

Risk management, internal control and audit process in local universities basis for operational goal achievement framework

Wang, Yan ✉

Graduate School, Lyceum of the Philippines University – Batangas, Philippines



ISSN: 2243-7703
Online ISSN: 2243-7711

Received: 25 May 2024
Available Online: 15 July 2024

Revised: 25 June 2024
DOI: 10.5861/ijrse.2024.24655

Accepted: 10 July 2024

OPEN ACCESS

Abstract

This study investigated the interrelationship between risk management practices, internal control, and the audit process in educational institutions, particularly schools. The primary objectives were to determine the current practices in risk management (risk identification, assessment, analysis, and response), to describe internal control in terms of control activities, information and communication, and internal control evaluation, and to assess the audit process across its preparation, implementation, and rectification stages. Additionally, the study aimed to test the significant relationships between these areas and to propose an operational framework for enhancing school development goals. Through quantitative analysis using Spearman's rho correlation coefficients, the research confirmed the significant relationships between risk management practices and various audit process stages, highlighting the integral role of risk management in the audit process. Similarly, strong correlations were found between elements of internal control and the efficacy of audit stages, underscoring the importance of robust internal control systems in facilitating effective audits. Based on the findings, the study proposed an integrated approach for schools, emphasizing the alignment of risk management with internal control mechanisms and audit processes. Recommendations included enhancing staff training, improving information and communication channels, regularly evaluating internal controls, and focusing on the rectification stage of audits. The adoption of technology in streamlining these processes and fostering a culture of accountability and continuous improvement were also suggested. The study contributes to the understanding of how schools can leverage risk management, internal control, and auditing to achieve operational excellence and fulfill their developmental objectives. It provides a comprehensive framework for educational institutions to enhance their governance, risk management capabilities, and overall operational efficiency.

Keywords: risk management, internal control, audit process, operational framework, school development

Risk management, internal control and audit process in local universities basis for operational goal achievement framework

1. Introduction

Local university is a newly built university financed by the local government, which undertakes the task of personnel training and practices the development of service economy. As a non-profit public institution, the local university undertakes the important mission of cultivating senior specialized personnel with innovative spirit and practical ability for the country, developing science, technology and culture, and promoting modernization construction.

The special nature of its unit determines that its economic business activities are different from other administrative institutions (Xu Haitao, 2016). First, the main content of local universities is teaching and scientific research. The income activities of local universities should be carried out to pursue social benefits and economic benefits at the same time, which need to achieve unity between the two. Second, local universities implement the financial management system of "unified leadership and centralized management", while larger schools implement the financial management system of "hierarchical management" under the premise of "unified leadership". Third, the local university budget principle adheres to the principle of living within one's means and balancing revenues and expenditures, which has the characteristics of comprehensiveness, planning and constraint. Fourthly, local universities have diversified funding sources, which have formed a pattern of financing in various forms and through various channels, with financial subsidies as the main income. Fifthly, the expenditure of local universities has a wide range, many types and various forms of settlement and payment. Sixth, the nationalization of local university funds requires the budget to serve the people, emphasizing the responsibility and efficiency of budget expenditure as well as the realization of social benefits (Zhang Qinglong 2018).

The particularity of such institutions in local universities determines the importance of risk prevention and control. Only by correctly identifying risk points and accurately controlling risk points can risks be effectively prevented. Internal control is an effective way to effectively prevent risks. The construction of internal control in local universities cannot completely copy the general guidelines of internal control in administrative institutions. Instead, a complete internal control system should be established to standardize the implementation of internal control construction in universities. In the end, based on the specific implementation of internal controls, conduct a comprehensive audit of the key points of internal control. Perform an end-to-end audit of the preparatory phase, implementation phase, and corrective phase within internal control. Identify issues and provide feedback through the audit to enhance the internal control processes, thereby better mitigating risks within the school.

This paper intended to sort out and analyze the system basis, mutual relationship and implementation status of risk management, internal control construction and Audit Process in local universities. It is pointed out by Liu Xiaoyong, (2022) that there are problems such as insufficient overall coordination, prominent dominant position of budget audit results, lack of internal control, defects in third-party organization evaluation and misunderstandings in informatization construction Based on the characteristics of local universities, it establishes an internal control system with financial risk prevention as a prerequisite, integrates the internal control system with the audit process, and ultimately, it can establish an internal control management process based on risk points. It conducts a comprehensive audit of the level of internal control management, and, based on the audit results, guides the university to better control risks, allowing the university to operate healthily.

Objectives of the Study - This study aimed to determine the risk management, internal control and audit process in local universities in Heilongjiang province in China. Specifically, it aimed to determine the risk management practices in terms of risk identification, risk assessment, risk analysis and risk response; describe

the internal control in view of control activities, information and communication, internal control evaluation; determine the audit process in view of Preparation Stage, Implementation Stage, Rectification Stage; test the significant relationship between risk management, internal control and audit process; and develop an operational framework to achieve the development goal of schools.

2. Methods

Research Design - This study used descriptive research which combined quantitative and qualitative methods for data collection. Quantitative methods was used to collect general data on local university risk management, internal control and performance evaluation practices. Researchers used SPSS software to conduct multivariate statistical analysis of questionnaire feedback data, including descriptive analysis, correlation analysis and regression analysis. These quantitative analysis results was seamlessly integrated to form a comprehensive internal control framework. On the other hand, qualitative method was used to collect data concerning stakeholders' perspectives and experiences regarding these practices to validate the results of the survey.

Participants of the Study - Participants in this study were the faculty members and administrators from local universities in China. The goal of the study was to take a representative sample of participants from different departments at these universities. Since the survey questionnaire was distributed through the internet, it was able to overcome limitations of universities and regions. The sample size of the questionnaire was determined using Rao soft analysis, and ultimately 300 questionnaires were distributed, with 288 valid questionnaires returned, ensuring a 95% confidence level and a 5% margin of error.

Instruments of the Study - The research tool is a self-structured questionnaire composed of closed questions. The questionnaire was designed according to the research objectives, and all four variables were reflected in the questionnaire. A pre-test was conducted before the questionnaire was distributed to the participants, and the questionnaire and answered within 15 minutes to ensure the validity and reliability of the tool.

Data Gathering Procedure - The data collection process included the distribution of questionnaires to participants. Questionnaires were distributed via email, online platforms such as WeChat, or in person, mainly through the WeChat "WenJuanxing" app. The questionnaires were distributed to the university management, internal auditors, and other relevant stakeholders, while the interviews were conducted with a sample of these stakeholders. Participants were asked to complete the questionnaire within a specific time frame and follow-up reminders were sent to non-respondents.

Ethical Considerations - Ethical considerations were considered throughout the research process. Informed consent was obtained from all participants, and their anonymity and confidentiality were ensured throughout the study and participants were assured that their information were for research purposes only.. The research protocol were reviewed and approved by the relevant institutional review board before the start of the study.

Data Analysis - Starting with cleaning and validating of the data collected from the questionnaire. This involved checking for missing data, outliers, and other errors. Secondly, the data collected by the questionnaire were input into the statistical software program for analysis. Descriptive statistics were calculated for each variable in the study, such as frequency distribution, mean, standard deviation, and ratio, and the data were analyzed for reliability and validity to provide a data summary for the study and help identify any patterns or trends.

3. Results and discussion

Table 1 shows a summary assessment of risk management. The grand composite mean was 3.44, indicating that all indexes are consistent. The data suggests a generally positive perception of risk management practices within the organization, with Risk Identification being the strongest aspect. However, there is room for

improvement, especially in Risk Assessment and Risk Response. The close scores between Risk Analysis and Risk Response could indicate a certain level of consistency in handling risks post-identification. The overall positive response might reflect well on the organization's risk management strategy, but the slight variances in ranking could guide future improvements.

Table 1*Summary Table on Risk Management Practices*

Key Result Areas	Composite Mean	VI	Rank
Risk Identification	3.51	Strongly Agree	1
Risk Assessment	3.37	Agree	4
Risk Analysis	3.45	Agree	2
Risk Response	3.44	Agree	3
Grand Composite Mean	3.44	Agree	

Legend: 3.50-4.00=Strongly Agree; 2.50-3.49=Agree; 1.50-2.49=Disagree; 1.00-1.49=Strongly Disagree

The composite for Risk Identification was 3.51, verbally interpreted as “Strongly Agree”. This was a notably high score and suggested that respondents had a very positive perception of the risk identification practices in place. It indicated that participants believed the organization effectively identified potential risks that could impact its operations or objectives. Being ranked first among the four key result areas of risk management (Identification, Assessment, Analysis, and Response) highlights the relative strength of risk identification practices in comparison to the other areas. This ranking suggests that among the various aspects of risk management, Risk Identification was perceived as the most effectively implemented or prioritized. Jones and Harris (2018) emphasized the crucial role of risk identification as the first step in the risk management process. They believe that risk identification is the basis of building the whole risk management structure, if the potential risks are not accurately and comprehensively identified, the subsequent risk management will not be effective, which is extremely unfavorable to the implementation of later risk management.

Harris(2018) believes that comprehensive risk identification is very important. In the face of various risks in universities, from financial risk, operational risk, reputation risk and strategic risk, no matter which aspect is ignored, problems will easily occur and the organization will be affected. In the authors' study, it was found that by accurately identifying risks, universities were able to prioritize risk types, placing the primary experience on those with higher impact. This precise prioritization can directly influence the development of risk strategies, ensuring that resources are allocated to where they are most needed.

The composite mean of risk analysis in risk management was 3.45, indicating that most respondents recognize the importance of risk analysis and believe that the practice of risk analysis is very necessary in the university organization. They maintain a positive attitude toward risk analysis, but also believe that there is room for improvement in the risk analysis process.

In the process of college risk management, risk analysis is very important. Anderson (2019) emphasized that risk analysis is very necessary in university operation, especially in the field of financial management. The author believes that effective risk analysis can help universities predict financial risks, maintain financial stability, find out audit problems in time and do a good job in supervision, so as to protect the assets and reputation of the university. The author believes that in the context of higher education, risk analysis must go beyond financial aspects, and should also include student safety, academic standards and other aspects to expand the scope of risk analysis to help schools cope with potential risks.

Davis(2020) discussed the role of risk analysis in improving the operational efficiency of universities and believed that risk analysis could help schools make correct decisions. Through comprehensive risk analysis, universities can effectively prioritize risks and focus resources and energy on areas with the greatest potential impact, which not only better allocates resources, but also improves the overall management level of the school. Finally, the composite mean of risk assessment in the application of risk management was 3.37, indicating that

respondents agreed with the importance of risk assessment. This score indicates that respondents generally agreed that the university's risk assessment was valid, but did not reach a level of strong agreement. Respondents expressed optimism about the risk assessment process, but also felt that there was room for improvement. Johnson (2019) believes that risk assessment is a strategic decision-making method that can play a positive role in the allocation of university resources. Universities should adopt a comprehensive approach to risk assessment, taking full account of financial risk, operational risk, academic risk, etc., and integrate risk assessment into the overall strategic planning of the school to ensure that decision makers identify potential risks.

In addition, in the face of the ever-changing external environment, the university should change the methods of risk assessment according to the environment, establish a dynamic assessment model, carry out risk assessment according to different environments, and react quickly in the assessment process to ensure that the risk assessment is accurate and effective. Leyao(2021) believes that quantitative risk assessment methods should be adopted in the context of universities, and the growth trend of quantitative risk assessment methods should be analyzed through research, and data analysis and predictive modeling should be used to deepen understanding. He believes that while qualitative assessment of expert judgment and stakeholder input has value, quantitative methods can better improve the accuracy and reliability of risk assessment. According to Li Leyao, this mixture of qualitative and quantitative methods provides a more comprehensive picture of the risk situation, enabling university administrators to effectively prioritize risks and develop appropriate solutions.

The analysis of the risk assessment process shows that the effectiveness of risk assessment is affirmed, but it is still weak compared with other aspects of risk management. Therefore, universities need to critically review and strengthen their risk assessment practices to ensure that risk assessment is carried out comprehensively. By conducting a comprehensive risk assessment, the university's overall risk management level can be improved to make it consistent with the university's strategic objectives.

Table 2

Summary Table on Internal Control

Key Result Areas	Composite Mean	VI	Rank
Control Activities	3.33	Agree	2
Information and Communication	.34	Agree	1
Internal Control Evaluation	3.31	Agree	3
Grand Composite Mean	3.33	Agree	

Legend: 3.50-4.00=Strongly Agree; 2.50-3.49=Agree; 1.50-2.49=Disagree; 1.00-1.49=Strongly Disagree

Table 2 analyzes the internal control situation of the school, including control activities, information communication and internal control evaluation. The comprehensive average value of these indicators was within the "agree" range, indicating that the respondents recognized the various processes of internal control and think that the overall internal control was in good condition, but there was still room for improvement.

The composite mean of "Information and Communication" was 3.34. Respondents recognized the importance of Information and Communication, ranking first among the three key indicators, indicating that it was conducive to the implementation of internal control. Information and Communication are the basis of internal control implementation. Information and communication are vital in any internal control system. Information and communication means that the University collects and transmits information related to internal control in a timely and accurate manner to ensure effective communication of information within the University and between the university and the outside world.

Information and communication can enable the sharing of resources and help the university popularize relevant policies and procedures. Through the analysis of the survey data, it is found that the respondents generally believe that the university can effectively search and process relevant information, so that the information can be effectively transmitted among the subjects of internal control, and this effective information flow is crucial for the university's decision-making, risk management and organizational operation efficiency.

Chen Liu(2020) discussed how information and communication systems can effectively support internal control activities, thus assisting the effective operation of internal control. They believe that effective information and communication systems can help managers make timely and accurate decisions and carry out accurate control activities. Their research points out that with the changes in the external environment and the arrival of the digital age, the proactive implementation of technological change is the key to improving information and communication systems. Brooks(2021) emphasizes that information and communication systems should be adaptable and compatible.

At the same time, they believed that it is necessary for all subjects within the university to participate in the exchange of information. Effective internal communication should not just be top-down, but horizontal and vertical, allowing the flow of information to flow freely between different levels of the organization. In addition, Kim (2019) research has demonstrated that the use of digital tools such as ERP systems, internal portals, and collaboration platforms can improve the efficiency of internal communication, and ensure the integrity and security of data in the system when using digital tools, especially in the context of increasing cybersecurity threats.

The rapid technological change brings both opportunities and challenges to the internal control system, especially its information and communication system. While respondents generally agreed on the importance of information and communication, it still requires constant technological updates. In the internal control system, more advanced communication tools can be adopted, such as the use of real-time information sharing and multi-party participation of the collaborative integrated communication platform. In addition, the implementation of more sophisticated data analysis systems can improve the accuracy and timeliness of information delivery. Internal control managers in colleges and universities should improve their awareness of information and communication training, conduct regular training for key positions, develop scientific training plans, and the training content should include the technology of the latest communication tools.

In this process, the importance of accurate, concise and transparent information flow transmission should be emphasized. Universities can develop training modules to improve staff skills in these areas, including things like data literacy, report writing and operating digital communication platforms. In addition, the university can also carry out publicity activities to emphasize the role of each employee in the internal control system, so as to give full play to the subjective initiative of employees and stimulate their work potential. Effective communication helps to improve the risk management ability, help the university to implement internal control compliance, and improve the overall operation efficiency of the university.

Although the existing information and communication system of the university is effective, if the information and communication system is to be improved, then technological change, staff training and awareness of communication and collaboration are also very necessary, which is a key area for improving the information and communication system. These improvements will not only increase the efficiency of information dissemination, but also strengthen the stability of the overall internal control environment, thus adapting to the changing needs of the University to support the achievement of operational objectives.

The composite mean of control activities was 3.33, indicating that the respondents recognized the role of control activities and believed that control activities have a positive effect on the implementation of internal control. Control activities are based on the results of risk assessment, the university adopts corresponding control measures to control the risk within the tolerable degree, which is the basis of the internal control system.

The control activities of internal control include responsibility division control, authorization control, audit and approval control, budget control, property protection control, accounting system control, internal reporting control, economic activity analysis control, performance evaluation control, information technology control, etc. Carry out control activities by identifying various risks in the university operation process, among which fraud risks can be separated by incompatible positions and controlled by authorization and approval. For example, financial seal abuse risks are required to be kept separately from the corporate seal, and authorization and

approval are required before the official seal is printed. Asset security risks will be controlled through accounting records and property protection. Assume that as a warehouse manager, he is responsible for warehousing, warehousing and daily physical storage of warehouse materials, but the accounting records of materials entering and leaving the warehouse are the responsibility of the accountant.

The accountant will also notify the warehouse manager or supervise the warehouse manager to carry out physical inventory every month to confirm the match between the book physical records and the warehouse physical records. Operational cost overruns or losses are more likely to be controlled by budget, performance appraisal and operational analysis. Various control activities are implemented within the university, in which continuous improvements are made to improve its control ability and efficiency.

Anderson(2018) explored the integration of control activities into university governance structures. They argue that control activities are essential to ensure the financial stability of universities, especially given the diversity and complexity of their financial flows. It is found that strong financial control is very necessary, such as budget control and expenditure monitoring, which can realize the established control effect of internal control, prevent the occurrence of financial risks, and ensure the healthy development of colleges and universities. In addition, at present, the external supervision of universities is increasingly strict, and the control activities can conform to the regulatory measures and realize the regulatory role. On the other hand, effective control activities can gain the trust of stakeholders, including students, teachers and education departments.

Kim (2019) conducts research on the risk management and operational control activities of universities. They examine how control activities play an important role in identifying and reducing risks to avoid the reputational damage caused by technological threats in school operations. It is found that the control activities should be carried out according to the actual situation of the university, fully considering the factors such as the scale of the school, academic courses and research activities, and according to different natures, targeted control activities should be carried out. The study also delves into the role of control activities in maintaining academic integrity and academic quality, arguing that curriculum review, enhanced supervision and student assessment are key to improving educational standards. Kim believes that this integrated overlay approach to control activities is essential to the university's overall risk management.

At the control activities within the university are usually effective, but the consistency of the control activities should still be emphasized in the implementation process, which should adapt to the overall goal of the development of the university, increase staff training, implement and update the content of the control activities, and establish a feedback mechanism for employees to constantly improve and improve the control activities and link the control activities with risk management. To achieve the purpose of internal control and risk control.

Finally, the mean of cost of internal control evaluation was 3.31, indicating the respondents' affirmation of the effectiveness of internal control evaluation. Internal control evaluation is an important means for universities to conduct regular physical examination of internal control system and find and correct problems. The evaluation of internal control in universities should at least follow three principles: comprehensiveness, importance and objectivity. The evaluation of internal control is usually based on the internal control manual and management system. Most of the evaluation of internal control presents two characteristics. The comprehensiveness principle is relatively easy to follow, but the importance principle is often difficult to embody due to the lack of decision-making basis. Second, the evaluation content is mainly financial report evaluation, lack of strategic objectives, business objectives and other high-level objectives.

Williams (2019) explores the critical role of periodic assessments in ensuring the effectiveness of internal control systems. Their research argues that internal control evaluation is essential to ensure that controls are effective and working as intended, assessing their effectiveness in mitigating risks and achieving organizational objectives during a systematic review of control activities. However, Williams noted that resource constraints and a lack of professional guidance can hinder regular assessments. They suggest that organizations can use technological upgrades to overcome these challenges, such as automated monitoring tools and personnel

training.

Patel(2020) believes that the feedback mechanism plays a positive role in strengthening the evaluation effect of internal control. Feedback from different stakeholders can significantly improve the effective evaluation of internal controls. Their research found that many organizations are trying to build counter-mechanisms that encourage critical speech in order to improve internal controls, recommending open forums and suggestion systems that encourage employees to express their assessment of the effectiveness of internal controls, laying the groundwork for regular reviews, and fostering a corporate culture of sustainability and accountability.

As a university in the new era, internal control evaluation should be carried out on the basis of internal control manual and management system, and systematic and comprehensive risk assessment should be carried out on enterprises from five dimensions including internal control manual, management system, enterprise value chain, risk event database and data analysis. Focus on the key issues related to the development of enterprises and core business links in-depth diagnosis, in order to find the shortcomings of enterprise management, and put forward targeted management suggestions.

In Internal Control Evaluation underscores its importance in ensuring the effectiveness of control mechanisms within organizations. While the general agreement on its effectiveness is promising, the need for more frequent and thorough evaluations and improved feedback mechanisms is evident. Addressing these needs requires a combination of technological solutions, training, and an organizational culture that values and acts upon stakeholder feedback.

Table 3

Summary Table on Audit Process

Key Result Areas	Composite Mean	VI	Rank
Preparation Stage	3.38	Agree	2
Implementation Stage	3.36	Agree	3
Rectification Stage	3.43	Agree	1
Grand Composite Mean	3.39	Agree	

Legend: 3.50-4.00=Strongly Agree; 2.50-3.49=Agree; 1.50-2.49=Disagree; 1.00-1.49=Strongly Disagree

Table 3 shows respondents' views on the Preparation Stage, Implementation Stage and Rectification Stage of the audit. The composite mean of the audit process is 3.39, indicating that respondents fully recognize each stage of the audit process. All stages of the audit process were considered to be effective. Of these, "Rectification Stage" had a mean of 3.43, ranking first. "Preparation Stage" ranked second with a combined average of 3.38. Finally, "Implementation Stage" came in third with an average score of 3.36.

The rectification stage is a key stage in the audit process. The rectification stage can reflect the real value of the audit. This part is mainly to correct the problems found in the audit report and improve the internal process of the university through the rectification of audit problems. Johnson(2018) conducted a comprehensive study on the rectification stage of the audit process and believed that the rectification stage is a crucial part of the audit process, which is the transformation of audit theoretical knowledge into practical operations. Johnson deeply studied the potential of change in the rectification stage and believed that the realization of the true value of audit mainly depends on the rectification stage. Although the preparation stage and the execution stage of the audit are also important parts, which can help to find problems in time and implement the audit plan, the two stages have not realized the transformation of the theory and formed the actual audit results. In this study, it is proposed that audit rectification work should be carried out systematically for the rectification stage of audit reports. Firstly, the contents involved in audit reports should be thoroughly understood, and audit problems should be classified according to the risk of audit problems, the utilization of resources and the potential impact of audit problems.

The audit rectification work should be carried out according to the priority of the problems in the audit report, and the rectification work should be carried out successively to realize the value of the audit through the rectification stage of the audit. Johnson believes that if the recommendations made during the audit are not

effectively implemented, the entire audit process risks becoming a purely theoretical application with little practical benefit. And the audit effect is not only measured by the completion of the audit report, but also the impact of the rectification on the long-term work. Johnson suggested establishing a clear audit accountability system and communication channels, and regularly monitoring the completion of audit rectification, fixing loopholes according to the progress of rectification, and establishing a cyclic audit work to ensure the smooth implementation of audit rectification work.

The work of Johnson(2018) recognizes the importance of the rectification phase in the audit process. Their research provides a new way of thinking, that is, how to establish a link between the theoretical application and practical application of audit in the rectification stage, which ultimately determines the effectiveness and value of the audit process in real work.the preparatory phase is the foundation of the audit process. Perfect audit preparation stage can improve the audit efficiency and ensure the audit work can be carried out effectively. The audit preparation stage requires a comprehensive plan and a thorough understanding of the audited entity or project in order to effectively communicate during the audit process and lay the foundation for the success of the audit.

Thompson(2021) provides an in-depth analysis of the role of risk assessment in the audit preparation phase, identifying its importance in the effectiveness of the audit process. Through the study of resource allocation in the initial stage of audit, it is suggested to allocate resources according to the level of risk, which will be a new direction of audit development. Thompson believes that effective audit is not just comprehensive coverage, but targeted review, which is the core content of research. High-risk areas should be identified early in the audit process so that auditors have sufficient time to allocate resources. This approach requires an initial assessment of various aspects of the subject, such as financial transactions, business processes and compliance with relevant regulations.

In the process of risk assessment, they use qualitative analysis and quantitative analysis methods. They explore how auditors use historical data, industry standards, and more to analyze how data can be used to assess potential risks. This approach helps auditors to classify risks and prioritize audit work accordingly. Thompson's key findings include the impact of risk assessment on audit planning. He found that by looking for things that needed to be audited by high or low risk, he could conduct a good risk assessment and inform a more effective audit plan. Notably, their research shows that risk assessment can help improve the efficiency of audits. By focusing on high-risk areas, auditors can make better use of their time and resources. This kind of focused audit method not only improves the possibility of finding major problems, but also increases the audit value through the information of key areas of the audited entity.

Thompson's (2021) study fully affirms the importance of the preparation stage in the audit process. It is found that early identification and assessment of risks is the basis for rational allocation of audit resources, so as to achieve more targeted, efficient and effective audit. They believe that this approach not only optimizes the audit process, but also significantly improves the overall quality of the audit results.

In the implementation stage of the audit process is the stage of transforming the audit theory into action. It requires a combination of technical expertise, analytical ability and professional judgment. The effectiveness of the audit implementation stage greatly affects the audit results and can ensure the accuracy of the audit results.

Brown (2019) studied in detail the key role of internal control in the implementation phase of the audit process. They believe that the audit engagement can effectively evaluate the implementation of the internal control of the organization and provide valuable insights. The internal control evaluation is important in determining the overall effectiveness of the audit. By studying the evaluation methods of internal control used by auditors, Brown explains in detail how auditors systematically evaluate various internal control procedures, such as the financial reporting process and the separation of rights and responsibilities of related positions. This evaluation includes the design and implementation of internal controls, as well as the effectiveness of internal controls in practice.

Auditors examine whether internal controls are working as intended and whether identified risks are being mitigated. In their research, they found that internal control evaluation is an important way to evaluate organizational risk management. Brown explained that effective internal controls are an essential part of sound risk management. Through audit activities, auditors are able to determine whether control activities are consistent with the risk profile and whether they effectively mitigate potential risks.

In addition, their research highlights the role of internal controls in compliance with regulatory standards. In the course of day-to-day operations, organizations are often subject to a variety of laws and regulations, and internal controls are critical to maintaining compliance. By testing internal controls, auditors are able to identify areas of non-compliance and make effective recommendations in accordance with laws and regulations. Crucially, Brown believes that the effectiveness of the internal control evaluation directly affects the effectiveness of the audit. Without thorough testing and evaluation of internal controls, an audit cannot give a reliable and complete opinion. Their research concludes that internal control evaluation can realize the value of audit work, and comprehensive internal control is conducive to the accuracy of audit results. Internal control evaluation is very important to the implementation stage of the audit process. Davis' detailed analysis shows that internal control can effectively evaluate an organization's risk management ability and help an organization operate legally. In addition, their research results show that comprehensive internal control evaluation is a key factor in evaluating the overall effectiveness of the audit, and internal control and audit activities are interrelated and influence each other.

Table 4*Relationship Between Risk Management Practices and Internal Control*

Variables	rho	p-value	Interpretation
Risk Identification			
Control Activities	0.649**	0.000	Highly Significant
Information and Communication	0.632**	0.000	Highly Significant
Internal Control Evaluation	0.656**	0.000	Highly Significant
Risk Assessment			
Control Activities	0.683**	0.000	Highly Significant
Information and Communication	0.682**	0.000	Highly Significant
Internal Control Evaluation	0.703**	0.000	Highly Significant
Risk Analysis			
Control Activities	0.681**	0.000	Highly Significant
Information and Communication	0.666**	0.000	Highly Significant
Internal Control Evaluation	0.702**	0.000	Highly Significant
Risk Response			
Control Activities	0.613**	0.000	Highly Significant
Information and Communication	0.563**	0.000	Highly Significant
Internal Control Evaluation	0.608**	0.000	Highly Significant

** Correlation is significant at the 0.01 level

Table 4 illustrates the relationships between various components of risk management and internal control in the university's operational process. Risk management primarily encompasses risk identification, risk assessment, risk analysis, and risk response. Key elements of internal control include control activities, information and communication, and internal control evaluation. Through data analysis, it can be observed that control activities were highly correlated with the four factors of risk management. This indicates that control activities had a positive impact on risk management, suggesting that effective control activities were closely related to successful risk management practices. Johnson's (2018) study on the relationship between control activities and various elements of risk management has made a significant contribution to the implementation of effective risk management in organizations.

Johnson's research findings reveal a significant positive correlation between control activities and different aspects of risk management, indicating a close relationship between the effectiveness of risk management and the comprehensiveness of internal control activities. Control activities not only resist risks but also effectively

mitigate risks through methods such as incompatible job separation and authorization approval systems, ensuring the success of risk prevention and control strategies. Johnson's research results align with the data analysis results of this paper, emphasizing the strong connection between control activities and risk management. Johnson suggests that organizations should prioritize strengthening their control activities to enhance risk management capabilities. In the context of university operations, experience and resources should be focused on the development of control activities. Through the implementation of comprehensive control activities, universities can better identify potential risks and ensure that school management is legal and compliant.

Johnson's (2018) study provides important insights into the relationship between control activities and risk management practices. It underscores the crucial role of control activities in effective risk management, offering guidance for organizations to implement risk prevention and control strategies. There is a highly significant correlation between information and communication and various elements of risk management. The rho values range from 0.563 to 0.682, indicating a strong association between the two. Effective communication and information flow can promptly convey risks, assisting organizations in enhancing the efficiency of risk identification and improving the accuracy of risk assessment.

Lee (2020) conducted a study on the role of information dissemination and communication in the context of risk management. Their research found that accurate risk information can enhance the effectiveness of risk management, helping organizations promptly identify and anticipate potential risks. Lee extended the study on how information is exchanged and shared within organizations, suggesting that effective risk management involves not only identifying and responding to risks promptly but also effectively conveying information about risks. Their analysis indicated that comprehensive and timely information communication should involve all parts of the organization, ensuring that notifications reach all levels promptly, enabling swift responses to new risks. Through empirical analysis, they found a highly significant correlation between effective communication, information flow, and risk management, suggesting that the more effective the communication of information within an organization, the more efficient its risk management process. Universities must establish information dissemination systems, create channels for information exchange, aid in timely risk identification and mitigation, establish a transparent and effective information environment, and ensure the effective implementation of risk management strategies. Modern universities need to prioritize information dissemination and communication, adopting a proactive approach to handling information to enhance their risk management capabilities.

Finally, internal control evaluation showed a highly significant correlation with various aspects of risk management. With rho values all exceeding 0.6, this indicated the crucial role of ongoing internal control evaluation in the context of risk management. Smith (2020) conducted a comprehensive analysis of the impact of internal control evaluation on risk management. Their study indicates a highly significant correlation between the evaluation of internal control and various aspects of risk management. They argue that continuous assessment of internal control should not only be a procedural activity but should be an effective tool for risk identification and mitigation. When an organization has a robust internal control system and regularly evaluates each aspect of internal control, it can significantly enhance the efficiency of risk management measures, providing a solid foundation for the organization to guard against risks.

Davis (2019) further supplements this viewpoint, delving into the mechanisms through which internal control evaluation affects risk management. They emphasize that such evaluations of internal control can help organizations identify vulnerabilities in their control structures, enabling timely corrections and adjustments. Their research results indicate that organizations with stringent mechanisms for internal control evaluation are better equipped to withstand financial risks. Patel (2021) discusses how technological advancements enhance the capabilities of internal control evaluation. They analyze the role of data analysis and artificial intelligence in streamlining the evaluation process, making internal control evaluation more efficient and accurate. According to their study, technology not only aids in identifying weaknesses in internal control but also contributes to predicting and mitigating potential risks.

From the foundational analysis by Johnson and Smith to the more technologically focused research by Patel and Lee, it is evident that ongoing, thorough evaluation of internal controls is paramount for identifying, assessing, and mitigating risks within organizations. These studies collectively highlight the necessity for organizations to prioritize internal control evaluation as a key component of their risk management framework.

Table 5*Relationship Between Risk Management Practices and Audit Process*

Variables	rho	p-value	Interpretation
Risk Identification			
Preparation Stage	0.616**	0.000	Highly Significant
Implementation Stage	0.555**	0.000	Highly Significant
Rectification Stage	0.589**	0.000	Highly Significant
Risk Assessment			
Preparation Stage	0.544**	0.000	Highly Significant
Implementation Stage	0.542**	0.000	Highly Significant
Rectification Stage	0.574**	0.000	Highly Significant
Risk Analysis			
Preparation Stage	0.574**	0.000	Highly Significant
Implementation Stage	0.581**	0.000	Highly Significant
Rectification Stage	0.611**	0.000	Highly Significant
Risk Response			
Preparation Stage	0.515**	0.000	Highly Significant
Implementation Stage	0.611**	0.000	Highly Significant
Rectification Stage	0.629**	0.000	Highly Significant

***. Correlation is significant at the 0.01 level*

Table 5 presents a statistical analysis of the relationship between various risk management practices and the stages of the audit process in an organizational setting. The table employs Spearman's rho correlation coefficients to measure the strength and direction of the associations, and p-values to indicate the statistical significance of these relationships. The focus was on different risk management practices (Risk Identification, Risk Assessment, Risk Analysis, Risk Response) and their correlation with the stages of the audit process (Preparation Stage, Implementation Stage, Rectification Stage).

Firstly, the three stages of the audit process were highly correlated with risk identification. The rho values ranged from 0.555 to 0.616. This indicates a strong positive correlation between them, emphasizing the crucial importance of effective risk identification throughout all stages of the audit process for universities.

Miller (2019) conducted a detailed analysis of the impact of risk identification on the preparation stage of the audit process. Their research made a significant contribution to this field, providing profound insights into the influence of early risk identification on the entire audit process. Miller argued that the initial identification of risks is not only a procedural formality but also assists auditors in outlining the focal points of the audit. When risks are accurately identified at the outset, it guides the direction of the audit, enabling auditors to set clear objectives, allocate resources more effectively, and concentrate on critical areas. The findings of their investigation suggest that targeted risk identification during the preparation stage can streamline the audit process, enhance efficiency, and improve audit outcomes. This study demonstrates that comprehensive risk identification during the preparation stage is essential, contributing to the overall quality of the audit process and facilitating the successful execution of audit work.

Thompson (2020) conducted a study that contributes to a deeper understanding of the role of risk identification, particularly during the implementation stage of an audit. His research indicates a strong correlation between comprehensive risk identification and the effectiveness of the audit's implementation stage. Thompson found that if risks are thoroughly identified before the commencement of audit activities, auditors can fully engage in the implementation stage, dedicating all their efforts to the actual execution of the audit. According to Thompson, this wholehearted approach allows for a more efficient utilization of audit resources and time, enabling in-depth investigations into the areas under scrutiny and providing insights that are both

unique and valuable. Ultimately, this significantly enhances the quality of audit outcomes. Thompson's work underscores the ongoing impact of risk identification throughout the entire audit process, with a specific emphasis on its influence during the implementation stage, ensuring the overall robustness of audit results.

Secondly, there was a close relationship between risk assessment and the three stages of the audit process. The Rho values ranged from 0.542 to 0.574, indicating a strong connection between risk assessment and the effective execution of the different stages of the audit; they exhibit a positive correlation.

LIU Chang (2018) conducted research in this field, primarily analyzing the impact of risk assessment on the audit process. The study found a highly significant relationship between risk assessment and the effectiveness of different audit stages. Comprehensive risk assessment was identified as a crucial pillar for the effective execution of the audit process, aiding auditors in prioritizing high-risk areas and allocating resources effectively. Their findings suggest that when risk assessment is seamlessly integrated into each audit stage, it results in more focused and efficient audit work.

Kim (2019) conducted further research, providing additional insights into how risk assessment influences the audit preparation stage. They discovered that thorough risk assessment at the beginning of the audit significantly influences the planning and scoping of the audit, laying a solid foundation for the entire audit process. Through analysis, it was confirmed that risk assessment is crucial for identifying audit priorities.

Patel (2020), in their study on the role of risk assessment in the implementation and rectification stages of the audit, concluded that risk assessments conducted during these stages can timely adjust audit strategies to adapt to emerging risks. It also ensures that the audit rectification stage can effectively address all identified risks. Their research suggests that continuous risk assessment throughout the entire audit process is a key factor in its overall success.

The analyses from the above experts collectively reveal that effective risk assessment is an indispensable part of the audit process. These studies consistently indicate that for auditors to conduct comprehensive and effective audits, it is crucial to carry out thorough and continuous risk assessments at all stages of the audit.

Third, there was a highly significant relationship between risk analysis and each stage of the audit process. The rho values range from 0.574 to 0.611, with a p-value of 0.000. This indicates a positive correlation between the audit process and risk analysis, affirming the importance of risk analysis in the audit process, particularly during the implementation and rectification stages.

Risk analysis holds significant importance in the audit process, especially during the implementation and rectification stages, which has been a consistent focus in accounting and auditing research. Martinez (2019) conducted a study examining the correlation between risk analysis and audit efficiency. His research confirmed the effectiveness of risk analysis in enhancing the implementation and rectification stages of the audit process. The study found that comprehensive risk analysis provides auditors with different audit perspectives, helps them acquire specialized knowledge, and offers valuable information for the effective implementation of key audit stages, ensuring the smooth progress of audit work. Taylor (2020) delved deeper into the impact of risk analysis on the implementation stage. The research revealed that effective risk analysis assists auditors in accurately identifying high-risk and potentially non-compliant areas, ensuring a more targeted implementation of audit procedures and effective assurance of audit work. Green focused on the study of the rectification stage of the audit process, emphasizing the use of risk analysis methods during this stage. By fundamentally understanding the causes of risks, risk analysis ensures the effectiveness of audit rectification. Risk analysis not only helps identify and mitigate risks but also plays a crucial role in the rectification stage of the audit. Their research results indicate that comprehensive risk analysis during the audit can promptly identify key risk points, ensuring effective correction of errors and addressing all issues in critical risk areas.

Finally, there was a strong correlation between risk response and the three stages of the audit process. The

rho values indicated a positive association between risk response and the audit process. Davis (2021) explored the impact of risk response on the audit process. His research indicates a highly significant correlation between risk response and all stages of the audit process, highlighting the importance of effectively addressing identified risks to achieve audit objectives. Davis suggests that an organization's ability to respond to risks not only influences the immediate outcomes of an audit but also shapes the direction of future audits. Effective risk response can address identified risks efficiently, reduce the likelihood of similar risks in future audits, and help organizations actively manage and confront risks, ultimately facilitating the achievement of audit goals.

Kim (2020) conducted research focusing on how risk response affects the preparatory stage of the audit process. The study found that organizations with robust risk response mechanisms tend to comprehensively plan the audit preparation stage. Conversely, effective risk response requires a comprehensive understanding of potential risks, providing necessary information for more targeted and effective audit planning throughout the entire audit process. In Pate's (2019) study, the relationship between risk response and the implementation stage of the audit process was explored. The research found that organizations demonstrating robust risk response mechanisms often have more comprehensive and well-planned audit preparation stages. Such organizations can effectively carry out the implementation stage of the audit, possessing centralized audit procedures and robust risk response strategies. The study suggests that proactive risk response methods ensure effective auditing, as auditors can focus on critical areas with known risks.

Table 6*Relationship Between Internal Control and Audit Process*

Variables	rho	p-value	Interpretation
Control Activities			
Preparation Stage	0.784**	0.000	Highly Significant
Implementation Stage	0.695**	0.000	Highly Significant
Rectification Stage	0.708**	0.000	Highly Significant
Information and Communication			
Preparation Stage	0.768**	0.000	Highly Significant
Implementation Stage	0.685**	0.000	Highly Significant
Rectification Stage	0.648**	0.000	Highly Significant
Internal Control Evaluation			
Preparation Stage	0.784**	0.000	Highly Significant
Implementation Stage	0.668**	0.000	Highly Significant
Rectification Stage	0.741**	0.000	Highly Significant

***. Correlation is significant at the 0.01 level*

Table 6 analyzes the relationship between various elements of internal control and different stages of the audit process. Internal control mainly includes three parts: control activities, information and communication, and internal control evaluation. The audit process mainly includes audit stages, namely audit preparation stage, audit implementation stage, and audit rectification stage. It can be determined by Spearman's rho correlation coefficient that there is a Highly Significant relationship between internal control and audit process.

First, the control activities of internal control were highly linked to all stages of the audit process. Rho values ranged from 0.695 to 0.784. The results show that there was a positive relationship between control activities and audit process, and that effective control activities were the basis for the success of audit process. Jackson (2019) studied the relationship between control activities and the audit process. As an integral part of the internal control system, he studied control activities to determine how to interweave control activities with the effectiveness of the audit process. They believe that effective control activities such as the separation of authority and responsibility are the basis for the success of audits. Jackson's findings, consistent with those in Table 16, highlight the importance of control activities at all stages of the audit process. Nguyen(2020) expanded on this by specifically analyzing the relationship between control activities and the audit preparation stage. They found that strong control activities can help auditors carry out their work, and auditors can clearly understand the organizational environment and potential risk areas, so as to promote the smooth implementation of audit work.

Kumar (2021) contributes to a deeper understanding of the audit process by examining the impact of control activities on the implementation and rectification phases. In his research, he found that effective control activities are not only conducive to the implementation of audit procedures, control measures can ensure the effective implementation of audit processes, but also have a guiding role in the audit rectification stage. This proves that the control activities have a dual role, and the control activities can be actively applied in the audit implementation stage to ensure the authenticity of the audit procedure. Control activities then become a key element of the audit rectification phase, which can help correct problems and make recommendations in terms of audit procedures and audit results. In doing so, Kumar's research expands our understanding of the dynamic interactions between control activities and the various stages of the audit process, providing valuable lessons for practitioners and researchers alike.

From Jackson to Kumar, they emphasized the indispensable role of control activities in audit success. Control activities are not only a procedural process, but also a necessary condition for the execution of audit work to ensure the long-term effectiveness of audit work. They stressed the need for auditors not only to strictly implement control activities during the audit process, but also to adopt a continuous monitoring approach to ensure that internal control mechanisms evolve as the environment changes. This shows that it is very necessary to develop control activities in the audit process, which is the main way to ensure the integrity and reliability of the audit function.

Second, Information and Communication are highly correlated with all stages of the audit process. Rho values range from 0.648 to 0.768, and it is not difficult to find the importance of effective communication and information flow in the audit process through data analysis.

By studying the role of Information and Communication, Anderson (2020) found that it has a significant impact on the implementation of the audit process and is of great importance to all stages of the audit process. Information and communication technology can help effective audit communication. Realize the transfer and exchange of audit information, and improve the efficiency of audit work. Anderson believes that efficient information and communication technology is a core component of the audit process, which is not isolated from a specific stage, but an indispensable tool in the audit process. As the audit moves into the implementation and rectification phase, Anderson emphasized the continued importance of information and communications technology. In the process of audit implementation, timely exchange of information can help auditors effectively deal with the complexity of audit procedures, and clear communication can ensure that audit activities are carried out as planned. Entering the audit rectification stage, information and communication technology can form a transparent audit environment, and the open and transparent audit results, as well as effective information management are crucial to guide the rectification process, which can ensure that the audit recommendations are easy to understand, the audit implementation process is operational, and the audit results are conducive to improvement.

Anderson's research emphasizes that ICT is not a secondary element of the audit process, but an intrinsic element throughout every stage of the accounting process. Fully aware of the role of information and communication technology, the University is able to ensure the effectiveness and full impact of the audit.

One of Anderson's key findings is the impact of information and communication technology on audit efficiency and effectiveness. Anderson believes that when auditors can easily obtain audit information and establish effective information communication channels, the whole audit process will benefit. Through technical support, you can have a more comprehensive and detailed understanding of the audited entity, so as to assess risks more accurately, formulate more effective audit plans, and finally obtain comprehensive and effective audit results. In addition, Anderson emphasized that ICT should not only be used within the audit team, but also be effectively used among stakeholders to successfully implement audit recommendations and strengthen internal control operations.

In short, Anderson's study believes that information and communication technology (ICT) plays a key role

in the audit process by collecting a large amount of basic data. Universities and auditors need to prioritize information and communication technology to ensure clear channels of communication and effective information management systems are in place to support all stages of the audit process. They believe that this approach is key to conducting audits, helping them comply with institutional regulations, and adding value to the University by supporting the risk management and control framework.

Finally, internal controls were highly relevant to all stages of the audit process. rho values ranging from 0.668 to 0.784 indicated that respondents unanimously recognized the relevance of internal control to the audit process, a finding that underscored the key role of internal control in strengthening the audit process.

Williams (2021) conducted an important study in this area, providing an in-depth analysis of the relationship between internal control and the audit process. Their research shows that there is a highly significant correlation between the evaluation of internal control and the various stages of audit. The evaluation of internal control helps to identify potential risks and find inefficient areas in time, so that auditors can concentrate on the audit work. Their findings show that internal control evaluation not only contributes to the audit preparation phase, but also influences the audit implementation and rectification phase. This view is supplemented by Patel(2019), who focuses on the impact of internal control evaluation on the preparation stage of the audit process. He found that strict evaluation at the early stage of audit is very necessary to lay a solid foundation for the audit work, so that auditors can develop more targeted audit strategies and audit work can be carried out more effectively. In his research, Patel found that internal control evaluation can ensure that a good audit structure is in place to conduct audit activities in important risk areas. Smith(2020) studied the impact of internal control evaluation on the audit implementation stage and rectification stage. In these stages, continuous evaluation of internal control can improve the quality of audit results and effectively ensure the effectiveness of rectification measures, emphasizing the importance of internal control evaluation in the entire audit process.

In short, through data analysis results, risk management, internal controls and audit processes are highly correlated, and three variables are integral aspects of the university's operational framework. Various studies have explored this relationship, which is critical to the success of an audit.

In summary, this study examined the interrelationships among risk management, internal control, and the school audit process. The results of this study confirmed the crucial connections among these key areas. This interdependency suggested that risk management, internal control, and the audit process were not independent components but were deeply integrated, with each process playing a vital role in the overall effectiveness and operational integrity of school management.

The study found that risk management was closely related to internal control, internal control was connected to the audit process, and risk management was interlinked with the audit process. This connection is crucial for the operational framework of schools, as it implies that effective risk management can maintain robust internal control, which is an indispensable component of internal control, and vice versa. Moreover, these practices directly impact the efficiency and effectiveness of the audit process, with each stage of the audit influenced by risk management and control implementation. Similarly, the study emphasized that internal control, including control activities, information and communication, and internal control evaluation, had a direct and significant impact on the audit process. Strong internal control contributes to more effective planning, implementation, and correction of the audit process, thereby enhancing the overall quality of audits. This crucial relationship underscored the importance of adopting a comprehensive approach in managing risks, implementing internal controls, and conducting audits in school management. The research results indicate that when these factors are effectively integrated, schools can better control operational risks, maintain high standards of management, and ensure continuous improvement in school operational processes.

This study contributes valuable insights into the relationships among risk management, internal control, and the audit process, providing assistance for the establishment of an integrated operational framework for local universities. The paper emphasizes the necessity for local universities to adopt a holistic approach in managing

these three aspects to enhance operational efficiency and achieve the operational objectives of the university (as shown in Figure 1).

Research Output

The diagram appears to depict a framework for local universities to achieve their operational goals. This framework combines three key elements: risk management, internal controls, and an audit process (Figure 1). Risk management takes the center stage, proactively identifying and mitigating potential threats that could hinder the university's ability to reach its objectives. Internal controls then act as a safety net, implemented through policies and procedures to safeguard assets, ensure financial accuracy, and promote compliance. Finally, the audit process serves as a systematic review mechanism, evaluating the effectiveness of both risk management and internal controls. This comprehensive approach suggests that by proactively managing risks, establishing strong internal controls, and conducting regular audits, local universities can significantly increase their chances of successfully achieving their operational goals.

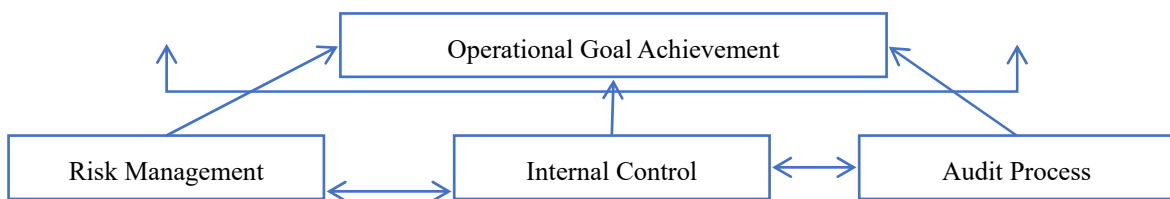


Figure 1. Operational Goal Achievement Framework

4. Conclusions and recommendations

The respondents moderately agreed on the risk management practices of local universities in China particularly in risk identification, risk assessment, risk analysis, and risk response. The respondents expressed moderate affirmation towards implementing internal controls, with a focus on control activities, information communication, and internal control evaluation. The respondents moderately agreed on the audit process under preparatory stage, implementation stage, and corrective action stage of the universities. The study tested and confirmed the highly significant relationship between risk management, internal controls and the school audit process which will lead to goal achievement. A framework for improving the university operational goal achievement was prepared.

The universities may improve the risk management practices by including internal control and audit processes in the operational activities of universities and conducting regular evaluation. The university may increase awareness on risk management, internal control, and audit processes among its employees to improve its practices. The universities may use the proposed framework for better operational goal achievement. The future researchers may conduct further study on risk management practices in other industry or sector with other variables like risk evaluation.

5. References

- Adjei, E., & Ansong, D. (2016). Internal control practices in Ghanaian universities: A case study of the Kwame Nkrumah University of Science and Technology. *Journal of Finance and Accounting*, 4(5), 254-261.
- Ahmed, I., & Khan, A. (2016). Performance appraisal system in Pakistani universities: An analysis of faculty satisfaction and performance. *Journal of Educational Research*, 19(1), 65-79.
- Al-Matari, E. M., Al-Swidi, A.K. & Fadzil, F.H.B.(2014). The effect of the internal audit and firm performance: A proposed research framework. *Review of Management and Marketing*, 4(1), 34- 41.
- Al-Sabaileh, M., & Al-Lozi, M. (2019). The effectiveness of performance appraisal in Jordanian universities.

- Education and Training, 61(6), 712-727.
- Ayagre, P., Appiah-Gyamerah, I. S. H. M. A. E. L., & Nartey, J. (2014). The effectiveness of Internal Control Systems of banks. The case of Ghanaian banks. *International Journal of Accounting and Financial Reporting*, 4(2), 377
- Ayo, C. K., Adebisi, A. A., & Adebisi, M. O. (2018). The role of performance appraisal in Nigerian universities: Perception of academics. *African Journal of Economic and Management Studies*, 9(2), 223-236.
- Bamberger, M. J., & Ruchti, T. G. (2015). Risk management in university procurement processes: A comparative analysis of Swiss and United States universities. *International Journal of Educational Management*, 29(5), 592-611.
- Bayyoud, M., & Sayyad, N.A. (2015). The Impact of Internal Control and Risk
- Beasley, M. S., Carcello, J. V., Hermanson, D. R., & Neal, T. L. (2016). The audit committee oversight process and the mitigating effect of internal control deficiencies on the association between financial reporting risk and restatements. *Auditing: A Journal of Practice & Theory*, 35(2), 21-45.
- Business Management. *International Journal Academy Resources, Business Social Sciences* 5(2), 237-248.
- Chang Qing, Shen Youdi. (2016). Implementation obstacles and improvement strategies for the standardization of internal control in universities. *Journal of Suzhou University (Philosophy and Social Sciences Edition)*, (6), 122-128.
- Chen Min. (2021). Construction of Overall Expenditure Performance Evaluation Index System for Universities under the Background of "Double First-Class" Construction. *Finance and Accounting Research*, (11).
- Deng Yinyin. (2019). Research on budget performance management in colleges and universities from the perspective of internal control. *Modern Marketing (Bi-Monthly)*, (11), 242-243.
- Department of Accounting, Ministry of Finance. (2019). Analysis report on the internal control construction of national administrative institutions in 2017. *Finance and Accounting*, (11), 9-13.
- Development Report on Knowledge Graph (2018). Chinese Information Processing Society of China Speech and Knowledge Computing Professional Committee. 2018.
- Duan Mei, Chen Huandi, Wang Yongfang. (2019). Thinking about the construction of internal control environment of public universities from the perspective of contingency theory. *Finance and Accounting*, (13), 73-74.
- Ejoh, N., & Ejom, P. (2014). The impact of internal control activities on financial performance of tertiary institutions in Nigeria. *Journal of Economics and Sustainable Development*, 5(16), 133-143.
- ElBaz, H. A., & Ahmed, A. M. (2019). The impact of performance appraisal on organizational commitment in Egyptian universities. *The Journal of Developing Areas*, 53(1), 179-191.
- Eniola A.A., & Entebang H. (2015). Government Policy and Performance of Small and Medium
- Eniola, O. J., & Akinselure, O.P. (2016). Effect of internal control on financial performance of firms in Nigeria: a study of selected manufacturing firms. *Journal of Business and Management*, 18(10), 80- 85.
- Feng Bin. (2016). Research on internal control of budget management in colleges and universities. *China Internal Auditing*, (4), 2-6.
- Feng Bin. (2019). Research on Internal Control of Budget Management in Universities. *Accountant's Friend*, (14).
- Gong Jingyu. (2020). Optimization of Comprehensive Budget Performance Evaluation System in Universities. *Accountant's Friend*, (15).
- Guo Daozhi. (2019). Analysis of Internal Control in Universities from the Perspective of Financial Risk Management. *Finance and Accounting Learning*, (26), 248-250.
- He Xuehong. (2017). Research on internal control of budget management in colleges and universities. *Business Accounting*, (23), 57-61.
- Ibrahim, H., Zulkifli, N., & Aswani, F. (2018). The effectiveness of internal control system in Malaysian public universities: A preliminary analysis. *Journal of Financial Reporting and Accounting*, 16(1), 63-76.
- Ibrahim, S., Diibuzie, G., & Abubakari, M (2017). The impact of internal control systems on financial performance: the case of health institutions in upper west region of Ghana. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 684-696.

- Jahanzeb, S., Fatima, T., & Ali, M. (2018). Performance management in universities: A systematic review. *Journal of Applied Research in Higher Education*, 10(2), 139-154.
- Journal of Innovative Finance and Economics Research, 3(4), 29-48.
- Kamau, C.N. (2014). Effect of internal controls on financial performance of manufacturing firms in Kenya. Unpublished MBA management research paper, Nairobi: University of Nairobi
- Kgabo, E.M. (2013). Effectiveness of internal control mechanisms in monitoring financial
- Kinyua, J.K., Gakure, K., Gekara, R., & Orwa, M. (2015). Effect of internal control environment on the financial performance of companies quoted in the Nairobi Securities Exchange. *International*
- Li Suying, Xie Mingming. (2022). Construction and Application of Performance Evaluation Index System for University Budget. *Accountant's Friend*, (11), 118-125.
- Li, H., & Zhu, C. (2016). An empirical study of performance appraisal in Chinese universities. *Journal of Business Research*, 69(6), 2269-2276.
- Lin Li, Guo Zhaoying, Wang Zhibo. (2017). The status quo, problems, and transformation of internal control in Chinese universities. *Educational Exploration*, (1), 97-100.
- Lin, J., & Liu, J. (2019). Internal control and performance of Chinese universities. *Journal of Higher Education Policy and Management*, 41(5), 479-495.
- Liu Borui. (2021). Research on Performance Evaluation of Special Funds for Higher Education Institutions. *Contemporary Accounting*, (24), 16-18.
- Liu Xiaoyong, Zhou Junfeng. (2018). Research on the problems of rigid and flexible management in university budgets-based on the consideration of the new budget law. *Journal of Gannan Normal University*, 39(1), 105-108.
- Liu Y. (2021). Research on Performance Evaluation of Special financial funds of Colleges and universities. *Western Finance and Accounting*,(09):4-7
- Liu Zheng. (2019). Identification and Control of Financial Risks in Universities Based on the Perspective of Internal Control. *Knowledge Economy*, (31), 8-11.
- Lu Kun. (2018). Exploration of the application of risk management in accounting internal control in universities. *Administrative Assets and Finance*, (8), 55-56.
- Management on Banks in Palestine. *International Journal of Economic Finance and Management Sciences*, 3(3), 156-161
- McMillan, J. J., & Nguyen, N. T. (2015). Internal control activities and student financial aid risk management. *Journal of Education Finance*, 40(3), 215-231.
- Ministry of Finance. (2021). Notice of the Ministry of Finance on issuing the Interim Measures for the Supervision and Management of Budget Performance Evaluation Business of Third-party Agencies [EB/OL].
- Mohd Isa, R., Hassan, M. S., & Abd Aziz, N. A. (2015). Internal control practices in Malaysian universities. *Procedia Economics and Finance*, 31, 483-489.
- Monisola, Olowolaju. (2013). Effect of internal audit on prevention of frauds, errors and irregularities in corporate organisation. *Research Journal of Finance and Accounting*. ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online),4(19).
- Ntshangase, S. S., & Nzuzza, Z. L. (2019). Internal control practices in South African universities: An exploratory study. *South African Journal of Accounting Research*, 33(1), 18-36.
- Office of the Ministry of Education. (2021). Guidelines for the internal control of economic activities in directly affiliated universities of the Ministry of Education (trial) [EB/OL].
- Ofori-Dwumfuo, G., & Bawuah, E. (2020). Internal control in public universities in Ghana: The role of management. *Journal of Accounting, Finance and Auditing Studies*, 6(1), 93-109.
- Omolaye, K.E.,and Jacob, R.B. (2017) The Role of Internal Auditing in Enhancing Good Corporate Governance Practice in an Organization. *International Journal of Accounting Research* 6 (1), 2-8.
- Omrane, A., & Ouertani, Z. (2018). Performance appraisal in higher education: A literature review. *Journal of Education and Practice*, 9(19), 30-39.
- resources at the Gauteng Department of Education. Unpublished MA Mini-Dissertation, North-West University,

- South Africa.
- Sawyer, Lawrence B, Dittenhofer Mortimer A, dan Scheiner James H. (2014). Internal auditing. Diterjemahkan oleh: Desi Adhariani. Jakarta: Salemba Empat.
- Shi Shuxia. (2019). Research on Performance Evaluation of Budget Management in Universities Based on Strategic Maps. *Accountant's Friend*, 82-86.
- Suginam. (2017). Pengaruh peran audit internal dan pengendalian intern terhadap pencegahan fraud. *Riset & Jurnal Akuntansi*, 1(1) e – ISSN : 2548 – 9224. p – ISSN : 2548 - 7507.
- Sugiyono. (2017). Metode penelitian kuantitatif, kualitatif, dan R&D. Bandung : Alfabeta, CV.
- Sulaiman, M., Mohamed, R. N., Yusoff, R. M., & Yusof, N. M. (2017). The impact of performance appraisal on the job satisfaction of academic staff in a Malaysian university. *International Journal of Academic Research in Business and Social Sciences*, 7(12), 1143-1158.
- Susanto, A. (2014). Sistem informasi akuntansi. Bandung: Lingga Jaya.
- Tang, D., Wu, J. (2019). Exploration on the Construction of Internal Control System for Budget Performance Management in Universities. *Finance and Accounting*, (01).
- Tang, Y. (2018). Research on countermeasures for financial risk prevention in colleges and universities. *Modern Commerce and Industry*, 39(03), 133-134.
- Tsui, A. S., & Cheung, Y. H. (2018). Performance appraisal: An integrative perspective. In *Handbook of Chinese organizational behavior: Integrating theory, research, and practice* (pp. 133-153). Edward Elgar Publishing.
- Tuckett, A. G., & O'Brien, M. S. (2019). An evaluation of performance appraisal in academic libraries. *Journal of Library Administration*, 59(6), 603-622.
- Wang, B., & Du, Y. (2016). Application of COSO internal control in three lines of defense for risk management and control [COSO 内部控制在风险管理和控制的三道防线中的应用]. *China Internal Auditing*, (4), 4-8.
- Wang, H. (2014). **Research on China's budget performance management reform** [D]. Beijing: Institute of Finance of the Ministry of Finance.
- Xinhua News Agency. (2018, November 19). Opinions of the Central Committee of the Communist Party of China and the State Council on fully implementing performance-based budget management [EB/OL]. [新华网] Retrieved from [link to the document], (This information may not be available online depending on the source).
- Yang, H. (2018). Financial Risk and Control Countermeasures in Universities [高校财务风险及控制对策]. *Economic and Trade Practice*, (03), 24-25.
- Yang, X. (2019). Analysis of the Construction of Internal Control System and Prevention of Corruption Risks in University Financial Departments [高校财务处内部控制制度建设与腐败风险防范分析]. *Accountant*, (07), 65-66.
- Yu, H. (2019). The allocation of supervisory power of college discipline inspection commissions--based on the analysis of the internal governance system of colleges and universities [高校纪检监察委员会的监督权配置--基于高校内部治理体系分析]. *Journal of National Academy of Education Administration*, (4), 55-63.
- Yu, Y. X. (2021). Research on Internal Control of Budget Business in Universities [内部控制在高校预算业务中的应用研究]. *China Internal Auditing* [中国内部审计], (10).
- Zhang, Q. (2019). Research on Financial Risk Control in Universities [高校财务风险控制研究]. *Finance and Economics (Academic Edition)* [财经论证] (08), 61.
- Zhang, Q. L. (2017). Principles and Practical Operations of Internal Control Construction for Administrative Institutions (Revised Edition) [行政事业单位内部控制建设原则与实务操作 (修订版)]. Beijing: Electronic Industry Press.
- Zhang, T. (2019). Reflection on budget performance management in colleges and universities from the perspective of internal control [高校预算绩效管理的内部控制视角反思]. *China Market* [中国市场], (8), 143-144.
- Zhang, X. Y. (2016). Practice of Performance Management of Financial Departments in Higher Vocational

- Colleges Based on BSC [基于BSC的的高职院校财务处绩效管理实践]. Accountant's Friend [会计之友], (16), 92-95.
- Zhang, Y. Z., & Yuan, C. (2018). Research on Risk Assessment Methods in Internal Control Evaluation of Universities [高校内部控制评价风险评估方法研究]. Education Accounting Research [教育会计研究], (4), 51-55.
- Zhao, Y. H., Xiao, S., & Liu, N. B. (2019). Discussion on audit supervision and evaluation of internal control in universities [高校内部控制审计监督与评价探讨]. Audit and Financial Management [审计与财务管理], (10), 8-10.
- Zuo, Y. Y. (2018). Discussion on the construction of financial risk prevention and control system [论构建高校财务风险防控体系].

