

## **Risk Prevention and Internal Control in University Research Funding Management**

#### Zhen Shen

Zhengzhou Police University, Zhengzhou, Henan, China

**Abstract:** In recent years, the state has increased more in the scientific research funds of institutions of higher learning, but in terms of the internal control and management of scientific research funds, the financial departments of universities are still in the primary stage. This paper analyzes various business risks in the internal control and management of research funds in Chinese universities, analyzes the causes of risks, and puts forward corresponding preventive measures in order to promote the improvement of the internal control and management system of research funds in domestic universities.

Keywords: scientific research funds; internal controls; risk prevention and control

### **1. Introduction**

The society's attention to scientific research is constantly increasing, and the total amount of scientific research funds of colleges and universities is increasing year by year, which effectively promotes the improvement of the scientific research ability of colleges and universities. While the investment of research funds in universities continues to increase, the management of research funds also emerges in one after another. How to effectively strengthen the internal control of research funds and improve the level of financial management is a major test for universities under the new situation.

# 2. The main business risks existing in the internal control and management of university scientific research funds

Chinese colleges and universities are mainly public universities, and the main scientific research funds come from the government financial appropriation, and the appropriation is increasing year by year. Under this background, the financial departments of colleges and universities generally lack the awareness of strengthening internal control to prevent financial risks. This relaxation of internal control management has led to the financial risk of scientific research funding in many business levels, and the specific manifestations are as follows:

#### 2.1 Income business risk

#### 2.1.1 Non-standard management of bills

Due to the large scale of colleges and universities, there are many tax invoices and financial bills, which brings great difficulties to the management of bills. The quality of the staff of each billing point is uneven, the understanding of the policy is limited, the awareness of the rule of law is weak, the lack of professional knowledge of taxation and finance, the error of the application and the untimely entry of bills are more prominent[1]. In order to encourage school teachers to undertake horizontal projects, some colleges and universities have not received the money, but first borrowed the special VAT invoices. **2.1.2 Diversified sources of funding and the income system does not follow up** 

With the development of higher education, colleges and universities to obtain funding support channels gradually broaden, in addition to the public finance budget allocation and business income, social organizations or enterprise donations, scientific research services, intellectual property and other income also rising year by year, but many schools research funds management system has not been updated, some schools even still in 20 years ago, the old system, income system construction failed to keep pace with The Times, become a serious constraint of income internal control management.

#### 2.2 Expenditure business risk

#### 2.2.1 Misallocation between expenditure and budgeting

At present, universities have begun to fully implement the bidding and procurement system, but due to the specificity of some scientific research projects, not all scientific research expenditure will be included in the procurement plan. In the process of scientific research projects, equipment procurement or market price fluctuation often change, which separates the actual purchase amount from the budget, thus causing the problem of insufficient funds for the later operation of scientific research projects, or the problem of excessive expenditure or failure of expenditure[2].

#### 2.2.2 The expenditure category management system is relatively scattered

Due to the different starting points of functional departments and financial departments, some information asymmetry, the introduction of various expenditure management systems is not timely and unreasonable, and even the budget has been issued, but the accounting auditors do not know what the scope of expenditure compliance.

#### 2.2.3 False accounting business is not easy to check

In the process of financial inspection of superior departments, it was found that false invoices were used to get project funds. In addition, the cases of false contracts, fictitious matters, true invoices and false business are also common.

# **3.** Analysis of risk causes of internal control and management of university scientific research funds

The main step of internal control management in colleges and universities is to find out the deficiencies and risk points at the business level, and analyze the causes, so as to determine the strategies to deal with risks and constantly improve them.

#### 3.1 Weak internal control awareness and lack of internal control management measures

At present, the current situation of financial departments in many universities in China attaches importance to accounting but ignores management. The main energy of financial personnel is used in simple and repeated daily accounting, and many financial staff do not understand the concept of internal control of scientific research funds. With the gradual expansion of the scale of colleges and universities, the expansion of funding sources will inevitably bring the growth of the total amount of funds. If the internal control system of scientific research funds is not built as soon as possible and still managed according to the old methods, the school is bound to be trapped in the whirlpool of financial risks. At present, in addition to the general lack of internal control consciousness in the university management, the internal control system is not perfect, the internal control management personnel is also seriously insufficient, and the responsibility has not been pressed layer upon layer[3]. For example, many universities have not yet introduced an internal control management of scientific research funds of the university has neither feasible standards and implementation procedures, nor formed a targeted solution strategy. The division of responsibilities is unclear, which naturally leads to the shirking of responsibility between departments when internal control risks occur.

#### 3.2 Lack of risk assessment mechanism

Risk assessment mechanism is an important part of internal control management, but many universities have not formulated scientific risk assessment mechanism, and lack effective methods and processes of risk identification, analysis and response to scientific research funds management, which cannot be carried out regularly. Or although some units carry out risk assessment, they often become a formality to cope with the inspection of superior authorities, with problems such as incomplete risk assessment coverage and unscientific risk assessment methods. In addition, the risk management of scientific research projects often focuses on post-event control, and coping measures will be taken only after the risk occurs. In this way, the best time point for risk control is often missed to increase the economic losses caused by risks.

#### 3.3 Lack of internal audit and supervision mechanism

Although colleges and universities have made their budgets and final accounts public as required, they are only published in major categories. Whether it is strictly followed the budget is not transparent and not subject to public supervision. The internal supervision function of the school does not play an effective role, the internal audit department is not efficient, the audit report issuance cycle is long, fails to organize special audit regularly or irregularly, and fails to find out the irregularities in the use of funds and correct it in time. At present, because the management of scientific research funds involves multiple business departments, the supervision direction and objectives of each department are inconsistent, and the lack of independent special audit, resulting in the lack of a joint force of supervision and weakening the intensity of supervision.

#### 3.4 Poor information communication between departments

In universities, the use of scientific research funds involves scientific research project management, finance, assets and audit and other departments. Each management department is relatively independent, with their own functional objectives and interest considerations, and the information communication channels are not smooth, and a good coordination mechanism is not formed. For example, the management department of scientific research funds focuses on the examination of the authenticity and integrity of the use of funds and the reimbursement of the bills, while the management department of scientific research project often pays attention to the contents related to the scientific research process, such as project declaration, project progress and final acceptance[4]. Although this management method is conducive to the declaration and completion of scientific research projects, it is easy to create regulatory loopholes and the illegal use of funds or unreasonable expenditure in the use of funds.

## 4. Internal control management and risk prevention measures of university scientific research funds

#### 4.1 Build the overall internal control and management system

Establish the school internal control management organization, and clarify the internal control management responsibilities. To lead the school, the integration of scientific research project management department, financial department, audit department and other related business, establish special internal control management institutions, to comb the responsibilities of scientific research funds management departments, each link of scientific research funds management to build a clear responsibility mechanism, and the specific responsibilities to each department, to the individual. The institution should regularly organize the study and training of relevant laws and regulations of internal control management, improve the internal control awareness of all staff, clearly understand the use norms of scientific research funds, coordinate the relevant business departments to work together, and effectively manage the use efficiency of scientific research funds. While doing risk warning, we should strengthen external supervision and internal audit. Strictly implement the internal control management departments; attach attention to the evaluation and supervision functions of internal audit on the use of funds, organize special audit regularly or irregularly, gradually improve the preconditions and independence of internal audit, and realize the effective evaluation and re-supervision of internal financial control by internal audit.

## 4.2 Conduct vertical process supervision and improve the management chain of scientific research funds.

We can refer to the PDCA cycle management mode in enterprise management, and supervise the scientific research funds from four stages: Plan,Do,Check and Act. In the budgetary stage of scientific research funding, Allocation plan of project funds use and project performance appraisal objectives, Should be submitted to the financial department for review and evaluation, Give rationalization proposals, To ensure the rationality and scientificity of the budget preparation; At the implementation stage of the research funding, Financial personnel shall regularly carry out the inspection and inspection of the use of funds, Check the difference between the benchmark amount and time schedule of the actual expenditure and the budget plan, In order to detect the problems in real-time, And a targeted adjustment of the use of scientific research funds plan; During the review stage of the research funding, Emphasis should be placed on checking whether the expenditure of scientific research funds, To realize the benign interaction between the use and implementation of scientific research funds, To realize the benign interaction between the use and implementation of scientific research funds, To realize the benign interaction between the use and implementation of scientific research funds, To realize the deficiencies in the management work, Then establish and improve the information feedback and budget adjustment standardization mechanism, Continuously optimize the key process of the management of scientific research funds.

## 4.3 Optimize the coordination degree of departments and realize the information sharing of scientific research funds

Each department should be on the basis of their original division of labor give full play to the professional and functional advantages, find work together, jointly promote internal control management, to the integration of business management and financial management, the integration of business data and financial data for internal control gripper, realize the internal linkage of business and financial, gradually improve the coordinated development of scientific research funds management. University management should according to their own actual needs, with the actual internal control problems, as soon as possible to build customized research funds internal control management information platform and financial information database, constantly improve the internal business departments between universities, colleges and universities and external supervision departments, outside the information demand subject between data interaction and sharing business needs. Through the construction of integrated information platform, the departments of related business process points, such as before the financial department to assist scientific research project management department budget cost and benefit, in the

process of project implementation audit department to project standardization constraints and supervision, strictly control the occurrence of financial risk. On this basis, universities should also establish unified data interaction standards, optimize the information exchange channels of the university financial internal control management system and other related business management systems, so as to continuously improve the business collaboration and interconnection between departments.

### 5. Conclusion

Internal control provides new ideas and new ways for the management of scientific research funds. However, with the expansion of new business in colleges and universities, the risk points of the management of scientific research funds in colleges and universities will not remain unchanged. The internal control management system and methods should be in accordance with the principle of dynamic, and constantly enriched and improved with the development of the actual situation. The ultimate goal of internal control construction is to serve the school management, and with the continuous change of the school management environment, the internal control construction must establish a long-term mechanism to ensure the integrity and safety of the use of scientific research funds, so as to ensure the orderly development and efficient completion of scientific research tasks.

### References

- [1] Zhu Liang. Internal control, management and risk prevention of university scientific research funds [J]. Cooperative Economy and Technology, 2024, (08): 120-122.
- [2] Sun Y, Deng D. Research on the defects and improvement of internal control of scientific research funds in colleges and universities based on FMEA model[C]International Conference on Service Systems and Service Management.Dalian: IEEE,2017:1-4.
- [3] Lee Y H. Determinants of research productivity in Korean Universities: The role of research funding[J]. The Journal of Technology Transfer, 2021, 46(5): 1462-1486.
- [4] Chandran V G R, Nourani M, Selvarajan S K, et al. Selective research funding policy and catching up the ladder in university research performance in Malaysia[J].Managerial and Decision Economics,2021,42(3):539-550.