

# Research on the Reform of Funds Management of Scientific Research Projects in the Central Finance of Colleges and Universities in the New Era\*

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**Abstract**—In the new era, universities are the main force of scientific and technological innovation, the energy pool of scientific and technological innovation, and undertake the important mission of national scientific and technological innovation. The central government's investment in scientific research projects in colleges and universities is increasing, the financial research projects and funding funds obtained from various channels are increasing, the difficulty of scientific research funds management is increasing, and the problems in the management and use of scientific research projects are becoming more and more prominent. According to a series of new financial and scientific research project funds management policies of China, aiming at the new situation faced by the management of scientific research funds in colleges and universities, this paper analyses the problems existing in the management of scientific research funds in colleges and universities, puts forward the reform and innovation of the use and management mode of scientific research project funds in colleges and universities, forms a dynamic financial management system, and stimulates scientific research personnel. The enthusiasm of scientific research and technological innovation should create a clean and healthy environment for scientific research, improve the ability of scientific research management and promote the development of scientific research and technological innovation in colleges and universities.

**Keywords**—new era; scientific research funds of colleges and universities; management

## I. INTRODUCTION

General Secretary Xi Jinping pointed out in the report of the Nineteenth Party Congress that socialism with Chinese characteristics has entered a new era. This is a scientific judgment of the new historical orientation of China's development and points out the direction for the management of scientific research funds in colleges and universities. Colleges and universities in the new era are the main force of scientific and technological innovation, the

energy pool of scientific and technological innovation, and undertake the important task of scientific and technological innovation. At present, the state's investment in scientific and technological innovation is increasing, and the investment in science and technology is increasing year by year. More and more financial research projects are funded by universities through various channels, and the funds for scientific research projects have increased significantly. At the same time, the difficulty of fund management is becoming more and more serious, and the phenomenon of violating rules and regulations exposed in the use of scientific research project funds is increasing, and deepening the reform of funds management mechanism of scientific research projects in colleges and universities, promoting scientific and rational management of funds of scientific research projects, stimulating scientific research enthusiasm of researchers, promoting scientific and technological innovation in colleges and universities, and improving the scientific research management ability of colleges and universities. Therefore, under the new policy of the new era, universities must constantly improve and refine the management system of scientific research funds, ensure the effective use of scientific research project funds in accordance with the regulations, promote the smooth development of scientific research and management work, and enhance the sustainable output and transformation of high-quality scientific research results.

## II. THE SIGNIFICANCE OF THE REFORM OF THE FUND MANAGEMENT SYSTEM OF FINANCIAL RESEARCH PROJECTS IN COLLEGES AND UNIVERSITIES UNDER THE NEW SITUATION

### A. Deeply Promoting the Reform of Fund Management of Financial Research Projects in Universities and Colleges

Since the 18th National Congress, the central government has made a comprehensive deployment of the reform of the

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scientific and technological system and the innovation-driven development, and has issued a series of major reform measures. Among them, the Executive Office of the State Council of the Central Office of the Communist Party of China issued the "Implementation Plan for Deepening the Reform of the Scientific and Technological System". In order to better implement the reform decision-making of the Central Committee and further promote the reform of the fund management of scientific research projects, the General Office of the Central Office of the Communist Party of China and the General Office of the State Council issued a number of ideas on further improving the fund management of scientific research projects of the Central Government. See the Circular of the Ministry of Finance of the People's Republic of China on Further Implementing and Implementing the Policy of Funding Management of Scientific Research Projects of the Central Government (No. 2016/50), and the Education Department of the Ministry of Finance of the People's Republic of China (No. 2017/6). Through these documents, it can be felt that the central government is steadily and deeply promoting the reform of scientific research project management and the use of scientific research funds in the new era.

*B. Scientific Research Funds Management Policy Is the Guarantee to Stimulate the Vitality of Scientific and Technological Innovation in Colleges and Universities*

In the new era, colleges and universities undertake new missions, and scientific and technological innovation activities are being further promoted. Universities and colleges have become the main force of scientific and technological innovation. The state attaches more importance to scientific research in colleges and universities, invests more and more funds in scientific research, and gradually increases financial research projects and funds. The conditions and environment for scientific research in colleges and universities have been further improved, which has stimulated the enthusiasm of scientific researchers. Under this new situation, scientific and reasonable management system and mode of scientific research funds must be established to protect scientific research and scientific and technological innovation. And a good and orderly system environment for the management of scientific research funds can be established to mobilize the enthusiasm, initiative and creativity of scientific and technological personnel, so that scientific researchers can concentrate on research, produce high-quality results, and promote the scientific research and innovation development of colleges and universities.

*C. Realistic Demand of Increasingly Complex Management of Scientific Research Funds*

With the deepening of the comprehensive reform of higher education and the vigorous promotion of innovation-driven development, scientific research and innovation-driven universities have become an important symbol of the level and strength of running schools between universities. [1] With the deepening of the reform of the fund management system of scientific research projects, the innovative vitality

of scientific research personnel has been stimulated. The state's investment in scientific research projects and funds in colleges and universities is increasing, and scientific research funds in colleges and universities have gradually become one of the important sources of funds for scientific research and innovation development. In this case, the original management system of scientific research project funds has not adapted to the new situation, the implementation of the management system of scientific research project funds is not in place and imperfect; the direct fee column in the budget preparation of scientific research project funds is too complex and too restrictive, the use of scientific research project funds can't be reasonable expenditure; and the disjointed management process of funds is becoming increasingly prominent.

**III. MAJOR PROBLEMS IN THE MANAGEMENT OF FINANCIAL RESEARCH FUNDS IN COLLEGES AND UNIVERSITIES**

*A. The Budget Structure of Project Funds Is Not Perfect Enough*

At present, the budget of scientific research projects is mainly filled in by the subjects compiled by the project budget document. Its subject preparation is clear. Its advantage lies in highlighting the normative and definite nature of the budget, but at the same time, the subjects compiled by the budget document are not flexible enough to fully cover the actual needs of the project in the study. Project managers do not understand the direct cost expenditure subjects in place, the use is not clear, the filling is too general, and there is no incentive for researchers to get research funds in the budget, which results in the proportion of individual subjects in the budget subjects being too high or too low, deviating from the needs of project research, such as high equipment and data costs, low personnel costs, etc. [2] The actual expenditure of the project in the research process deviates greatly from the subject funds in the budget preparation of the scientific research project funds. In the research process, there are often phenomena such as adjusting the budget or using the funds in the budget department, which is not conducive to the better use of the scientific research funds by researchers.

*B. The Internal Control Management System Is Not Perfect and the Process of Funds Management Is Not Clear*

At present, the budget and use of scientific research project funds in colleges and universities are carried out by project managers, the financial department is responsible for the management of project funds, the scientific and technological management department is responsible for the management of the whole research process, the supervisory and supervisory department is responsible for the review of funds after the completion of the project, and the secondary department is responsible for the specific supervision of scientific research projects. The lack of linkage mechanism among project managers, scientific research management departments, financial management departments, supervision departments and the secondary departments where the

project is located leads to the disconnection and isolation of the management between the research process management of scientific research projects and the process management of the use of scientific research funds. Science and technology management departments mainly focus on the level of projects, the number of projects obtained, the amount of funding, the process of scientific research projects and the quality of output, etc. The use and supervision of project funds are weakened, which is considered to be supervised by financial departments. However, the financial department only judges whether the use of funds conforms to the financial regulations according to the budget of project funds, and does not understand the specific implementation process of scientific research projects. The supervisory and supervisory department only audits the funds in the final examination and acceptance. The second-level departments where the project leaders are located are difficult to fulfill their supervisory obligations, which results in the inadequate supervision of scientific research projects funds and the appearance of some project leaders when using funds. Over-expenditure, false reporting, misappropriation and other irregularities occur, which makes it difficult to comprehensively manage and effectively supervise the funds of scientific research projects. The management process, division of responsibilities and powers and internal monitoring of scientific research project funds have not formed an effective supporting mechanism. At the same time, the lack of communication among departments in the management of scientific research projects and the poor transmission of information lead to the disjunction between the project completion schedule and the use of funds; and the confusion of scientific research expenditure may affect the scientific research personnel to concentrate on research.

*C. The Division of Responsibilities and Powers Is Not Clear and the Management Service Is Single*

The fund management of scientific research projects in colleges and universities is managed by many departments, the division of responsibilities and powers is not clear, there is no detailed internal control system, there is no unified management process, and management services are done separately, which results in the difficulty in managing and managing the funds of scientific research projects.

**IV. ACCELERATING THE REFORM OF SCIENTIFIC RESEARCH FUNDS MANAGEMENT IN COLLEGES AND UNIVERSITIES UNDER THE NEW SITUATION**

*A. Accelerating the Reform of "Releasing Control Clothing" in the Field of Science and Technology, Improving the System of Fund Management of Financial Scientific Research Projects, Improving the Internal Self-control Mechanism, and Establishing the Management Order of Scientific Research Funds in Colleges and Universities*

In the management of scientific research funds in colleges and universities, people, finance and materials are mainly managed. If there is no scientific and sound management system of scientific research funds, the first is

the lack of corresponding restraint mechanism; the second is the lack of corresponding incentive mechanism; and the third is the vulnerability to the illegal use of scientific research funds. Therefore, colleges and universities should actively implement the spirit of the document issued by the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council on Further Improving the Fund Management of Scientific Research Projects of the Central Government (No. 50 of 2016 issued by the Office of the Central Government of China), and promote the reform of "release and control clothing" in the field of science and technology. Institutions of higher learning must adhere to the principle of problem orientation, combine with the actual situation of the school and the new fund management policy for scientific research projects, carefully find out, sort out and analyze the current fund management system for scientific research in the school, promptly put forward and solve new problems, further revise and refine the budget formulation, fund allocation, labor service fees, indirect fees, external funds, the use of surplus funds and accounting audit of scientific research funds and other concrete management system, as well as promote the reform of fund management of scientific research projects to take root, insist on managing projects, people, money and things with the system, and enhance the "sense of achievement" and "sense of gain" of scientific research personnel reform.

*B. Strengthening Collaborative Management Among Departments, Clarifying Responsibilities and Powers, Clarifying Responsibility Subjects, and Standardizing Work Processes*

Scientific research project funds management is not a single department management, but a multi-department collaborative management, strengthen the collaborative management relationship between departments, jointly reform and innovate new ways of scientific research funds management, formulate a scientific research funds management system that not only meets the needs of scientific research projects, but also meets the requirements of financial management and property management. It is necessary to distinguish the responsibilities and powers of various departments, clarify the main body of responsibility, and standardize the work flow, and to create a sound working process environment for scientific researchers to devote themselves to research.

*C. Reforming the Staffing of Scientific Research Management Institutions and Setting up the Posts of Scientific Research Accounting Assistant*

Scientific research accounting assistant is a full-time financial researcher who knows not only scientific research management but also financial management system. At present, the budget preparation of scientific research projects is mainly carried out by project leaders and project team members independently, without the participation of financial managers familiar with the system, which easily leads to the lack of scientific, rational and normative budget of scientific research projects. [3] It is imperative to increase

the number of scientific research accounting assistants, so that scientific research accounting assistants can guide project leaders and members to prepare and fill in scientific and reasonable scientific research funds budget, reduce the burden of scientific research personnel in the preparation and use of funds budget irregularities, reduce the phenomenon of irregularities in the use of scientific research funds, and improve the effective use of scientific research funds.

*D. Strengthening the Training of Management Personnel, Financial Personnel and Scientific Research Personnel in Scientific Research Project Funds Management Policy*

In order to implement the newly promulgated central government policy on the management of funds for scientific research projects, more efforts should be made to train managers, financiers and researchers on the management of funds for scientific research projects. First, through centralized learning, it is available to systematically and deeply study the new scientific research funds management policy documents and document interpretation, understand and grasp the connotation of its policy; second, it is available to vigorously publicize the new scientific research funds management policy through the form of network, website, Wechat and propaganda column, so as to make the new scientific research funds management policy deeply popular and let more scientific research managers and researchers study independently, learn to further understand and master its policies, and strangle the phenomenon of irregular operation and violation of discipline and law before it happens.

*E. Strengthening the Financial Supervision of Scientific Research Funds and Simplifying the Procedure of Compensation and Approval of Scientific Research Funds*

In the process of fund management, it is necessary to combine strict financial supervision with simplified reimbursement audit procedures. Firstly, it is necessary to strictly abide by the relevant provisions on fund management, and the funds for scientific research projects must be earmarked for special purposes and may not be misappropriated for other purposes. The second is to formulate and improve the scientific procedures for financial reimbursement of scientific research funds, and implement the procedures for reimbursement at different levels of authorization, approval and responsibility, which run through all aspects of budget management, revenue and expenditure management and asset management of scientific research projects. Thirdly, it is necessary to improve the management system of detailed balance funds and external funds; strictly implement the regulations of state-owned assets management and relevant provisions of government procurement; improve the supervision system of equipment procurement, so as to make the whole process open, transparent and traceable; and improve the relevant management system of detailed research activities, travel, meetings and so on. It is necessary to supervise the whole process and supervise in an all-round way so as to prevent the illegal use of scientific

research funds or corruption cases. [3] At the same time, it is necessary to strengthen the supervision of horizontal scientific research funds, incorporate them into the unified financial management of the units, and manage them in accordance with the provisions of the contracts signed by the two parties.

*F. Strengthening the Construction of Networked Scientific Research Management System, Promoting the Disclosure of Information Within the Unit, Strengthening Internal Monitoring, and Improving the Transparency of Scientific Research Funds Management*

At present, one part of the construction of digital smart campus in colleges and universities is the informationalization construction of scientific research management. Through the connection of scientific research management system and smart campus network, it can integrate resources more effectively, optimize the allocation, and improve the utilization rate and management efficiency. The management of scientific research funds makes full use of modern network office, promotes the publicity of funds information of scientific research projects within units, clarifies the responsible subjects of internal information publicity, perfects the system of internal information publicity, and further opens appropriate information of scientific research funds. Besides the confidential information involved in the relevant provisions of the state, the main contents that can be publicized are as follows: the establishment of scientific research projects will also publicize the application and approval of funds, budgeting, and adjustment of funds, direct funds, indirect funds, and final acceptance and audit results of funds. Accept the supervision of the internal personnel and the discipline inspection and supervision department of the unit, so as to ensure that there is no dead-end management of scientific research funds.

## V. CONCLUSION

In a word, it is necessary to deepen the reform of the scientific and technological mechanism, implement the new central government's policy on the funding of financial research projects, and improve and refine the management system of scientific research funds within universities. Standardize the management process of scientific research funds, innovate the management service mode, create a good scientific research environment, stimulate the enthusiasm and innovation of scientific research personnel, and ensure that the decentralized policy authority of scientific research funds management is well managed.

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