

Research on Pathways to Enhancing the Effectiveness of Internal Control in Universities from the Perspective of Financial and Accounting Supervision

Limin Cheng

School of Economics and Management, Shanghai University of Political Science and Law,
Shanghai 201701, China

Abstract

Amid the national efforts to establish a robust financial and accounting supervision system and deepen comprehensive reforms in education, internal control serves as a pivotal mechanism for universities to standardize economic activities, mitigate financial risks, and enhance governance capabilities. Its effectiveness directly impacts institutional operations and long-term development. Currently, Chinese universities face challenges in implementing internal controls, including inadequate supervisory environments, incomplete regulatory frameworks, insufficient risk management capacities, poor coordination among oversight bodies, and underdeveloped digital infrastructure-all of which hinder optimal control efficacy. This study examines the intrinsic relationship between financial accounting supervision and university internal control systems, considering institutions' characteristics as non-profit organizations with diversified funding sources and complex operational structures. It systematically identifies practical issues in current internal control practices and proposes actionable solutions-including optimizing supervisory environments, refining regulatory frameworks, strengthening risk assessment, enhancing collaborative oversight, advancing digital transformation, and cultivating specialized talent teams-to improve control effectiveness. These recommendations aim to provide theoretical foundations and practical guidance for universities in establishing robust internal control systems, complying with accounting supervision requirements, and achieving modernized governance capabilities.

Keywords

Financial and Accounting Supervision; Higher Education Institutions; Internal Control; Risk Prevention and Control; Information Technology Development.

1. Introduction

As China's higher education sector enters a new phase of high-quality development, universities have continuously expanded their operational scale, seen growing total funding allocations, and experienced increasing diversity in financial activities. The convergence of funds from multiple sources-including government grants, tuition revenues, social donations, research funding, and profits from university-affiliated enterprises-has led to expanded operational areas such as campus infrastructure construction, material procurement, contract management, logistical services, and project implementation, significantly intensifying pressures on university financial management and risk prevention. During this period, the state has consistently strengthened financial oversight and internal control mechanisms in administrative and public institutions, issuing a series of policy documents to clarify operational requirements. In 2012, the Ministry of Finance released the *Internal Control Standards for Administrative and Public Institutions (Trial)*, formally integrating internal

control into daily management practices. In 2016, the Ministry of Education issued the *Internal Control Guidelines for Economic Activities at Universities Under Its Direct Administration (Trial)*, refining internal control standards tailored to university-specific operations. In 2023, the General Office of the Central Committee of the Communist Party of China and the State Council jointly issued the *Opinions on Further Strengthening Financial Supervision*, explicitly incorporating financial oversight into the national supervision framework and emphasizing comprehensive, routine monitoring based on internal controls (Xu Yude, 2023).

As public institutions classified under Category II of public welfare organizations, higher education institutions possess three core functions: education, scientific research, and social services, which distinguish them from enterprises and conventional administrative bodies. Consequently, their internal control frameworks cannot be directly replicated using standard models. For a long time, many universities have exhibited a mindset that prioritizes teaching and research over internal management, emphasizes service provision while neglecting supervision and control mechanisms. Common issues include superficially implemented internal controls, inadequate enforcement of regulations, and evident risk vulnerabilities (Li Jing, 2023). Amid the comprehensive advancement of financial accounting oversight, leveraging its supervisory, regulatory, and guiding capabilities to address internal control deficiencies, enhance operational effectiveness, and prevent risks such as financial fraud, asset loss, and improper expenditures has become a critical challenge in university governance. Under these circumstances, investigating strategies for improving internal controls in higher education institutions from the perspective of financial accounting oversight holds significant practical relevance.

Current research on internal control in Chinese universities is quite substantial; however, studies that deeply integrate financial accounting supervision with internal control and conduct systematic analyses based on their interrelationship remain limited. This article clarifies the logical relationship between financial accounting supervision and internal control in higher education institutions, identifies key challenges in internal control tailored to university operational characteristics, proposes improvement strategies aligned with supervisory requirements, further advances theoretical research in internal control and financial accounting supervision for administrative and public institutions, strengthens the theoretical framework of university governance, and provides valuable insights for future academic investigations.

2. Literature Review

(1) Relevant Foreign Research

1) Research on International Internal Control Theories

Modern internal control theory originated in the West, with the series of frameworks developed by the COSO Committee serving as the core theoretical foundation for internal control development in global public institutions and universities (COSO, 2013). The 1992 Internal Control – Integrated Framework identified five key elements-control environment, risk assessment, control activities, information communication, and internal oversight-which established the fundamental structure of an internal control system. The 2017 COSO ERM Risk Management Framework further integrated risk management with internal controls, emphasizing comprehensive risk anticipation and dynamic governance throughout the entire process, thereby becoming the primary theoretical tool for university governance abroad (Piyachat Thongpaeng, 2025). The Western academic community widely recognizes that internal control constitutes a systematic framework enabling organizations to mitigate risks and ensure compliant resource utilization; internal control in public sectors must be distinguished from that in profit-oriented enterprises, with the safety of public funds and fiscal

transparency as central objectives (Ahrens & Chapman, 2006). Rittenberg & Covaleski (2001) emphasized that administrative and public institutions should leverage internal controls to establish accountability mechanisms and enhance service quality and efficiency through internal oversight-a perspective extensively adopted in university management practices across Europe and America .

2) Research on Internal Control Practices in Foreign Universities

Universities in Europe, North America, Southeast Asia, and other regions have established comprehensive practical frameworks by integrating internal control with budget management, performance evaluation, and third-party audits through well-developed public governance approaches. Agyemang & Broadbent (2015) emphasize that university internal control constitutes not merely accounting management but a holistic system encompassing institutional governance, tailored to the unique operational characteristics of both teaching and research activities. In risk management, international scholars have focused on high-risk areas such as campus infrastructure, procurement processes, and research funding, advocating for dynamic risk assessment models that integrate risk identification throughout operational workflows to enable proactive early warning and real-time monitoring (Alwardat et al., 2015). Grounded in public accountability theory, foreign studies highlight the importance of information transparency and societal oversight, arguing that external disclosure of financial and asset data enhances compliance with internal controls and strengthens public trust in universities (Sandford, 2024). Additionally, universities worldwide prioritize fostering a culture of universal internal control awareness, reducing perceptions of resistance to regulation, and embedding control requirements into daily operational practices, thereby significantly improving regulatory implementation effectiveness.

3) Research on Accounting Supervision Abroad

There is no concept in foreign countries that fully corresponds to China's financial and accounting supervision system; related research is scattered across fields such as fiscal oversight, government accounting regulation, and public accountability. In Europe and America, independent regulatory bodies and legal frameworks serve as the core components of supervisory systems, emphasizing the independence of regulatory authorities and the rule of law (Alt, 2019). Alt and Lassen (2006) conducted empirical studies using OECD countries as samples, demonstrating that a robust fiscal supervision system can curb arbitrary revenue and expenditure practices by governments and public sectors while enhancing fiscal transparency . Arapis and Reitano (2018)' s cross-country comparative study identified three key pillars for sustainable public fiscal supervision: establishment of legal frameworks, institutional autonomy, and information disclosure . Overall, international supervision models primarily rely on market mechanisms, legal constraints, and social oversight, rather than integrating supervision into domestic governance systems-a fundamental distinction from China's political nature and governance framework for financial and accounting supervision. Therefore, their practical experiences can only provide partial reference and should not be directly replicated.

(2) Relevant Domestic Research

1) The Research Context of Financial and Accounting Supervision

Research on financial and accounting supervision in China has evolved from focused oversight of specific operational aspects to comprehensive regulation of public authority. Early studies categorized financial and accounting supervision into two distinct components-fiscal supervision and accounting supervision-with emphasis on fundamental tasks such as account verification and error correction (Xu Yude, 2023). Following its formal integration into the Party and state supervision system in 2020, academic focus underwent a fundamental shift: researchers recognized the political significance and governance value of financial and accounting supervision in the new era, defining its core functions as constraining public power

and standardizing financial practices. After the issuance of the "Opinions on Further Strengthening Financial and Accounting Supervision" by the Central Committee's General Office and the State Council's General Office in 2023, scholars conducted extensive research on the integrated five-element supervision framework and collaborative mechanisms among stakeholders (Liu Minghui, 2026). Digital transformation has emerged as a key trend, with proposals to reform traditional manual supervision methods through big data and artificial intelligence to address limitations of post-event oversight (Wang Yuelong & Zhu Yan, 2022). Additionally, empirical studies have demonstrated that routine financial and accounting supervision effectively curbs non-compliant financial activities and reduces management risks (Chen Dong et al., 2024).

2) Current State of Research on Internal Control in Higher Education Institutions

Following the release of the "Internal Control Standards for Administrative and Public Institutions (Trial)" in 2012, research on internal control in Chinese universities entered a period of rapid development. The academic community was the first to define the concept and implementation frameworks for university internal controls based on their distinctive characteristics-including non-profit nature, diversified funding sources, and complex operational processes (Li Jing, 2023). Problem analysis has remained a central focus of this field; numerous studies have identified common challenges in most domestic universities, such as inadequate internal control environments, incomplete institutional frameworks, insufficient risk assessment mechanisms, vulnerabilities in fund and asset management, and insufficient supervisory coordination (Zhong Chong & Zou Ying, 2024). Addressing these issues, scholars have proposed comprehensive strategies focusing on institutional improvement, role reorganization, and risk prevention. As research progressed, scholars began distinguishing between comprehensive universities, vocational colleges, and private institutions to develop tailored improvement approaches. In the digital era, most researchers identify information silos as a major barrier to effective internal control, advocating for the establishment of unified information platforms to facilitate data sharing (Li Runyu & Yang Rong, 2025).

3) Research on the Integration of Financial Accounting Supervision and Internal Control

In recent years, the integration of financial accounting supervision and internal control has emerged as a cutting-edge trend in university management. Internal control serves as the foundational stage and implementation mechanism for financial accounting activities, while financial accounting supervision ensures the effective enforcement of internal control systems; together they reinforce each other and form a closed-loop management framework (Li Ying & Shi Shuang, 2025). In accordance with policy requirements, it is recommended to establish an integrated internal control and supervision system involving multi-department collaboration under Party leadership (Li Jing, 2023). Using universities as case studies, this research conducts a detailed analysis of existing shortcomings in their integration process and proposes implementation pathways regarding environmental factors, institutional frameworks, and digitalization efforts (Zhong Chong & Zou Ying, 2024). However, current integration studies predominantly focus on macro-level strategies, and actionable solutions tailored to specific operational scenarios require further refinement.

(3) Literature Review

1) Findings from existing research

Through years of exploration, relevant research both domestically and internationally has yielded a wide range of theoretical insights and practical achievements. Theoretically, the Western COSO framework series has laid the foundation for global internal control studies; domestic scholars have clearly defined the connotations, attributes, and roles of financial accounting supervision and internal control in higher education institutions based on national contexts, while elucidating their synergistic mechanisms (Zhou Hua & Dai Deming, 2022).

Practically, international efforts have developed mature approaches to risk management in public institutions, information disclosure, and social oversight; domestic researchers have systematically identified common challenges in university internal controls and, aligning with financial accounting supervision policy directions, proposed comprehensive improvement measures covering systems, personnel, and digitalization to inform practical university practices. Emerging perspectives such as digitalization and collaborative governance continue to be integrated into research, expanding the scope of this field.

2) Limitations of Current Research

Firstly, the delineation of conceptual boundaries remains insufficient. The concurrent use of similar concepts such as financial supervision, fiscal regulation, accounting oversight, and audit supervision is prevalent, while research on practical coordination mechanisms—including role allocation among regulatory bodies, case referral procedures, and joint enforcement actions—remains limited (Liu Minghui, 2026). Secondly, interdisciplinary integration and empirical studies are inadequate. Current research predominantly focuses on single perspectives from accounting or public finance disciplines, with scarce cross-disciplinary studies incorporating law, information technology, and public administration; existing literature mainly provides theoretical frameworks, lacking sufficient large-scale empirical analyses, long-term tracking studies, or in-depth case examinations, making general recommendations ineffective for meeting the specific needs of different types of universities. Thirdly, digitalization research remains superficial: while many studies advocate leveraging intelligent technologies to enhance supervision and internal controls, investigations into implementation mechanisms—including platform architectures, data standards, algorithm design, and data security—are scarce (Wang Yuelong & Zhu Yan, 2022). Fourthly, there is a lack of research on adapting international best practices to China's university management systems and Party-building requirements, hindering effective integration of advanced foreign approaches.

Given the limitations of existing research and the practical needs of contemporary university management, conducting a systematic study on enhancing the effectiveness of internal controls in higher education institutions from the perspective of financial accounting supervision holds significant theoretical value and practical relevance. Current domestic research on integrating these two approaches remains insufficiently comprehensive, particularly lacking well-developed, practical solutions tailored to university operational contexts. Amid the dual trends of strengthened financial accounting oversight and ongoing reforms in higher education, university financial activities have become increasingly complex, with various financial and management risks emerging frequently. Existing research findings often fail to adequately meet modern management requirements. Building on this foundation, this paper focuses specifically on universities, closely aligning with policy frameworks and operational mechanisms of financial accounting supervision to identify fundamental issues in current internal control systems and develop targeted, actionable optimization strategies. These efforts not only address gaps in existing research and advance theoretical understanding in this field but also provide practical guidance for universities nationwide in strengthening internal controls and implementing effective financial accounting supervision practices, bridging the gap between academic research and real-world application.

3. Relevant Concepts and Their Internal Logical Relationships

(1) The Connotation and Characteristics of Internal Control in Higher Education Institutions

1) General Definition of Internal Control

Internal control constitutes a fundamental institutional framework for modern organizational governance, representing an integrated management system that combines systems, processes, authority and responsibilities, and oversight mechanisms established by organizations to

achieve strategic objectives, standardize internal operations, and mitigate various risks. From an international perspective, the "Internal Control – Integrated Framework" issued by the COSO Committee defines internal control as a set of processes implemented jointly by the board of directors, management, and all employees, designed to provide reasonable assurance regarding operational efficiency, financial reporting reliability, compliance, and other objectives (COSO, 2013). This definition emphasizes the key attributes of internal control: full staff participation, comprehensive coverage, and multi-objective orientation, serving as a universal theoretical foundation for establishing internal control systems across organizations worldwide.

In the realm of administrative and public institutions in China, according to the "Internal Control Standards for Administrative and Public Institutions (Trial)" issued by the Ministry of Finance in 2012, internal control is clearly defined as a set of activities undertaken by an institution to prevent and manage risks associated with economic activities by establishing systems, implementing measures, and following procedures aimed at achieving control objectives. Compared to enterprises, whose primary internal control objective is profitability, internal control in administrative and public institutions places greater emphasis on four core aspects: safeguarding public funds, ensuring the integrity of state-owned assets, ensuring the legality and compliance of economic activities, and delivering efficient public services, thereby embodying both public welfare and regulatory characteristics.

As representative public welfare institutions of Category II, higher education institutions implement internal controls centered on various economic activities within their operational framework. According to policy documents and academic perspectives (Zhong Chong & Zou Ying, 2024), university internal control involves participation from the university's Party committee, management team, functional departments, and all faculty members. It covers the entire spectrum of economic operations—including budget management, fund inflows and outflows, government procurement, project management, asset administration, contract management, and research funding—by enhancing institutional planning, standardizing operational procedures, clarifying role responsibilities, and establishing checks and balances mechanisms. This comprehensive system aims to identify, prevent, and mitigate economic risks, thereby ensuring stable institutional operation and academic advancement. Spanning the entire process of decision-making, execution, and oversight, it serves as a fundamental measure for universities to strengthen governance capabilities and maintain financial discipline.

2) Core Characteristics of Internal Control in Higher Education Institutions

Higher education institutions possess three core functions: talent cultivation, scientific research, and social service. Their operational models, funding structures, and scope of activities differ significantly from those of enterprises and conventional government agencies, thereby establishing distinctive internal control characteristics that set them apart from other organizations.

First, their public welfare nature is pronounced, with control objectives oriented toward social benefits. Higher education institutions do not pursue profit as their operational goal; all their funds and assets are dedicated to public welfare endeavors such as teaching and research. Therefore, internal control in universities is not aimed at maximizing economic profits but rather at rationally allocating public resources, enhancing institutional efficiency, and ensuring the stable development of education. This necessitates that the design and implementation of internal controls balance compliance requirements with service-oriented objectives (Li Jing, 2023).

Secondly, funding sources have become increasingly diversified, significantly increasing the complexity of management. Traditional higher education institutions primarily rely on government allocations and student tuition fees—sources that are singular and subject to well-defined regulations. With the diversification of higher education, the proportion of funds

derived from horizontal research grants, social donations, university-industry collaboration revenues, venue rentals, and income from university-run enterprises has steadily risen (Zhong Chong & Zou Ying, 2024). Variations exist in the application scope, approval procedures, and regulatory requirements for different funding channels; these intertwined systems substantially complicate fund coordination and internal control management.

The third business area encompasses a wide range of activities, with internal control covering a lengthy chain of processes. Beyond fundamental teaching and research operations, universities also handle complex economic tasks such as large-scale infrastructure projects, extensive material procurement, external collaborations, logistical operations, debt management, and contract signing. These business processes are characterized by numerous nodes, involvement of multiple departments, and extended timeframes, necessitating that internal control achieve comprehensive coverage across all business areas, processes, and stages; consequently, the scope and nature of internal control continue to expand.

Fourth, the organizational structure features a complex hierarchy that emphasizes collaborative participation from all members. Higher education institutions establish various components including leadership teams, functional departments, secondary schools, research institutes, and affiliated units, with staff comprising administrative personnel, faculty, researchers, support staff, and external collaborators. Internal control is not solely the responsibility of the finance department but requires coordinated efforts across the entire institution; any deficiency in implementation can undermine the effectiveness of internal controls, making full participation a fundamental principle for internal control in universities.

(2) The Connotation and Functions of Financial and Accounting Supervision

Financial accounting supervision constitutes a vital component of the Party and state's oversight system, serving as a key initiative in the new era to comprehensively advance strict Party governance and standardize order in the financial and economic sectors. In 2023, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the "Opinions on Further Strengthening Financial Accounting Supervision," which defines it from a strategic perspective as a set of measures-comprising supervision, inspection, regulation, and accountability mechanisms-based on laws and regulations for monitoring the fiscal, financial, and accounting activities of state organs, enterprises, institutions, social organizations, and individuals (Xu Yude, 2023). This definition transcends traditional perceptions limited to auditing accounts and verifying invoices, endowing financial accounting supervision with political, governance, and public attributes.

In light of the actual operational context of higher education institutions, financial and accounting supervision specifically refers to the comprehensive oversight conducted by relevant departments-including finance, auditing, discipline inspection, and asset management-under the unified leadership of the Party Committee. This oversight is carried out in accordance with national financial laws and regulations, educational industry standards, and institutional management protocols, covering all financial activities across the university, such as revenue and expenditure management, fund utilization, asset operations, project implementation, and accounting practices. The scope of supervision encompasses all economic transactions, involves multiple stakeholders, and spans the entire lifecycle from pre-event planning through execution to post-event evaluation.

Based on academic research and practical implementation (Zhang Di, 2022), financial accounting supervision in universities primarily encompasses three core functions.

First, the compliance supervision function. This constitutes the most fundamental role of financial and accounting oversight. It involves thoroughly verifying whether various economic activities, accounting treatments, and documentation comply with national financial regulations, requirements from superior authorities, and institutional rules and procedures;

promptly addressing issues such as improper reimbursement claims, fraudulent documents, accounting irregularities, and unauthorized off-book accounts; and upholding the baseline standards of financial compliance.

Second, the risk warning function. Through process review, data analysis, and operational investigation, it identifies potential risks in high-risk areas such as fund utilization, asset management, and project procurement, issues preemptive risk alerts, prompts relevant departments to improve their practices, shifts supervisory oversight to a proactive stage, and transforms error correction from reactive to risk prevention.

Third, the efficacy supervision function. This involves monitoring the utilization efficiency of public resources by overseeing the use of funds such as fiscal allocations, research grants, and special subsidies, identifying issues like idle funds, duplicate expenditures, or resource waste, thereby encouraging universities to optimize resource allocation and enhance the effectiveness of public funding and state-owned asset utilization.

(3) The intrinsic logical relationship between financial accounting supervision and internal control in higher education institutions

In university governance frameworks, financial accounting oversight and internal control are not isolated, separate functions but rather an interdependent, mutually reinforcing, and collaboratively integrated system. Both mechanisms operate through the same economic transaction processes to serve the common goal of standardized university governance, establishing deep synergies across institutional design, operational execution, and developmental advancement (Li Ying & Shi Shuang, 2025).

1) Internal control serves as the foundation and mechanism for financial and accounting supervision.

Internal control establishes the foundational framework for university financial operations, defining the scope of accounting supervision, clarifying operational standards, and streamlining procedural steps – essential prerequisites for effective implementation. Universities utilize internal control systems to specify workflows, approval authorities, role assignments, and regulatory requirements for budget management, revenue/expense processing, procurement, and asset administration. Accounting oversight must rely on these established controls and operational procedures; without them, supervision would lack clear benchmarks and become disorganized and arbitrary (Li Jing, 2023). Furthermore, internal controls employ mechanisms such as segregation of duties, authorization reviews, and process constraints to prevent violations at early stages, significantly reducing supervisory workload. A robust control system enables proactive risk prevention, substantially minimizing post-event violations and shifting supervision focus from corrective measures to process management. Additionally, operational records, accounting documents, and approval logs generated through internal controls serve as primary data sources for verification, evidence collection, and analysis in accounting oversight.

2) Financial and accounting supervision serves as both a guarantee and extension for the effective implementation of internal controls.

A comprehensive internal control system holds no value if merely existing in written form; its actual effectiveness depends on proper implementation, with financial and accounting supervision serving as the primary mechanism for ensuring compliance. In practice, many universities exhibit well-established systems but lax enforcement, primarily due to insufficient oversight (Zhong Chong & Zou Ying, 2024). Through routine measures such as daily reviews, periodic inspections, special audits, and annual audits, financial and accounting supervision continuously monitors how various departments and positions implement internal control systems, promptly identifies deviations-including process circumvention, authority overstepping, and non-compliant operations-and urges corrective actions.

Financial accounting supervision serves as both an evaluator and an optimizer of internal control systems. Through supervisory activities, it enables precise identification of gaps, vulnerabilities, conflicts between provisions, and irrational processes within internal control frameworks, thereby prompting institutions to revise policies, optimize procedures, and enhance control measures. Under the constraints and driving forces of financial accounting supervision, university internal controls have evolved from a single focus on compliance management to a comprehensive approach integrating compliance, risk management, and efficiency considerations, achieving dynamic updates to the internal control system.

3) The two elements work synergistically to enhance university governance.

From a long-term development perspective, the coordinated operation of financial accounting oversight and internal control establishes a closed-loop management system encompassing policy implementation, supervision and inspection, problem rectification, and system optimization, thereby comprehensively enhancing university governance efficiency. Internal control is responsible for setting rules, establishing safeguards, and defining processes, serving as the primary defense mechanism for internal management; financial accounting oversight focuses on monitoring compliance, preventing risks, and holding parties accountable, thereby strengthening regulatory rigor and deterrent effect. The two mechanisms-static and dynamic respectively-complement each other and permeate all economic activities within universities.

In the current context of vigorously advancing the modernization of university governance and strengthening financial discipline, the integration of these two approaches can overcome departmental barriers, consolidate management resources, and effectively mitigate integrity risks, financial risks, and asset risks. Internal control enhances execution through supervision, while supervision achieves comprehensive coverage via internal control; their synergistic effect not only standardizes university financial practices and safeguards state-owned assets but also transforms university management models from extensive to refined approaches, creating a stable and standardized internal environment for core operations such as teaching and research, thereby fostering high-quality development in higher education.

4. Current Status and Challenges in Internal Control Development at Universities

Driven by a series of national policies, most domestic universities have completed the drafting of initial internal control systems, process standardization, and foundational assessments, thereby establishing preliminary internal control frameworks with enhanced awareness of internal controls compared to previous levels. However, in practice, due to factors such as management philosophies, staff competence, technical capabilities, and interdepartmental collaboration, the overall effectiveness of university internal controls remains suboptimal, with various issues being notably evident. From the perspective of financial and accounting oversight, these problems can be categorized into six major types.

(1) The internal control environment is weak, with severe insufficient awareness of internal controls among all staff.

The internal control environment, serving as the foundation for the operation of the internal control system, encompasses management philosophies, organizational culture, job assignments, and staff awareness. Currently, most universities' internal control environments suffer from deficiencies, which constitutes the primary factor hindering effective implementation of internal controls.

1) Uneven emphasis from management and cognitive biases exist.

Some university administrators view internal control solely as an internal management function of the finance department, mistakenly believing it merely involves expense

reimbursement reviews and account reconciliation, while overlooking its critical role across all business areas including infrastructure development, procurement, contracts, and asset management. In daily operations, they prioritize teaching and research activities over internal control and financial oversight, lacking comprehensive planning for establishing internal control frameworks, implementing regulations, and addressing identified issues, resulting in insufficient momentum for internal control development from top management down through all levels.

2) Grassroots faculty members hold limited understanding and exhibit resistance attitudes.

Many faculty and staff members lack a sufficient understanding of the value of internal control, viewing it merely as a set of rules governing their own behavior and perceiving stringent process reviews, documentation requirements, and authorization approvals as increasing operational complexity. During business operations, they deliberately bypass procedures, streamline formalities, adopt a passive attitude toward internal control regulations, and even engage in fraudulent practices or perfunctory actions, thereby hindering the effective implementation of internal control systems.

3) Lack of internal control culture and inadequate publicity guidance

For a long time, higher education institutions have primarily focused on academic culture and campus culture, while the development of compliance culture, internal control culture, and risk management culture has lagged behind. The frequency of specialized training sessions, warning education programs, and knowledge dissemination activities on internal controls, financial regulations, and risk prevention remains extremely low; consequently, an environment where everyone emphasizes compliance and adheres to established procedures has not yet been established among all faculty and students. Internal control practices remain confined to policy documents and have not been integrated into daily work routines.

4) The job structure is unreasonable, and the division of authority and responsibilities is unclear.

Some organizations suffer from overlapping job responsibilities, unclear authority boundaries, and failure to separate incompatible positions. For instance, in certain small procurement tasks, the duties of handling, reviewing, and accepting goods are often performed by the same individual; in fund management, the checks and balances between the cashier and accounting roles are weakened. This confusion between job authorities and responsibilities directly renders internal control mechanisms ineffective and poses significant obstacles to financial and accounting oversight.

(2) The internal control system is inadequate, with deficiencies in both updating and implementation.

As the primary framework for internal control, university internal control systems currently suffer from four major issues: structural deficiencies, disorganized coordination, slow updates, and lax implementation.

1) There are gaps and overlaps in the institutional framework, with a lack of comprehensive coordination.

Various functional departments within universities formulate their own management regulations solely based on their specific operational needs, without implementing a unified university-wide planning framework. Some high-frequency operations lack formal written policies and rely instead on traditional practices or verbal agreements; other operations face redundant regulatory constraints with conflicting provisions. For instance, the funding management regulations established by research institutions differ from those of the finance department regarding scope and terminology, while asset inventory standards set by the asset management department diverge from financial accounting rules, leaving staff uncertain about how to proceed when handling related tasks.

2) The institutional updates are not timely, resulting in insufficient adaptability.

National fiscal policies, government procurement regulations, and research funding management rules are constantly evolving. However, many universities have long relied on outdated versions of their internal control systems without timely revisions to align with new policies, operational developments, and emerging risks. For emerging activities-such as university-industry collaborations, online service fees, and the commercialization of research outcomes-there is a lack of corresponding internal control mechanisms, resulting in regulatory gaps.

3) The implementation of regulations is lax and lacks sufficient rigidity; there are insufficient binding constraints.

The institutional frameworks of some universities are relatively well-established, yet in practice, personal considerations often override established rules. Regarding issues such as excessive reimbursement claims, incomplete documentation, or missing procedures, financial staff often fail to reject these requests due to considerations of personal relationships; furthermore, there is a lack of clear accountability mechanisms for violations, and the penalties imposed are minimal, rendering internal control systems virtually ineffective and undermining the institutional foundation for financial oversight.

(3) Lack of a risk assessment system and weak risk prevention and control capabilities

Risk identification, risk assessment, and risk management constitute the core components of internal control and are essential for financial and accounting supervision to achieve proactive early warning. Currently, most domestic universities have not established a scientific and sustained risk evaluation mechanism.

1) No systematic risk assessment mechanism has been established

Most universities have not established dedicated risk assessment teams nor developed comprehensive risk evaluation processes covering all operational areas. Risk assessments are conducted only sporadically during external inspections or audit visits, resulting in superficial evaluations that fail to integrate routine risk screening across key domains such as budgeting, revenue and expenditure management, procurement, infrastructure development, contracts, and asset management.

2) Incomplete risk identification and inadequate control in key areas

Higher education institutions face various operational risks in their business activities, including financial risks, procurement-related risks, infrastructure project risks, contract default risks, risks of loss of state-owned assets, and debt risks. However, universities typically focus solely on risks related to fund inflows and outflows, while neglecting high-risk areas such as infrastructure development, procurement, and external collaborations, making it difficult to accurately identify potential hazards. Even when engaging third-party organizations to produce risk assessment reports, some institutions treat these reports merely as documentation for compliance inspections rather than using them to enhance internal control processes.

3) Lack of risk classification and early warning mechanisms

The risk levels were not classified based on the probability of occurrence and impact severity, nor were risk registries or risk maps established. When risk signs emerge, early warnings and timely interventions are difficult to implement; remedial actions are typically initiated only after violations or asset deterioration occur, leaving risk prevention entirely reactive.

(4) Significant loopholes exist in fund and asset management, leading to ineffective control over core operations.

Funds and state-owned assets constitute the primary economic resources of universities and serve as the core management objects for internal control and financial oversight; currently, the management challenges in these two areas are particularly pronounced.

1) The fund management system is inadequate, and revenue and expenditure control lacks standardization.

Higher education institutions have established rigorous management measures for special funds (special fiscal funds and special research funds), but lack detailed regulations for routine working capital. Fund expenditures are often arbitrary, budget execution faces insufficient constraints, and issues such as overspending and fund idleness or waste frequently occur. The procedures for using zero-balance accounts and dedicated accounts are unclear; funds from different sources are sometimes deposited and utilized together; non-tax revenues are not remitted to the treasury in a timely manner as required, which violates relevant financial management regulations.

2) The asset management system is outdated, with severe discrepancies between recorded accounts and actual assets.

Most universities have not implemented a system of regular inventory checks and periodic spot inspections for fixed assets. Both financial and asset management departments exhibit a weak awareness of the importance of asset auditing, resulting in prolonged periods without conducting on-site inventories. The entire lifecycle of asset acquisition, utilization, depreciation, and disposal lacks proper tracking and documentation. During operation, fixed assets undergo depreciation and wear and tear; however, some financial staff fail to recognize depreciation or update accounting records in accordance with accounting standards. After assets are retired, transferred, or disposed of, the financial system does not promptly adjust their book values, leading to significant discrepancies between recorded asset values and actual conditions. Higher education institutions typically operate separate financial and fixed asset management systems that operate independently without data interoperability. Following asset transactions, while the financial system completes accounting adjustments, the asset management system fails to update its information accordingly, causing growing data inconsistencies between the two systems and compromising the security of state-owned assets.

(5) The supervision system is fragmented, with insufficient coordination among departments. The supervisory bodies within universities encompass multiple departments, including finance, auditing, disciplinary inspection and supervision, asset management, academic affairs, and research. However, these supervisory forces remain fragmented and lack cohesion in their regulatory efforts, which is the primary factor contributing to the low effectiveness of financial and accounting oversight.

When formulating regulations and conducting operations, various functional departments focus solely on their own responsibilities, resulting in inadequate interdepartmental communication. The business processes of departments such as research, procurement, and logistics are disconnected from financial oversight requirements, leading to poor process integration and gaps in the internal control chain. Financial supervision, internal auditing, and disciplinary inspection constitute the three primary supervisory mechanisms in universities; however, they have long operated independently. Financial supervision primarily focuses on reviewing daily revenues and expenditures, covering a broad scope but lacking penalty authority, thus yielding limited deterrent effects. Internal auditing emphasizes post-event special audits, which suffer from poor timeliness and struggle to achieve process control. Disciplinary inspection mainly deals with investigating violations of discipline and laws, often relying passively on evidence collection and intervening only after issues become apparent. These three supervisory mechanisms are only temporarily deployed during inspections or

special governance campaigns, without establishing a sustained system for information sharing, case referral, or joint inspections.

The current supervision model in higher education institutions primarily relies on post-event inspections and corrective actions, while lacking proactive risk assessment and real-time process control. By the time multiple violations, asset depreciation, and fund wastage occur, supervisory measures are already implemented, but they can only mitigate losses rather than prevent them. Regarding issues such as inadequate internal control implementation, improper use of funds, and disorganized asset management, most approaches involve verbal notifications and time-bound rectifications, with few instances of public criticism, performance penalty deductions, or disciplinary actions. As a result, the consequences for violations remain minimal, and the authority and seriousness of supervision are insufficient.

(6) Information technology development lags behind, and the implementation of "Internet + supervision" proceeds slowly.

Digital technology serves as the primary tool for enhancing internal control effectiveness and strengthening financial accounting oversight. While university financial management has largely achieved computerization, the level of informatization in financial accounting supervision and internal control remains significantly lagging, with inadequate capabilities in digital governance.

Higher education institutions have achieved intelligentization in fundamental financial tasks such as accounting and fee management; however, financial oversight and internal control verification still rely on manual review of documents and manual data verification. Manual screening not only involves heavy workloads and low efficiency but also frequently leads to omissions and misjudgments, making real-time risk alerts unattainable and limiting supervision to post-event analysis. The financial systems, asset management systems, research management systems, human resources systems, procurement systems, and contract management systems within these institutions operate independently, lacking a unified data platform or standardized data formats. Data formats vary across systems with disconnected interfaces, preventing supervisors from accessing integrated cross-departmental and cross-system data for comprehensive analysis—thus hindering the implementation of big-data-driven risk control and intelligent monitoring. Furthermore, risk control mechanisms are not embedded within information systems, making it impossible to automatically identify abnormal transactions, excessive expenditures, or procedural violations. Consequently, automated risk alerts, notifications, and intervention capabilities remain unavailable, leaving the development of digital internal controls and intelligent supervision mechanisms stagnant.

5. Overall Requirements for the Development of Internal Control Systems in Universities from the Perspective of Financial and Accounting Supervision

In accordance with the "Opinions on Further Strengthening Financial and Accounting Supervision" and relevant policies on internal control development within the education system, and considering the specific circumstances of higher education institutions, the integrated development of internal control and financial accounting supervision in universities during the new era must adhere to four core principles to define its direction and fundamental requirements.

(1) Uphold the Party's overall leadership and strengthen top-level design

Financial accounting supervision has been integrated into the oversight framework of the Party and the state; the development of internal control systems in higher education institutions must adhere to the unified leadership of the Party committee. The Party committee of higher

education institutions bears primary responsibility by incorporating internal control and financial accounting supervision into the institution's overall development plan through top-down strategic planning. A leadership team for financial accounting supervision and internal control, headed by university administrators, should be established to coordinate all functional departments and secondary colleges, clarify the responsibilities and control objectives of personnel at each level, eliminate departmental barriers, ensure full implementation of internal control systems and supervisory mechanisms, and guarantee accurate execution of financial decision-making processes and management regulations.

(2) Uphold supervision in accordance with laws and regulations to strengthen institutional safeguards

All economic activities, internal control processes, and supervisory practices within higher education institutions must be strictly implemented in accordance with national financial laws and regulations as well as educational sector management provisions. In compliance with legal requirements, all internal control systems should be comprehensively reviewed and revised to address deficiencies, eliminate conflicts and gaps, enhance regulatory rigor, conduct oversight inspections and accountability measures based on law, thereby establishing financial discipline as an inviolable boundary and preventing violations of rules or lax enforcement.

(3) Adhere to a problem-oriented approach and implement precise risk management

Starting from the current situation, issues identified through audits, and problems reported during inspections, a comprehensive risk assessment covering all business areas and processes is conducted. School leaders, heads of functional departments, frontline staff, and financial personnel are engaged in joint risk evaluations to identify high-risk areas such as funds, assets, procurement, infrastructure, and contracts, and to establish a risk database and risk map. Tailored strategies are implemented for different categories and levels of risks, with differentiated control measures developed to achieve precise prevention and targeted governance.

(4) Uphold coordinated collaboration to establish an integrated supervision framework

Overcome departmental barriers and establish a regularized work system characterized by horizontal collaboration and vertical interaction. Promote in-depth coordination among relevant departments such as finance, auditing, discipline inspection and supervision, assets management, research, and procurement, and create a working platform for information sharing, clue transfer, joint review, and outcome dissemination. Advance supervisory oversight mechanisms by integrating diverse supervisory resources to ensure seamless coverage across the entire process-before, during, and after events-thereby establishing a comprehensive, multi-tiered, and integrated supervision framework that enhances overall governance efficiency.

6. Pathways for Enhancing the Effectiveness of Internal Control in Universities from the Perspective of Financial and Accounting Supervision

Based on the current challenges and development needs of internal control in universities, this study proposes comprehensive improvement strategies across seven key areas-internal control culture, regulatory frameworks, risk mitigation, fund and asset management, oversight collaboration, digital infrastructure deployment, and talent development-to foster deeper integration between internal control and financial accounting supervision.

(1) Optimize the internal control environment and foster a culture of compliance throughout the organization.

As the foundation, the internal control environment requires comprehensive optimization across three dimensions: management philosophy, cultural development, and role allocation.

Transform management philosophies within university leadership teams. Leaders must fully recognize the critical importance of internal controls and financial oversight for institutional development, incorporating internal control establishment as a core annual priority. Regular specialized meetings should be convened to coordinate tasks, assess risks, and drive corrective actions. Discard the mindset that prioritizes operational efficiency over management excellence, ensuring simultaneous advancement and robustness in both teaching/research activities and internal control mechanisms. Strengthen awareness campaigns to elevate understanding across all staff. Continuously conduct targeted training programs on financial regulations, internal control systems, risk prevention, warning education, and knowledge competitions. Provide management-level training on integrated internal control coordination; staff training on procedural standards and invoice management; and financial personnel training on professional skills. Through illustrative case studies, clarify potential compliance risks, address resistance, and foster a culture of compliant and process-driven operations. Simultaneously enhance financial disclosure transparency and actively embrace supervision from faculty and students.

Conduct rational position planning and implement the separation of incompatible roles. Perform a comprehensive review of all financial operations positions across the institution, clearly defining each role's responsibilities, authorities, and workflow procedures. Strictly enforce the principle of separating incompatible functions by establishing distinct roles for processing, reviewing, approving, verifying, and storing documents, thereby establishing mutual checks and balances among positions to strengthen internal control mechanisms.

(2) Improve the internal control system and strengthen the rigorous enforcement of regulations

The goal is to establish a comprehensive, enforceable, and dynamically updated internal control system across the entire university. The finance department, in collaboration with audit, asset management, procurement, and research departments, will conduct a thorough review of existing financial and administrative regulations. Outdated policies will be phased out, conflicting provisions revised, and gaps in regulations related to emerging operations or weak areas addressed, resulting in a unified, coherent framework that covers all business functions with clear guidelines, procedures, authority, and responsibilities for each activity. Designated personnel will monitor national fiscal policies and new regulations from educational authorities, revising the internal control system annually based on institutional developments and risk dynamics to ensure alignment with external policies and operational needs. Evaluation criteria for policy compliance will be established, integrating implementation performance into departmental and individual annual assessments. For violations such as rule breaches, procedural bypasses, or fraudulent practices, appropriate measures-including public notifications, point deductions, and accountability actions-will be enforced to strengthen compliance and eliminate favoritism-based decision-making.

(3) Establish a comprehensive risk assessment system to achieve proactive risk warning.

Establish a long-term risk assessment and prevention system to shift the focus of internal control and financial supervision forward. Form a specialized risk assessment team led by the university's Internal Control Working Group, comprising key personnel from departments such as finance, auditing, assets management, infrastructure, procurement, and disciplinary inspection. This team will be dedicated to identifying, analyzing, and evaluating risks across the entire institution. Conduct comprehensive risk assessments and maintain detailed risk registries and risk maps. Identify risk points at each stage of operational processes (e.g., budgeting, revenue/expense management, procurement, infrastructure development, asset

management, contracts, research funding), analyze their causes, likelihood of occurrence, and potential impact scope, and classify them into three categories: general, significant, or major risks. Maintain dynamic risk registries and maps accordingly. Develop tailored response strategies for different risk levels and types: assign dedicated personnel to monitor and implement full-process controls for major risks; optimize operational procedures and strengthen review mechanisms for routine risks; establish early warning indicators for potential risks. Regularly review risk management effectiveness to continuously refine preventive measures.

(4) Standardize fund and asset management to plug loopholes in core operations.

Funds and assets constitute the primary focus of control; issues identified in these two areas will be addressed individually, with control procedures further refined.

Strengthen the management of invoices and reimbursement processes. Establish standardized requirements for original vouchers and reimbursement attachments; financial staff must rigorously verify the authenticity, legality, and completeness of invoices, and resolutely combat the practice of forging invoices or submitting fraudulent reimbursements. Standardize all expense accounting categories across the institution and organize training sessions for financial personnel to prevent misuse of accounts. Fully implement official credit cards and online transfer settlement systems, define permitted cash usage scenarios and limits, minimize cash transactions as much as possible, and ensure traceability of fund flows. Standardize the management of zero-balance accounts and special-purpose accounts, and strictly comply with regulations regarding the remittance of non-tax revenues. Distinguish between special funds and general working capital; establish comprehensive procedures covering budgeting, execution, and performance evaluation for daily working capital management, enhance budgetary constraints, eliminate expenditures without budgets or exceeding approved amounts, and reduce instances of fund idleness and waste.

Implement a regular asset inventory mechanism. Develop fixed asset inventory management regulations, adopting quarterly spot checks and annual comprehensive audits conducted jointly by the finance department, asset management department, and user departments during on-site inspections. Upon completion, formal inventory reports shall be issued, with prompt investigation of causes and proper handling of identified surplus or shortage assets in accordance with established procedures. Standardize accounting treatments throughout the entire asset lifecycle: require accounting personnel to calculate depreciation and amortization promptly based on accounting standards; immediately perform financial adjustments upon asset transfers, scrapping, or disposal to ensure accurate financial data. Enhance system interoperability to eliminate information silos by integrating data channels between financial and fixed asset management systems for real-time synchronization. Establish a tiered asset accountability framework adhering to the principle "user is responsible for custody and maintenance," assigning responsibilities down to specific departments, positions, and individuals. When personnel assignments change, complete asset handover procedures and obtain signed confirmation before leaving their posts.

(5) Strengthen multi-departmental collaboration and establish an integrated supervision system

Integrate multiple internal oversight mechanisms to eliminate departmental barriers and establish coordinated supervision efforts. Establish a regular collaborative working system: The disciplinary inspection agency or internal control leadership group shall serve as the lead entity, organizing monthly or quarterly joint meetings on financial accounting supervision and internal control, with participation from all supervisory and operational departments to report issues, share information, exchange experiences, and plan follow-up actions, thereby creating a sustained coordination mechanism. Consolidate supervisory responsibilities to ensure

comprehensive process control: Deeply integrate financial supervision, audit oversight, and disciplinary inspection into the entire business workflow – the finance department handles daily operational controls, the audit department conducts periodic specialized inspections, and the disciplinary inspection department investigates violations and imposes accountability measures, achieving a closed-loop management system encompassing pre-event warnings, in-process monitoring, and post-event accountability. Strengthen the accountability framework to enhance supervisory deterrence: Establish clear penalty standards for various violations; for issues such as inadequate internal control implementation, improper fund utilization, or asset impairment, apply measures ranging from formal interviews and public criticism to performance deductions or disciplinary sanctions based on severity, thereby increasing the cost of non-compliance and reinforcing supervisory authority.

(6) Accelerate informatization development and establish an "Internet + Financial Accounting Supervision" model.

Leveraging digital technologies such as big data, cloud computing, and the Internet of Things, we are driving the digital transformation of internal control and supervision. A unified data platform has been established across the entire university, featuring standardized data protocols and interface specifications that integrate financial, asset management, research, procurement, contract management, human resources, and other operational systems. This eliminates information silos, enables centralized data storage and sharing, and provides robust support for comprehensive oversight and data analysis. An intelligent accounting supervision and internal control system platform has been developed, embedding all key control processes and risk management elements into information systems to facilitate online operations and automated approval workflows. The system features intelligent warning mechanisms that automatically detect anomalies-including irregular reimbursement claims, excessive expenditures, non-compliant procedures, or asset fluctuations-with real-time alerts and automated notifications, marking a shift from manual to automated monitoring. A visual management dashboard has been implemented, providing administrators with clear insights into fund utilization, asset status, risk exposure, and compliance adherence through charts and dashboards, thereby enhancing decision-making support. Additionally, the system integrates with external financial, tax, and government procurement platforms as needed to expand supervisory capabilities.

(7) Strengthen talent development and consolidate human resource support

Human resources serve as the cornerstone for implementing institutional frameworks and applying technological solutions, with efforts focused on three key areas: team development, personnel allocation, and training mechanisms. Dedicated staff should be appointed to optimize job roles, ensuring sufficient personnel in finance, internal control, and oversight positions tailored to institutional scale and operational demands. Internal control coordinators shall be assigned to each secondary college and functional department to oversee internal control awareness campaigns, process coordination, and issue reporting, thereby establishing a university-wide grid-based internal control management system. A tiered, categorized training program should be developed, including regular sessions on financial regulations, internal control systems, IT system operations, risk identification, and audit procedures. Staff should participate in external exchanges to learn from leading institutions' best practices, continuously enhancing professional competencies. Professional ethics cultivation must be strengthened to reinforce ethical standards in practice. The evaluation and incentive mechanisms should be refined by incorporating internal control and accounting supervision performance into staff evaluations, with recognition and rewards granted to individuals and departments demonstrating outstanding achievements to boost motivation and initiative.

7. Conclusion

Amid the dual context of higher education advancing toward high-quality development and the comprehensive establishment of the national financial accounting supervision system, internal control serves as a primary tool for universities to standardize economic activities, mitigate financial risks, safeguard state-owned assets, and enhance governance capabilities, while financial accounting supervision provides crucial support for ensuring the effective implementation of internal controls. Their deep integration and synergistic interaction represent an inevitable trend in university management practices in the contemporary era.

This study reveals that current internal control systems in Chinese universities generally face multiple challenges: inadequate environmental support, incomplete regulatory frameworks, insufficient risk management, significant vulnerabilities in fund and asset management, weak supervision coordination, and lagging digitalization. These issues are exacerbated by traditional management practices, departmental silos, personnel competency gaps, and technological limitations, significantly undermining control effectiveness. In line with accounting supervision policies and the specific context of university development, enhancing internal control efficacy requires a holistic approach rather than isolated improvements. It must adhere to four core principles: Party committee leadership, lawful oversight, targeted problem resolution, and collaborative cooperation. A systematic strategy should be implemented across seven key areas: fostering a culture of internal control, refining institutional mechanisms, establishing risk assessment systems, standardizing core operational procedures, strengthening supervisory collaboration, promoting digital empowerment, and cultivating professional talent pools. This will establish an integrated management framework combining regulations, processes, supervision, technology, and human resources, transforming internal controls from formalities into substantive operational mechanisms.

With continuous advancements in digital technologies, ongoing improvements to the national financial and accounting supervision system, and persistent reforms in higher education, the integration between internal control and financial accounting oversight in universities will further deepen. In the future, higher education institutions must consistently adhere to policy guidelines, continuously refine their internal control systems and supervisory procedures; extensively leverage emerging technologies such as big data and artificial intelligence to achieve comprehensive intelligence and automation in both internal control and supervision; and persistently foster a culture of compliance, making adherence to regulations a spontaneous practice among all faculty and students. Additionally, universities can develop tailored internal control management approaches based on their specific institutional characteristics, enhance the precision of internal controls, and ensure the sustained and stable development of higher education through robust internal control mechanisms and effective financial accounting oversight.

References

- [1] Xu, Y. D. (2023). New accounting supervision regulations leave no cover for accounting misconduct. *Finance and Accounting*, (8), 26.
- [2] Wang, Y. L., & Zhu, Y. (2022). Research on innovation of accounting supervision models in the digital era. *Accounting Communications*, (20), 78–82.
- [3] Zhang, D. (2022). Research on the construction of a risk-oriented integrated mechanism for financial and accounting supervision. *Fiscal Supervision*, (15), 33–37.
- [4] Zhou, H., & Dai, D. M. (2022). Division of labor, collaboration, and historical evolution between audit supervision and financial accounting supervision. *Accounting Research*, (09), 17–25.
- [5] Chen, D., Li, T., & Wang, H. (2024). An empirical study on the constraining effect of accounting supervision on corporate financial behavior. *Audit Research*, (02), 56–64.

- [6] Li, Y., & Shi, S. (2025). The operational logic and development path of financial accounting supervision under the perspective of Chinese-style modernization. *Contemporary Finance & Economics*, (01), 89–96.
- [7] Liu, M. H. (2026). Research on the construction of a practice paradigm for China-specific accounting supervision. *Financial and Economic Issues Research*, (03), 12–20.
- [8] Zhong, C., & Zou, Y. (2024). Pathways to enhancing the effectiveness of internal control in universities. *Journal of Shanxi University of Finance and Economics*, 46(S2), 281–283.
- [9] Li, J. (2023). Construction of Internal Control Systems in Universities from the Perspective of Financial and Accounting Supervision. *Journal of Shanxi University of Finance and Economics*, 45(S2), 195–197.
- [10] Alt, J., & Lassen, D. D. (2006). Fiscal transparency, political parties, and debt in OECD countries. *European Economic Review*, 50(6), 1403–1439.
- [11] Ahrens, T., & Chapman, C. S. (2006). Doing qualitative field research in management accounting. *Accounting, Organizations and Society*, 31(8), 819–841.
- [12] Alwardat, Y., Almatar, A., & Khattab, A. (2015). The impact of internal audit function effectiveness on public sector performance. *International Journal of Auditing*, 19(2), 112–124.
- [13] Arapis, T., & Reitano, V. (2018). Fiscal transparency and fiscal governance: A cross-country analysis. *Journal of Public Budgeting, Accounting & Financial Management*, 30(3), 345–362.
- [14] Alt, J. (2019). Twenty years of fiscal transparency research. *Public Budgeting & Finance*, 39(4), 3–25.
- [15] COSO. (2013). Internal control—Integrated framework. COSO.
- [16] Li, R. Y., & Yang, R. (2025). Research on countermeasures for improving the internal control environment in universities. *Financial Management Research*, (10), 88–92.
- [17] Piyachat Thongpaeng. (2025). Internal Control Model for Finance and Procurement at Sisaket Rajabhat University Based on the COSO framework for fiscal Transparency and Sustainability. *Advances in Consumer Research*, 2(1), 434–441.
- [18] Agyemang, G., & Broadbent, J. (2015). Management control systems and research management in universities: An empirical and conceptual exploration. *Accounting, Auditing & Accountability Journal*, 28(7), 1018–1046.
- [19] Rittenberg, L., & Covalleski, M. A. (2001). Internalization versus externalization of the internal audit function: An examination of professional and organizational imperatives. *Accounting, Organizations and Society*, 26(7-8), 617–641.