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Optimization Strategies for Scientific Research Fund Management in Provincial Local Universities under the Background of the "Streamlining Administration, Delegating Powers, and Improving Services" Reform

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Abstract: *Provincial local universities not only carry the task of cultivating talents for the country, but also undertake the task of serving the high-quality development of the local economy, thus constructing their role and positioning in the higher education system. With the increasing financial support from the national and municipal governments for local provincial universities, the most significant investment in scientific research funds has been increasing year by year, which conforms to the development direction of the times, encourages scientific and technological innovation, drives production with technology, and focuses on efficient results orientation. However, compared to provincial universities, local provincial universities also have geographical limitations and limited research funding. Therefore, in addition to striving for more sources of funding, scientific and effective management of research funding is an important part of project implementation. This article explores the current situation and existing problems of scientific research fund management in provincial local universities under the background of the current "Streamlining administration, Delegating Powers, and Improving Services" reform, optimizes the path, further improves efficiency, and promotes the sustained high-quality development of local universities.*

Keywords: *Streamlining administration, Delegating Powers and Improving Services, Scientific Research Funding*

1. Introduction

"Streamlining administration, Delegating Powers, and Improving Services" is an abbreviation for "streamlining administration, delegating powers, strengthening regulation, and improving services." It emphasizes optimizing governance structures and enhancing service delivery to foster innovation and efficiency. Over recent years, the government has issued a series of policies and implemented reform measures aimed at refining the management of research funds. These include "Several Opinions on Further Improving the Management of Central Financial Research Project Funds" and "Notice on Several Measures to Optimize Research Management and Improve Research Performance." Additional, the issuance of the "Several Opinions on Reforming and Improving the Management of Central Financial Research Funds" in 2021 marked a significant advancement by further elaborating the principles of "streamlining administration and delegating power" within the domain of science and technology [1].

This evolving framework signals a shift in research funding governance toward a more decentralized and service-oriented direction, aimed at reducing administrative burdens, empowering research institutions, and ensuring that resources are better aligned with strategic goals. Importantly, these reforms are not isolated efforts, but an integral part of a broader system of reforms to the STI ecosystem. By incorporating research funding management into this larger framework, policies aim to create a synergistic environment that supports scientific breakthroughs, fosters collaboration, and maximizes research performance in the new era.

The comprehensive approach underscores the commitment to aligning policy mechanisms with the dynamic needs of an innovation-driven economy, ensuring that reform measures contribute not only to short-term efficiency gains but also to long-term sustainable technological advancement progress.

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2. Current Situation of Scientific Research Fund Management in Provincial and Local Universities under the Background of the "Streamlining administration, Delegating Powers, and Improving Services" Reform

According to data from the National Bureau of Statistics, the national fiscal expenditure on science and technology has been increasing year by year from 2014 to 2023, from 645.45 billion yuan to 1199.58 billion yuan. Among them, the proportion of local fiscal expenditure on science and technology has increased from 55.1% to 66.9%, as shown in Table 1. Data shows that the government is increasingly encouraging local financial and technological development, which is a favorable environment and opportunity for provincial and local universities to develop scientific and technological innovation. Therefore, the scientific and effective management of scientific research funds is the guarantee for the development of scientific and technological innovation [2].

Table 1: National Financial Science and Technology Expenditure from 2014 to 2023.

Annual indices	Local fiscal technology expenditure (in billions of yuan)	Proportion of local fiscal technology expenditure (%)	National financial expenditure on science and technology (in billions of yuan)
2014	3555.4	55.10%	6454.5
2015	3993.7	57.00%	7005.8
2016	4491.4	57.90%	7760.7
2017	4962.1	59.20%	8383.6
2018	5779.7	60.70%	9518.2
2019	6544.2	61.10%	10717.4
2020	6336.8	62.80%	10095
2021	6971.8	64.80%	10766.7
2022	7325	65.80%	11128.4
2023	8022.7	66.90%	11995.8

Note: The data is sourced from the National Science and Technology Investment Statistical Bulletin of the National Bureau of Statistics. (https://www.stats.gov.cn/sj/zxfb/202410/t20241002_1956810.html)

Under the new situation, a series of policy documents issued by the country have responded to the development of the times, increased support for scientific and technological innovation, encouraged efficient output oriented results, formed a mechanism with research project leaders as the first responsible person, relaxed the autonomy of scientific research and innovation, and increased awareness of responsibility risks and integrity. However, in the process of policy implementation, relevant research institutions have misunderstandings and have not fully considered the laws and characteristics of local universities, resulting in some unclear systems and bringing certain difficulties to researchers. In order to fully understand the spirit of national documents and further strengthen the management of research funds in local universities, this article proposes optimization strategies based on the characteristics of local university development and the difficulties in implementing policies, which aims to solve practical problems, improve management and service efficiency, and promote the sustained and rapid development of scientific research in universities.

3. Main Problems in the Management of Research Funds in Provincial Local Universities

3.1. Incomplete Information System Construction and Insufficient Information Integration

In the information age, the informatization of education has become an inevitable trend of development, which influences various facets of educational management, including research funding management. However, the poor information sharing and integration within scientific research funding management systems significantly hinder management efficiency, creating barriers to the effective allocation and utilization of research resources. Currently, there are many problems in how to effectively integrate the scientific research management system with other systems in many provincial universities. Although some universities have established a formal sharing mechanism, they often fail to achieve the real integration of resources, and information asymmetry exists for a long time. Due to the lack of integration, key data between departments cannot flow seamlessly, and it is difficult for researchers to obtain accurate and real-time information on the use of scientific research funds through the system platform. Especially under the background of the "Streamlining Administration, Delegating Powers, and Improving Services", which aims to reduce administrative burdens and improve public services, the current state of scientific research management is inadequate. The policy emphasizes the need for

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efficient, transparent, and responsive governance, yet the lack of an integrated and information-based research funding platform prevents universities from aligning with these expectations. Without a high-quality, transparent and accountable system, it is difficult to ensure the rational use of scientific research funds and create an environment conducive to innovation and academic progress. Therefore, it is imperative to establish an effective information-based scientific research funding platform that can not only integrate decentralized systems, but also promote real-time data sharing, transparency and accountability. The platform will enable researchers to obtain accurate information about scientific research funding, improve project monitoring efficiency, and enhance overall management capabilities. In addition, it will help achieve the broader goals of administrative simplification and service improvement, ensure that scientific research management can meet the requirements of modern education, and make meaningful contributions to national and global scientific development.

3.2. Inadequate Management of Scientific Research Funding Carryover and Surplus

The research management departments of universities are responsible for project budgeting and conclusion each year. However, they have failed to take any clean-up measures for projects that have been concluded but whose funding remains unused for a certain period of time. The main reason is that although the government has been increasing research funding year by year, it has also increased the competitiveness of funding competition. With geographical constraints and limited information resources, it is more difficult for local universities to apply for various research funding. Therefore, considering the hardships faced by researchers, the research management department has not liquidated or recovered the funds from them. Insufficient utilization of the unit's right to coordinate the use of surplus funds has resulted in low efficiency in the use of surplus funds [3]. Researchers generally prioritize the application process over execution. The lack of scientific budgeting design and timely understanding of research policies increases the difficulty of reimbursement. Relevant research management departments focus more on projects than on management, resulting in inadequate supervision. Consequently, some research funds remain unspent for extended periods, and this irregular management practice has inadvertently increased the financial burden on universities. There is still room for further improvement and optimization in reducing idle funds and improving the efficiency of surplus fund utilization [4].

3.3. Unscientific Budget Preparation for Research Funding, Making It Difficult to Implement

The management of research funding is highly policy-driven and requires a unity of professionalism and practicality [5]. The budget submission for research funding occurs during the application process. The principals of research projects are either frontline teaching faculty or dedicated research personnel, and the university has certain requirements for their research workload. Therefore, due to the pressure of teaching and research, most of their energy is focused on scientific research and application, with relatively little attention paid to changes in research funding management policies. In addition, they are not proficient in the management and financial knowledge of research funding. Therefore, when applying, they prepare budgets based on past experience, lacking calculation basis and long-term planning for implementation. In addition, there are unforeseen expenses during the implementation of scientific research projects, such as encountering obstacles during the experimental process, equipment functions not meeting experimental requirements, requiring equipment updates and upgrades, or hiring experts to provide certain guidance for difficult problems resulting in labor costs. The staffing of scientific research teams may change according to the direction of project development, and professional and technical personnel may also increase personnel expenses, leading to inaccurate budget preparation. During the research process conducted by the principal investigator, changes in research direction and technical routes may occur, resulting in significant alterations to budget expenditures. This undermines the rigor of budget preparation, and frequent adjustments to the budget are cumbersome, thereby increasing the difficulty of budget execution.

4. Optimization Strategies for Scientific Research Fund Management in Provincial Local Universities

4.1. Establishing an Effective Integrated Information Technology Research Funding Platform

We should strengthen resource integration, break down information barriers, overcome cross departmental information sharing platforms, improve effective integration of research funding management platforms, financial systems, personnel platforms, procurement systems, contract

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management systems, travel approval systems, asset management systems, etc., and maximize resource allocation (Details of Optimization process as shown in Figure 1). In today's research environment, optimizing the allocation of scientific research resources has become increasingly important. It not only concerns the efficiency of scientific research output, but also directly affects the transformation and application of scientific and technological achievements [6]. Researchers can timely understand the allocation and use of project funds, the progress of travel approval, and the signing of equipment purchase contracts on the platform, saving time in handling related signing matters. At the same time, with the emergence of intelligent AI, universities can utilize high-tech such as big data and artificial intelligence to optimize the application of scientific research projects, guide budget preparation, improve the standardization of fund use, strengthen project management risk control, and provide support for the scientific management of funds.

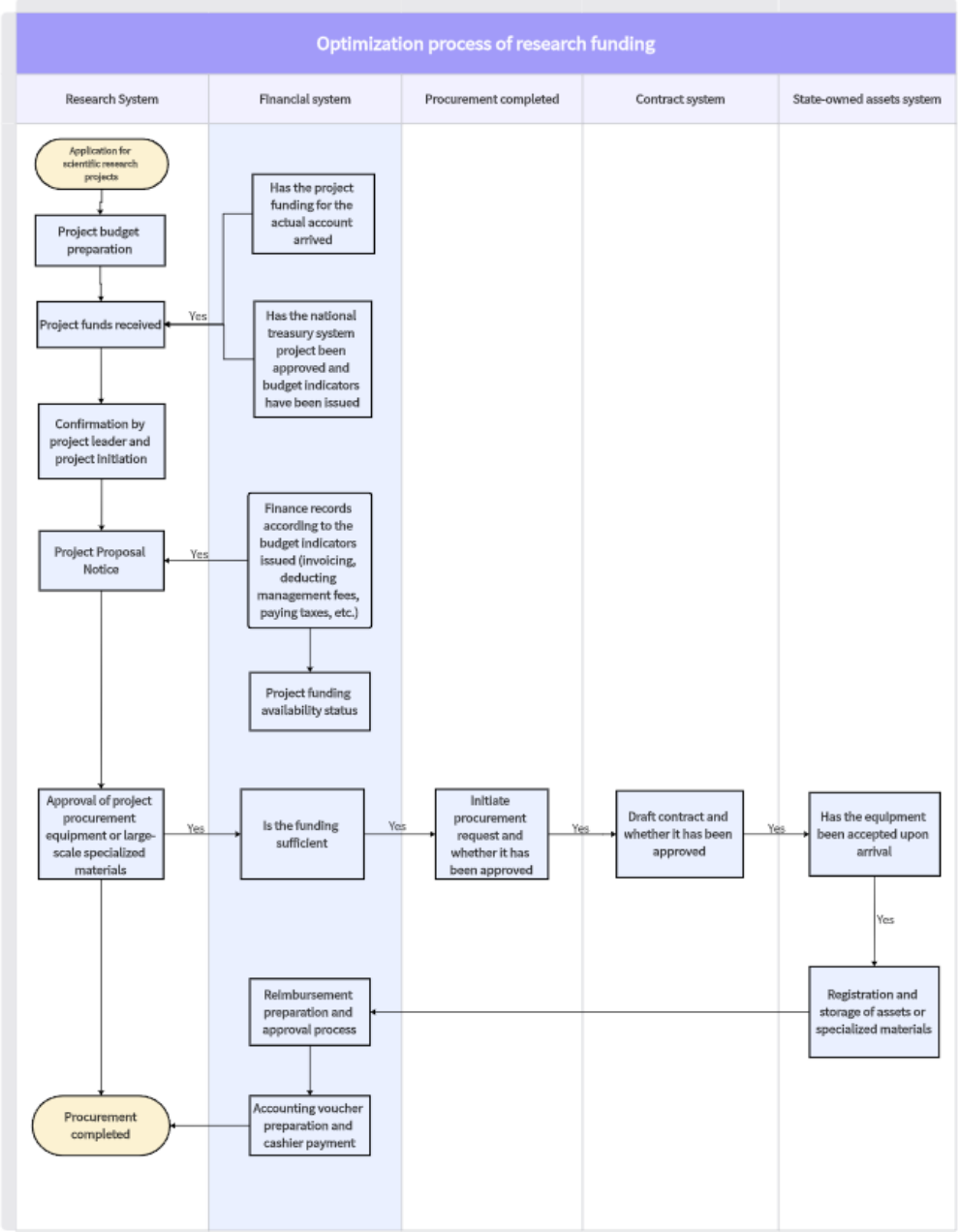

Figure 1: Optimization process of the Scientific Research Funding Management Platform

4.2. Standardizing the Management of Scientific Research Surplus Funds and Improving the Efficiency of Fund Utilization

The project management department of universities is responsible for implementing the system of transferring surplus funds, further improving scientific research management methods, and fulfilling their

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main responsibilities. Long term outstanding funds should be promptly cleared, recovered and allocated in a coordinated manner to improve the efficiency of fund utilization. In addition, it is necessary to carry out graded management of surplus fund projects. If there are external reasons that prevent execution, the scientific research management department should provide certain guidance and assistance, actively communicate, and complete fund execution within a limited time frame. For abnormal situations, the phased withdrawal of overall planning not only serves as a reminder to researchers, but also provides a certain buffer space. The scientific research management department should strengthen the coordinated use of surplus funds, arrange direct expenditures for scientific research activities, improve the mechanism for activating surplus funds, and accelerate the progress of fund utilization.

4.3. Strengthening Budgeting, Enhancing Financial Assistance Systems, and Improving Training

After the implementation of the "Streamlining administration, Delegating Powers, and Improving Services" policy, the system of scientific research financial assistants has been further implemented, the openness of recruitment work has been enhanced, and external graduates have been actively recruited [7], which has reduced the administrative burden on scientific researchers and teams, effectively connected the communication between the finance department and the scientific research management department, and strengthened the level of budget management. To build a strong research assistant team, the first step is to improve the selection mechanism, followed by professional training that includes interpretation of new policies, budget preparation, execution, and reimbursement. This will help research assistants quickly grasp the relevant knowledge of scientific research in their institutions. In terms of assessment, the assessment system should be improved to effectively combine business ability and comprehensive literacy, and conduct a comprehensive evaluation of management level. Through a series of measures, in the budget preparation process, the practical needs and risk factors of construction projects should be fully considered, and reasonable budget methods should be proposed [8]. Enhancing the scientific nature of budget preparation can reduce the troubles caused by budget adjustments and simultaneously improve the professional competence of research assistants.

5. Conclusion

Under the promotion of the "Streamlining Administration, Delegating Powers, and Improving Services" policy, local universities face unprecedented challenges and new requirements in the management of scientific research funds. The policy aims to create a more favorable environment for scientific research, encourage and empower scientific researchers to focus on their work, give them greater autonomy in resource allocation, and reduce the administrative burden of scientific research funding management. The main measures include simplifying the approval process, establishing efficient and transparent work processes, building advanced information management platforms to promote big data sharing, and implementing performance incentives to promote incentives and accountability.

Local universities should actively connect with national policy directives to ensure effective implementation of policies. This requires optimizing scientific research funding management strategies based on the characteristics and needs of their scientific research activities. In addition, they must establish a scientific research management system that is both compliant and flexible, thereby promoting a balance between supervision and academic freedom. Efficiency can be further improved by establishing a transparent monitoring and evaluation mechanism and promoting cooperation between administrative departments and academic researchers.

References

[1] Zhang Yaofang. Review and Prospect of the Reform of National Research Fund Management Policies in the New Era [J]. Friends of Accounting, 2023 (9): 115.
[2] Jiang Liping. A Preliminary Study on the Management Model of University Research Financial Assistants [J]. Friends of Accounting, 2017 (17): 118-120.
[3] Ma Surong. Exploration of Financial Supervision and Management of University Research Funds [J]. China Chief Financial, 2024 (10): 141.
[4] Ma Ziyin, Gai qi. Practice and Reflection on the Management of Surplus Funds in Scientific Research Projects [J]. Commercial Accounting, 2024 (18): 116.
[5] Liu Yalin. Research on the Management of Research Funds in Higher Education Institutions under the Background of "Streamlining administration, Delegating Powers, and Improving Services" [J].

ISSN 2616-5902 Vol. 7, Issue 1: 148-153, DOI: 10.25236/AJBM.2025.070120

Tianjin Science and Technology, 2024 (9): 5.
[6] Zhou Xiaolu. Exploring the Management of Research Funds in Higher Education Institutions under the Background of "Streamlining administration, Delegating Powers, and Improving Services" [J]. China Management Informationization, 2024 (9): 59.
[7] Guo Weihua. Research on implementing the reform of "Streamlining administration, Delegating Powers, and Improving Services" in the field of scientific research, and further solving the problem of "complicated reimbursement" of scientific research funds[J]. Market Outlook, 2024 (9): 12.
[8] Tang Lingling. Research on the Innovation of Management Mechanism and High Quality Development Path of University Research Funds [J]. Industry, 2024 (9): 45.