidated financial statements are prepared and analyzed, as well as the current state of the accounting and auditing organization and how it might be optimized or improved. An in-depth examination of the definition of consolidated financial statements and their significance in reflecting a company's overall financial position and operating results reveals the various interests involved in the consolidation process, as well as the impact of these relationships on audit quality. The current empirical investigation into the structure of accounting audit institutions examines the existing workflow of audit institutions and its limitations, as well as key factors influencing audit quality, such as personnel quality, technical means, and internal control management. As a result, recommendations are given to systematically optimize the accounting and auditing organization, including rational structural adjustments to improve audit independence, openness, and efficiency. A range of particular measures to increase auditing quality are advocated, including the use of data analytics (DA) technology and artificial intelligence (AI) in the auditing process. According to the report, in a changing market context, it is critical to continuously adapt and optimize audit organizational structures to meet the complex and diversified problems provided by corporate consolidation while also promoting the audit profession's continued growth.

Keywords: consolidated financial statements; organization; audit quality; improvement methods; accounting and auditing

Introduction

(i) Background and significance of the study

Mergers and acquisitions (M&A) are a popular business strategy in today's quickly evolving market economy¹. With the acceleration of globalization and increased industry competition, many businesses employ Consolidated Financial Statements Analysis (CFSA) to optimize resource allocation, improve market competitiveness, and realize economies of scale². Auditing plays a vital part in this process, not only because it provides financial transparency, but also because it has a far-reaching impact on the corporate governance structure following the merger. As a result, the study of consolidated financial statement analysis and its impact on accounting and auditing organizations' efficiency is both theoretically and practically relevant.

(ii) Purpose and content of the study

Corporate mergers are becoming increasingly widespread in today's international economy, highlighting the relationship between consolidated financial statement analysis and audit organization. As a result, the purpose of this study is to investigate the impact of consolidated financial statements on the accounting and auditing organization and how it can be improved, as well as to develop an analytical framework based on the SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goal-setting framework³.

This study first clarifies the specific research objectives, i.e., to reveal the challenges and opportunities faced by consolidated financial statements in the auditing process through exhaustive data analysis, and to

provide theoretical and practical guidance for accounting and auditing organizations in the consolidated business environment. Quantitatively, we will ensure the measurability of the research results and strengthen the interpretation of the results through data collection and statistical analysis methods, such as Quantitative Analysis (QA) and Regression Analysis (RA)⁴.

Concept and significance of consolidated financial statements

(i) Definition of consolidated financial statements

Consolidated Financial Statements (CFS) are uniformly formatted statements that disclose the financial situation and operating results of a holding company (Parent Company) and its subsidiaries (Subsidiaries) over a specific period⁵. The primary purpose of this statement is to present a complete and integrated financial viewpoint that reflects the total economic status of the enterprise group rather than just the financial position of a single firm. The key distinction between consolidated financial statements and ordinary financial statements (Standalone Financial Statements) is that the latter only reflect the financial information of a single enterprise and provide no insight into the interactions of the businesses within the group or their contribution to overall performance⁶.

The value of consolidated financial statements should not be underestimated. Its importance in accounting theory can be attributed to the Accrual Basis Principle⁷. This principle demands businesses to record revenues and expenses as they occur for the consoli-

dated financial statements to accurately reflect the company's financial condition and results of operations. Consolidated financial statements allow stakeholders, including investors, creditors, and regulators, to meet their information requirements while making investment decisions. These people are keen to learn the truth about the company's operations and potential prosperity. As a result, consolidated financial statements allow decision-makers to examine the overall financial status of the organization and so impact investment decisions.

(ii) Functions and roles of the consolidated financial statements

Consolidated financial statements are the overall financial statements prepared by the parent firm and its subsidiaries over a specific period. Its primary goal is to give external stakeholders with an overview of the enterprise group's financial status and operating outcomes, allowing investors, creditors, and other stakeholders to conduct in-depth research and decisions. The primary function of consolidated financial statements is shown in the following features.

1. Giving comprehensive information: integrating the financial data of the main firm and all of its subsidiaries to provide users with a more comprehensive and accurate picture of the enterprise group's financial status. After consolidating their statements, stakeholders will be able to assess the group's assets, liabilities, and owners' equity.

2. Supporting decision-making analysis: Consolidated financial statements offer management a comprehensive view of operations, allowing them to better assess various subsidiaries and their impact on the parent firm when making choices.

3. Enhanced transparency: By consolidating financial accounts, firms can increase data transparency and boost public and investor trust in the company.

4. Resource allocation optimization: Consolidated financial statements can reflect the status of enterprise resource allocation, allowing businesses to manage resources more effectively and increase overall efficiency.

One of the most common mathematical formulas used in analyzing consolidated annual financial statements is the consolidated capital turnover ratio, which can be calculated using consolidated sales revenues and consolidated total assets and reflects the efficiency of a company's capital use over time. The formula is expressed as follows.

$$\text{capital turnover ratio} = \frac{\text{Consolidated sales revenue}}{\text{Consolidated total assets}}$$

This formula calculation enables businesses to delve deeper into the function of the consolidated financial statements as well as their resource use.

Analysis of the current status of the accounting and auditing organization

(i) Composition of the organizational structure

In today's complicated financial world, the makeup of the accounting and auditing organization is not only a critical factor influencing audit quality, but it also has implications for business performance optimization. The organizational structure's hierarchy is good, ensuring that diverse functions are successfully coordinated and resources are sensibly distributed, hence increasing audit efficiency.

The primary components of an accounting and auditing organization typically include three levels: top management, middle management, and executive level. Top management is responsible for developing audit strategy and policy, as well as providing advice and direction to the audit process via the Audit Standards and Risk Assessment frameworks⁸. Middle management is responsible for implementing the audit plan, mobilizing and deploying audit staff resources, and ensuring that the audit activity achieves its objectives. This level is in charge of conducting preliminary analyses of audit results to assist senior decision-making. The executive level is the team that oversees the audit process and completes it using specialized methods such as fieldwork, data collection, and analysis.

(ii) Workflow of existing audit bodies

Table 1

Analysis of the current status of the organization for the audit of the consolidated financial statements

Organizational structure	Audit process	Audit quality	Factor
Vertical management	clear-cut hierarchy	Professional qualities and experience	Identify financial risks
	Clear delineation of responsibilities		Judgement
Flat management	Fast feedback	Innovativeness	Adaptable
	Audit flexibility		Technology Application Outlook
Risk assessment		Data integration	Real-time data acquisition
Data collection			Enhancing audit comprehensiveness
Financial Technology Applications			Big data analytics

In today's changing business climate, the value of consolidated financial statements (CFS), which show an organization's entire economic status and financial health, has grown⁹. However, the real reflection of consolidated financial statements is determined not only by the quality of the statements themselves but also by the

efficacy of the Audit Organizational Structure (AOS)¹⁰. In this article, we will examine the current condition of AOS and its impact on the overall audit quality of consolidated financial statements.

In the field of accounting and auditing in China, it is frequently seen that there are vertical management

and flat management of auditing organizations. The former is easy to build a clear hierarchical audit process, which is conducive to a clear division of responsibilities, but also allows the effective allocation of audit resources. The latter, like the "Big Four," can enhance the speed of information feedback, and promote the flexibility of audit work, and adaptation.

Audit organizations' existing processes are complex, with tasks such as risk assessment, information collecting, and on-site auditing. Effective practices can increase efficiency and dependability. When dealing with consolidated financial accounts, it is vital to obtain a thorough grasp of the subsidiaries' operational conditions as well as analyze the credibility of internal controls and financial data. However, the absence of integration of information systems in some audit firms makes it difficult for auditors to access data in real-time, compromising the comprehensiveness and accuracy of audits.

When assessing the aspects that influence audit quality, the audit team's professionalism and experience should not be overlooked. Experienced auditors in the business can better recognize potential financial hazards and misrepresentations and then make proper decisions. Flexibility and innovation in audit thinking are also essential for enhancing audit performance. The use of big data analytics and cloud computing technology in auditing has become increasingly frequent in recent years, as FinTech has grown in popularity. As a result, auditing organizations must continue to use cut-

ting-edge technology to ensure more efficient and reliable data processing. One example is the use of technology such as data mining to perform more accurate trend analysis and risk prediction on historical financial data.

In this paper, we will conduct a thorough study and discussion of the current condition of the organization of consolidated financial statement audits. It is critical to clarify the relationship between organizational structure and workflow, as well as to focus on improving team quality and foresight in technology application, as these are critical to improving the efficiency and quality of the auditing institution's work. Simultaneously, for current challenges and bottlenecks, make specific proposals for improvement to assist the ongoing development of China's audit sector by providing theoretical support and practical guidance.

(iii) Factors affecting audit quality

When studying audit quality, it is vital to delve deeply into the fundamental aspects influencing its quality across a variety of dimensions. These elements include not only regulatory policies, auditors' professional ability, and the degree of standardization of the audit process, but also the interconnections between the process of creating company consolidated financial statements and the general business environment. In the following sections, we will thoroughly examine the elements influencing audit quality and their interrelationships, drawing on data from our own research and business scenarios.

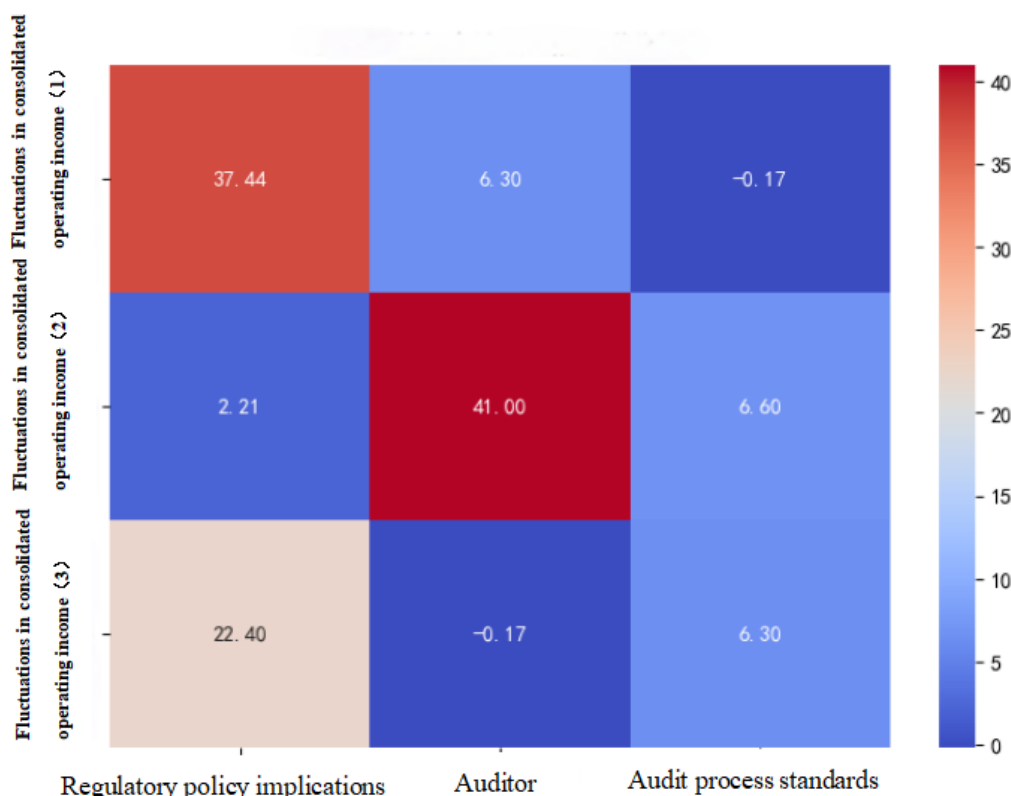


Figure 1. Correlation analysis between regulatory policy and audit quality

Note: Take the listed companies of Shanghai and Shenzhen A shares from 2018 to 2023 as samples

First, the impact of regulatory rules on audit quality is significant. The legislative framework and standards set by regulators have a direct impact on the transparency and authenticity of a company's consolidated

financial statements. By analyzing the data, we discovered that the various fluctuations in the recent year-on-year growth rate of consolidated operating income, such as the difference between 37.44% and 6.3%, more

or less reflect the different coping strategies of companies in the process of consolidated auditing in response to market changes and regulatory policy adjustments. Such variances may reflect disparities in the auditing

organization's ability to adjust in the face of changing rules, as well as potential regulatory compliance issues during audit execution.

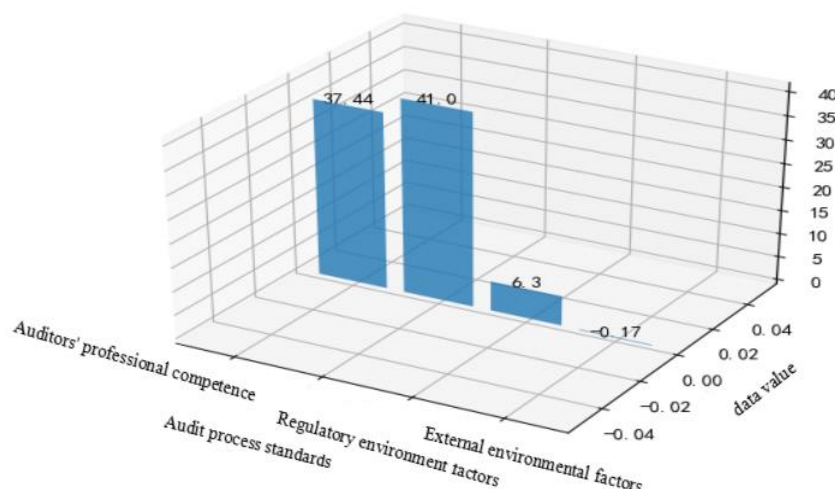


Figure 2. Impact of auditors' professional competence on audit quality

Note: Take the listed companies of Shanghai and Shenzhen A shares from 2018 to 2023 as samples

Second, the professional competence of auditors is an important aspect of establishing audit quality. Auditors must have strong accounting expertise, a comprehension of laws and regulations, and great business insight to succeed in today's ever-changing corporate environment. In our survey data, considerable swings in the year-on-year growth rate of consolidated operating

income, such as outliers of -0.17% and 2.21%, may indicate weaknesses in auditors' risk identification and assessment processes. An audit team that can successfully predict and assess the causes of these changes, and then make sensible decisions, would undoubtedly improve the overall credibility and efficacy of the audit.

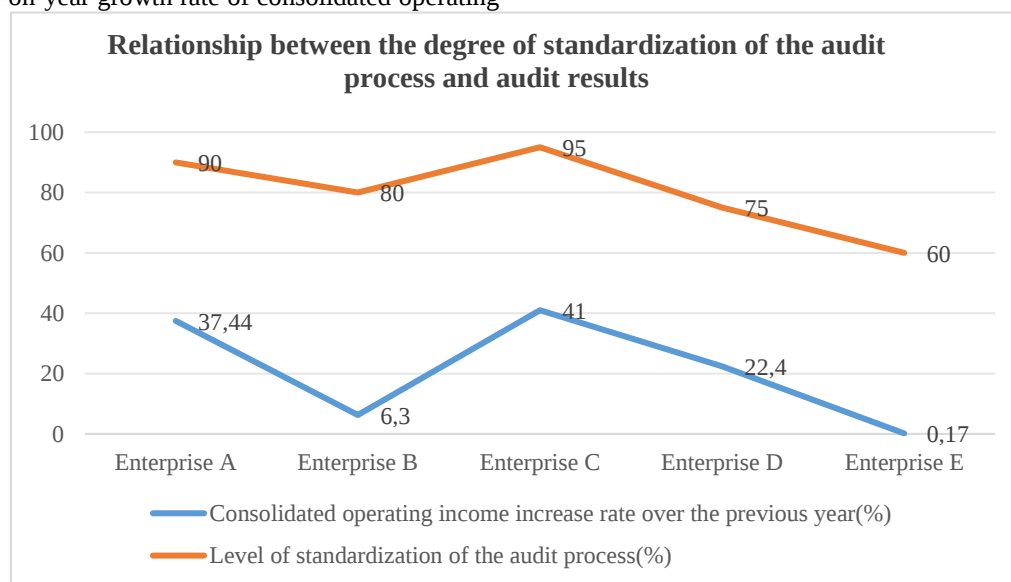


Figure 3. Relationship between the degree of standardization of the audit process and audit results

Note: Take the listed companies of Shanghai and Shenzhen A shares from 2018 to 2023 as samples

Third, the degree of uniformity of the audit process is a key component in determining audit quality. Standard Operating Procedures (SOPs) for auditing consolidated financial statements can reduce human errors while improving data processing uniformity and reliability¹¹. Combined with our data, organizations with a 41% CAGR in consolidated operating revenues

are more likely to standardize and automate their internal audit processes to assure data quality and consistency. Other year-on-year consolidated operational income growth rates, such as 6.6% or 22.4%, may represent the degree and efficacy of standardization used in different firms' audit processes, hence affecting the trustworthiness of audit reports.

An enterprise's internal and external environments can both have a substantial impact on audit quality. For example, increased market rivalry and economic swings may cause adjustments to an enterprise's financial strategy, which may be shown in the consolidated financial statements as irregular variations in revenue growth. By analyzing in-depth audit data from various companies, we can discover that some enterprises have experienced negative growth (e.g., -0.17%) in their consolidated revenue growth during economic downturns or market volatility, and these changes are frequently linked to external market shocks and the timeliness and accuracy of internal decision-making.

The elements influencing audit quality are not restricted to the traditional scope of auditing but must be thoroughly examined in the context of the complex business environment confronting firms' consolidated financial statements. Through extensive data interpretation, we discovered that regulatory policies, auditor professional competency, audit process standardization, and the company's general business environment all interact to influence audit quality. This complete perspective serves as a solid foundation for proposing future improvement approaches and pointing the way forward for optimizing the audit process and improving audit quality.

IV. Improvements to optimize the organization of the accounting and auditing organization

(i) Proposed organizational restructuring Numerous reasons in today's accounting and auditing companies contribute to low audit efficiency and quality, which have a substantial impact on the credibility of the company's consolidated financial statements and decision support. As a result, it is critical to make the necessary changes and improvements to the current structure. In this case, the organizational change model, particularly Cottle's eight-step method of change, must be employed as a theoretical foundation for transformation.

Recognizing the flaws in the current organizational structure is the first step toward optimization. Many audit companies today have unclear duties, poor information communication, and unreasonable resource allocation, making the audit process difficult to perform efficiently and accurately. For example, when confronted with complex cross-border merger audits, certain small audit teams are unable to rely on full competence, limiting the audit's scope and depth. To achieve the best allocation and usage of audit resources, it is recommended to implement a professional team system in the organizational structure, such as separating the audit team into user sector, financial analysis, and compliance audit teams¹².

(ii) Specific measures to improve audit quality

In today's complex economic environment, the quality of financial audits is a critical component of sustainable development. In this regard, the optimization of the accounting and auditing organization is critical, and particular techniques to increase audit quality are the key to achieving this objective. Implementing the PDCA cycle (Plan-Do-Check-Act) management approach has the potential to significantly increase audit quality.

In the "planning" phase, the business must create a clear audit policy and methodology. This procedure entails reviewing all aspects of audit standards and business requirements. Based on this, businesses can use the Risk-Based Audit Approach (RBA) to identify essential business areas and potential risks¹³. This strategy not only focuses on high-risk areas but also guarantees that resources are distributed effectively, improving the audit's professionalism and efficiency.

(iii) Improvement strategies incorporating technological tools

In today's business context, financial audits face increasingly complex issues, prompting companies to examine ways to optimize their accounting and auditing teams through the use of developing technological approaches. The rise of data analytics tools, artificial intelligence (AI), and blockchain technology has aided in the enhancement of audit effectiveness, making the audit process more efficient and accurate.

Data Analytics Tools (DATs) can automate the analysis of large volumes of financial data using powerful algorithms and statistical models¹⁴. This technique helps identify potential financial concerns and enables traditional audits to transition from sample audits to comprehensive audits. Auditors, for example, can use big data analytics to monitor financial activities in real-time. Fraud can be discovered quickly by identifying patterns and abnormalities. The application of such technologies increases audit efficiency, reliability, and scientific decision-making.

Artificial intelligence (AI) is rapidly being applied in the auditing profession¹⁴. AI technology may use machine learning to examine previous audit data, generate audit reports automatically, and provide useful insights. For example, AI using Natural Language Processing (NLP) can examine complex contract wording and transaction records to discover potential compliance risks and legal difficulties. This new technique not only significantly saves the time spent on human audits, but it also improves the ability to discover hidden hazards during audits and ensures overall audit quality.

V. Conclusion

In today's rapidly changing market economy, analyzing consolidated financial statements during the company merger and acquisition process is crucial for optimizing resource allocation and increasing competitiveness. Auditing, as a critical component, ensures financial transparency and influences corporate governance structure. Auditors must adapt to the changing auditing environment to improve quality and efficiency. PEST analysis demonstrates how political, economic, social, and technological elements interact to determine consolidated statement analysis and auditing methods. Consolidated statements are critical for satisfying the information needs of stakeholders, and standards such as IFRS must be followed to ensure data veracity. Audit quality is influenced by auditors' professional competence, regulatory policy rigor, and audit process uniformity, making it vital to maximize audit structures and team skills. Based on Cottle's eight-step change process, this study recommends programs to increase efficiency by identifying flaws, facilitating information flow, and creating incentives. Modern technologies like

data analytics, artificial intelligence, and blockchain can improve audit efficiency and accuracy, data processing, risk identification and monitoring, and reliability. Improvement frameworks and targeted recommendations are intended to continuously improve audit quality. Consolidated statement analysis and audit architecture enhancements assist businesses in succeeding in complicated financial contexts, maintaining financial openness and management discipline, and influencing company reputation, investor trust, and stakeholder decision-making. This work addresses a vacuum in the literature, offers theoretical support and methodological direction for academic research and industry practice, and fosters long-term business development.

References:

1. Liu Xinchun. Empirical Analysis of Financial Statement Fraud of Listed Companies Based on Logistic Regression and Random Forest Algorithm[J]. *Journal of Mathematics*, vol.1.2021(2), pp.1-9. <https://doi.org/10.1155/2021/9241338>
2. Mohammed Muneerali Thottoli. The relevance of compliance audit on companies' compliance with disclosure guidelines of financial statements[J]. *Journal of Investment Compliance*, 2021, 22(2), pp.137-150.
3. Carini Cristian, Teodori Claudio. Debate: Public sector consolidated financial statements-the hybrid approach[J]. *Public Money Management*, 2021, 41(6), pp.432-433.
4. Retno Wardhani, Agung Soedibyo. Auditing Financial Statements during Covid-19 Outbreak: Case Study in ABC Indonesian Public Accounting Firm[A]. *Proceedings of the 4th International Conference on Economics, Business and Economic Education Science, ICE-BEES*. 2022. <http://dx.doi.org/10.4108/eai.27-7-2021.2316905>
5. Zhan Ximing, Zhao Mengying, Yan Lijuan. An Empirical Study on the Influence of Consolidated Financial Statement's Amplification Effect on Audit Fees[J]. *Discrete Dynamics in Nature and Society*, 2022(8), pp.1-11.
6. Wang Dongliang. The Application of Grey Relational Analysis in the Evaluation of Financial Auditing Effect and Improvement[J]. *Mobile Information Systems*, 2022(1), pp.1-6.
7. Chen Donger. Predicting Accounting Fraud in Publicly Traded Chinese Firms via A PCA-RF Method[A]. *CSIEDE 2022, ACSR 103*, 2022, pp.739-748.
8. Abin Deepa, Thepade Sudeep D. Improved shadow suppression with the amalgamation of AGWCD and exemplar-based inpainting method[J]. *Intelligent Fuzzy Systems*, 2022, 43(3), pp.2907-2919.
9. Agrizzi Dila, Soobaroyen Teerooven, Alsalloom Abeer. Spatiality and accounting: the case of female segregation in audit firms[J]. *Accounting, Organizations and Society*, 2021, Vol.93, pp.1-17. <https://doi.org/10.1016/j.aos.2021.101238>
10. Sun Jinghui, Li Liuchuang, Qi Baolei. Financial statement comparability and audit pricing[J]. *Accounting Finance*, 2022, 62(5), pp.4631-4661.
11. Deng Ying, Bowrey Graham, Jones Greg. Exploring Changing Requirements of Financial Statement Audit Reports via a Morphogenetic Approach[J]. *The Australasian Accounting Business and Finance Journal*, 2021, 15(2), pp.38-55.
12. Askarova Dilorom Khadjimuratovna. Improvement ways of wages accounting and audit[J]. *Asian Journal of Research in Business Economics and Management*, 2021, 11(10), pp.33-39.
13. Leuz Christian. Towards a design-based approach to accounting research [J]. *Journal of Accounting and Economics*, 2022, 74(2-3), p.1-29. <https://doi.org/10.1016/j.jacceco.2022.101550>
14. Rep Ana. Notes to the Financial Statements: Current State and Improvement[J]. *Business Systems Research Journal*, 2021, 12(2), pp. 60-78.
15. Bi Tian. Research on auditing method of financial budget statement based on cluster analysis algorithm[A]. *Proceedings of the International Conference on Mathematics, Modeling, and Computer Science*, 2023, vol.12625, pp.12625X1-12625X5. <https://doi.org/10.1117/12.2670407>