Research on Financial Performance of Colleges and Universities Based on COSO Internal Control System

Mao Zhao¹,a and Zhenghua Yue²,b,*

¹Chengdu Normal University, Chengdu 610000, China; ²Chengdu Normal University, Chengdu 610000, China.

a24529773@qq.com, bbyue10103615@qq.com

Abstract

The autonomy of colleges and universities in China has been gradually implemented and expanded, and the financial performance of colleges and universities has become a hot research topic. However, the research theories of financial performance in colleges and universities are insufficient, and there are scattered research activities, which have not formed a sound and effective system. To this end, we can learn from the widely used internal control theory in the world to prove the financial performance research theory of colleges and universities. Taking the internal control framework issued by the US COSO Committee as the focus, this paper analyzes the quality and benefits of internal control in the financial performance environment of colleges and universities, analyzes the current financial problems in colleges and universities, and proposes corresponding solutions. The research results show that the use of COSO internal control system research theory is of great benefit to the rapid improvement of financial performance in colleges and universities.

Keywords

Five elements of COSO; Financial performance; Colleges and universities; Internal control.

1. Introduction

COSO (Five Elements of Internal Control) is the English abbreviation of the sponsor committee of the US Anti-False Financial Reporting Committee. It aims to explore the causes of fraud in financial reports and find solutions. The internal composition of COSO includes control environment, risk assessment, control activities, information communication and communication, monitoring of the environment, and construction of an internal control system of higher education institutions to promote internal control management efficiency, reduce asset loss risks, and help ensure reliable financial reporting. Sex, respect financial laws and regulations [1].

The key factors affecting financial performance include financial documents, cash flow statements, financial statements, etc., which can clearly indicate the university's operational capability, solvency, profitability and development capability; comprehensively reveal the university's operating status and financial status [2]. Disclosure, so as to make an accurate evaluation and judgment on the merits and demerits of the economic benefits of colleges and universities. COSO combines financial performance with the establishment of a university internal control system, which can timely adjust the financial plan of colleges and universities and improve financial performance. Therefore, this topic combines COSO and financial performance to conduct a comprehensive evaluation and supervision of the financial audit of colleges and universities to prevent operational risks and improve the operational efficiency of colleges and universities.
2. COSO and Financial Performance Internal Control Construction System Construction and Control Methods

Choosing to build a suitable university management and internal control methods is the key to the success of the internal control system. The internal control system of colleges and universities needs to be constructed in combination with COSO report and financial performance. It is determined by five elements and three objectives, and is defined by all staff of the university, financial report quality reliability and laws and regulations, to realize comprehensive budget control and accounting information system of colleges and universities [3]. Various methods such as control, internal control audit control, system control, risk prevention control, internal report control and internal audit control are guided by the financial performance management of colleges and universities, and the integration of information technology is used to optimize the financial internal control of higher education institutions.

2.1. Optimizing the Internal Control Environment

Using COSO theory to construct a university control environment, organizational control requires rational control of institutional setup and job division. The organization of colleges and universities should be divided into three levels: first, the leadership level, and the overall planning and decision-making of the university's operations; the second level is the organizational structure level, to implement the decision-making and strategic planning of the university for the construction of the support department for the normal operation of the university; The third level is the functional division of labor. Each production and dispatching department of the university, each management department performs its duties, performs functional work, implements the post responsibility system, and forms an internal control environment with hierarchical division of labor and control at all levels. To this end, it is necessary to establish and improve the financial internal control system of colleges and universities, improve the organizational structure and management system of colleges and universities, establish a solid financial team, and strengthen the construction of internal control environment in four aspects: integrity, diligence and another moral values education. Especially in the establishment of internal control system, good internal control degree may not completely eliminate various economic frauds, but it can play a good role in prevention and supervision. Colleges and universities should establish an incompatible job separation system, authorization examination and approval system, accounting system control and business process control system in accordance with their own circumstances, clear responsibility and authority, and form a mutual checks and balance mechanism.
2.2. Risk Assessment

The financial risk assessment of colleges and universities is to identify, analyze and evaluate various uncertain factors affecting college finance, various potential risks and crises, and draw comprehensive conclusions. On this basis, the management and control of the risks of colleges and universities. To this end, it is first necessary to establish a risk control mechanism, establish an authorization approval system, strictly control the approval authority at all levels, and implement the responsibility to posts and individuals. Establish and improve accounting system control, property protection control, budget control, etc., improve the control content and control procedures of the financial system, and minimize financial risks. Second, control the risk of financing. School-school cooperation should avoid risks and control the size of debt in a reasonable range. In particular, some colleges and universities that borrow money on a long-term basis must maintain a reasonable scale of debt and debt structure, and ensure that the investment of debt can bring relatively equal benefits to colleges and universities. When considering loans, the proportion of assets and liabilities and solvency of colleges and universities should be fully considered to avoid heavy the debt burden is in financial trouble. Finally, circumvent business risks and investment risks. The confusion of the sources of funding in colleges and universities and the pressure of competition between universities have brought risks to the operation and management of colleges and universities. To this end, it is necessary to establish a rapid response mechanism to predict and circumvent possible operational risks in advance; increase the feasibility analysis of investment risks and improve the efficiency of the use of funds and assets. For risky projects, through qualitative analysis and quantitative analysis, predict risks, avoid risks, and minimize risks as much as possible.

2.3. Control Activities

Control activities refer to the unit management’s use of corresponding control measures based on the results of risk assessment to control risks within the tolerance, which is the specific way to implement internal control [4]. Common control measures include: incompatible job separation control, property protection control authorization control, audit approval control, accounting system control link, budget control, internal report control, economic activity analysis control, performance evaluation control, and information technology control. The role of control activities is to help management ensure that management policies are implemented. The goal is to effectively implement management and control risk measures identified through risk assessment. The main problems existing in current universities are:

First, there is a defect in the authorization control of property protection control. For example, the college staff collects tuition fees and does not turn over the finances, resulting in the loss of tuition fees. That is, the property protection control measures for non-financial personnel to restrict cash exposure during the tuition collection process are not taken. For example, the cash receipts used by the cashiers of colleges and universities are large. How much is the normal cash withdrawal amount stipulated in the post system, and whether the accounting and department responsible personnel verify the cash balance and the actual withdrawal amount every day. These are the most basic guarantees for asset security. Requirements, but often in the form of actual work. Second, there are flaws in budget control. The budget of colleges and universities is usually compiled after June every year. From the perspective of controlling costs and expenses, the budget preparation time is relatively late. The budget data of the first half of the year is not available, and the cost control standard cannot be determined. How to control the cost of expenses in the first half of the year. Third, there are deficiencies in the approval of the audit and the control of the accounting system. The daily economic business of colleges and universities is that the accounting supervisors review and approve the payment according to the system regulations. A new accounting business is not specified in the system, but there should be new business processing measures, including immediate treatment methods and new supplementary regulations. Otherwise, there will be a lack of control of the project.
2.4. Information Communication Control

In-house information exchange and communication, in order to implement internal control and control, should timely and accurately collect information related to the economic activities of colleges and universities, and transmit the information to the relevant departments in a scientific transmission mode combined with information processing technology. Colleges and universities must pass financial accounting materials, business management materials and market research, external regulatory department data analysis to determine the financial and economic information of colleges and universities, and use the access to timely adjust the internal control system of colleges and universities to improve the internal control system. To this end, colleges and universities need to start from the following points: First, improve the financial information system of colleges and universities and network resources of colleges and universities [5]. The symmetry and openness of information can facilitate the development of various finances, improve work efficiency, and reduce the turnaround time of business processing. For example, the establishment of a financial data network inspection system allows faculty and staff to grasp the financial information of departments and individuals in a timely manner, which is convenient for work; establishing a financial account number system can save time for reporting and improve the efficiency of financial accounting personnel. Second, strengthen the horizontal communication and external vertical communication between the financial department of the university and the internal. The finance department should strengthen communication with the teaching, administration, logistics and other departments of the university. In particular, it should collect the internal control data of various departments, do a good job in information exchange and resource sharing, and improve the effectiveness of financial internal control. In addition, it is necessary to strengthen communication and communication with the higher education authorities, the financial department, the taxation department, and the institutions of the same level, timely access to the latest education and financial information resources, seize development opportunities and avoid possible financial risks in advance.

2.5. Internal Supervision

Internal supervision is the guarantee of the internal control system. According to the management characteristics, colleges and universities set up a relatively efficient internal inspection system to supervise the soundness, execution and feedback of internal control, improve the internal control system, prevent errors, and control the system. It has always maintained reasonableness and scientific. Through all-round supervision before, during and after the event, it has put forward effective improvement measures in time to ensure the internal control system is efficient and reasonable, and to improve internal system construction. To this end, first, it is necessary to implement the internal audit system of the financial department, and strengthen the regular review of the original documents, accounting vouchers, financial statements and other accounting materials to ensure the authenticity of financial information. Second, it is necessary to pay attention to the internal audit work, the importance of internal audit work in the economic management of colleges and universities, increase the allocation of auditors, improve the professional quality of internal auditors, and enhance the status of internal audit institutions. Third, establish a sense of control and supervision of managers and all employees. According to the principle of relative rights and responsibilities, the person in charge of the unit is responsible for the organization and implementation of the internal supervision system, and bears the ultimate responsibility for the establishment and effective implementation of the supervision system.

2.6. Financial Performance

Financial performance includes various statements, cash flow, accounting vouchers and other indicators related to accounts and assets. It is because of the core components of economic
management, and strictly controls financial performance, comprehensively on the operating conditions and financial status of colleges and universities. Reveal and disclose, so as to make an accurate evaluation and judgment on the merits and demerits of the economic benefits of colleges and universities.

Using the big data processing method, weight the obtained data, set up multiple regression equations, and analyze the internal control evaluation preferences. The internal control score equation expression is:

$$Y_i = b_{i1}X_{i1} + b_{i2}X_{i2} + b_{i3}X_{i3} \ldots b_{in}X_{in} + b$$  \hspace{1cm} (1)

The setting $Y_i$, $X_{i1}$, $X_{i2}$, $X_{i3}$, $X_{i4}$, $X_{in}$ represents the internal control score, the five elements, and the financial Performance.

Through the analysis of statistical results, the control environment and the mean value of information communication are close to the median, and the evaluation of the control environment and the information communication dimension shows a relatively stable nature. Among the above six indicators, the average value of financial information quality is the highest, while the risk assessment and the lowest value of information communication mean that the current colleges pay more attention to financial performance and ignore the risk assessment [6]. At the same time, the information between the auditors and the financial personnel of the university is poorly communicated. problem. On the other hand, it is reported that the current financial management system of colleges and universities still has imperfect points. The construction of risk assessment system is ineffective and there is no perfect risk management system. In addition, the financial information is released to a lower level, and each department has few opportunities to access the financial system of the university, resulting in poor communication of information. In addition, the quality standards of financial information are quite different, indicating that the current auditors have some inconsistencies in the evaluation of financial information in colleges and universities.
### Tab 1. Descriptive statistics of internal control indicators for energy production enterprises (n=56)

<table>
<thead>
<tr>
<th>variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>maximum</th>
<th>Minimum value</th>
<th>median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control environment</td>
<td>12.27</td>
<td>2.24</td>
<td>17.75</td>
<td>14.40</td>
<td>6.70</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>5.87</td>
<td>1.69</td>
<td>9.55</td>
<td>7.64</td>
<td>2.87</td>
</tr>
<tr>
<td>Control activity</td>
<td>12.21</td>
<td>2.23</td>
<td>17.34</td>
<td>14.87</td>
<td>6.86</td>
</tr>
<tr>
<td>Information communication</td>
<td>9.55</td>
<td>2.05</td>
<td>13.10</td>
<td>9.65</td>
<td>4.34</td>
</tr>
<tr>
<td>Internal supervision</td>
<td>12.05</td>
<td>2.29</td>
<td>17.24</td>
<td>14.79</td>
<td>4.34</td>
</tr>
<tr>
<td>Financial quality</td>
<td>27.91</td>
<td>4.69</td>
<td>37.22</td>
<td>29.04</td>
<td>14.12</td>
</tr>
</tbody>
</table>

#### 3. Problems and Measures

Through the analysis of the above survey results, although the internal control evaluation management accountant has certain knowledge of the COSO evaluation system, in most internal control evaluations, the internal control is generally judged based on financial performance, and the judgment standard is roughly equal to the financial information quality standard. The method has one-sidedness and even deviation, which affects the objectivity and applicability of internal control evaluation. Staying in the basic account audit, the original document and the financial verification of the audit procedures, can not fully control the audit risk. Therefore, this topic draws the following conclusions.

Firstly, the internal control risk control needs to be analyzed in the overall situation of the university. Through the strategic risk and the auditing direction, the auditing objectives are determined according to the procedures, and the correct results are obtained. From the bottom up, the risks in the financial statements are summarized and the audit conclusions are formed. According to the risk prevention-oriented approach, the audit efficiency is improved and the business risks are reduced.

Secondly, the improvement of the system is to ensure the rigor of the audit process and the objective and scientific guarantee of the audit results. Improve internal control, establish internal control evaluation and management supervision mode, reduce operational risks, and successfully complete financial control reform in the national green economy development policy.

#### 4. Conclusion

Firstly, through the literature analysis method, the paper searches for the internal control evaluation content, evaluation methods and indicators of COSO management theory, and determines the internal control evaluation basis through literature analysis.

Secondly, through the analysis of the status quo of the internal control of colleges and universities, the author puts forward the research idea of establishing the internal control system combined with COSO and financial performance management.

Finally, COSO management theory and financial performance are used to optimize the university's system structure, and the problems that may arise after the system construction is implemented are integrated, and the opinions and measures for continuous improvement are proposed.

#### Acknowledgments

This work was supported by Financial Performance Evaluation of Chinese Universities. Project Number is CS14SD01.
References


