

Considerations on Financial Management and Information Processing in Colleges and Universities under the Double-Class Background—A Case from China University of Geosciences (Beijing)

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Abstract

Double-class construction is an important strategy for building a strong country with high-quality education, which means an important opportunity to our country's education development, and brings new challenges for financial construction of colleges and universities. Financial management provides the preconditions and support foundation for the cultivation of college talents, scientific research, social services, and cultural inheritance, and is an indispensable financial guarantee for the operation of university organization. This paper analyzes several existing problems in the financial management in our colleges and universities at new stage, such as unadvanced training methods, ineffective financial reimbursement, weak management concepts of scientific research funds, and imperfect management system. Under the new situation of double-class construction, the relevant financial management departments of colleges and universities should actively respond to the potential challenges, and strengthen the control of the internal information management level, and steadily improve the efficiency and effectiveness of financial management. Taking the double-class discipline construction of China University of Geosciences (Beijing) as an example, several measures are put forward to improve the financial management ability and improve the financial service level, i.e., constructing and improving the financial management system of colleges and universities, strengthening financial policy training and publicity, improving the informatization level of financial management, and promoting the construction of financial management talent teams, further to improve the financial management ability and enhance the financial services level, and guarantee that the development of financial system construction of colleges and universities complies with a scientific, reasonable and efficient model under the double-class background.

Keywords

Double-Class; Financial Management; Colleges and Universities, China University

of Geosciences (Beijing)

1. Introduction

In November 2015, the Chinese government issued the Overall Plan for Coordinating the Development of World-class Universities and Disciplines, marking a new era for the development of Chinese higher education. As an indispensable financial guarantee for the operation of the university organization, financial management of colleges and universities provides an important foundation and support for personnel training, scientific research, social services, and cultural inheritance. Its level determines the efficiency of resource utilization and the output effect of school running and scientific research [1, 2]. Under the background of double-class construction, as well as the new stage of big data, with the development and penetration of information technology, how to build a financial system suitable for the development of colleges and universities remains an urgent problem to be explored and solved by the financial management departments in colleges and universities.

2. The Current Problems of Financial Management of Colleges and Universities

2.1. A Sharp Increases in the Workload of Financial Reimbursement due to the Growing of Revenue and Expenditure Scale of Colleges and Universities

With the expansion of the scale of school running, the scientific research funds of colleges and universities have increased rapidly, which prompted the overall financial reimbursement business volume in our colleges and universities to continue to rise. The financial management of colleges and universities not only needs to carry out budget (final) management, accounting management, settlement management, employee salary management, and scientific research financial management, but also undertakes the preparation of financial support materials such as various inspections, evaluations, and project declarations, with the work tasks and pressures increasing day by day [3]. The phenomenon of long queues in financial reimbursement institutions is generally common in our colleges and universities, which not only affects the smooth progress of scientific research, but also adds invisible pressure to the overall financial management. In recent years, the emergence of self-service reimbursement systems has improved such phenomenon. In addition, under the traditional reimbursement model, the information of the bills and vouchers needs to be manually input by financial personnel, resulting in low efficiency of reimbursement work.

2.2. Relatively Weak Management Concept and Implementation Strength of Scientific Research Funds

With the continuous deepening of the reform and development of colleges and universities, the management of scientific research funds gradually presents the characteristics of specialization and refinement, which also puts forward higher requirements for the management of scientific research funds in colleges and universities. In terms of scientific research funds management status in our colleges and universities, there are several pervasive problems such as outdated scientific research funding management concepts, relatively weak management strength, relatively lagging management methods, and lack of management resources that adapt to the situation development. Such problems have severely hindered the effective improvement of the overall management level of scientific research, and restricted the scientific development of university scientific research funds management in higher educational institutions [4]. Therefore, it is necessary to change the traditional management mode of scientific research funds and carry out innovative research on the existed management style, so as to meet the demand of double-class construction under a new situation, and comprehensively promote the sustainable development of scientific research in colleges and universities.

2.3. Slightly Backward Financial Training Model

At present, the financial training model in colleges and universities is generally similar to the traditional accounting training, mainly focusing on financial knowledge presentations and teaching the basic skills and experiences, which lacks substantive application. Consequently, the scientific researchers are still not familiar with the relevant financial work after the training, so that the overall management effectiveness of financial training cannot be brought into full play. Under such circumstances, there is a lack of professional knowledge and effective treatment of new financial problems for most financial personnel, which makes it difficult to improve the management level [4, 5]. As the state becomes more and more standardized in the funds management, the audit pressure is gradually increasing, and the existing financial training management methods will be difficult to adapt to the double-class construction standards. It is better to treat and teach these financial trainers according to individual conditions and aptitudes, and impart on the well-designed training contents to them, so as to improve the efficiency of financial workers in our colleges and universities.

3. The Challenges for the Financial Management of Colleges and Universities under Double-class Construction

Financial management of colleges and universities is an indispensable financial guarantee for the organization and operation of colleges and universities, and its main functions are reflected in the management and control of scientific research funds and material procurement. The experiences of education development show that the problems existing in the financial management of colleges and universities will directly affect the effectiveness of the education system in optimizing resource

allocation, dispersing financial risks, improving the efficiency of fund use, and promoting the transformation of achievements [3]. The current form of financial management in colleges and universities is still mainly financial allocation. With the promotion of double-class construction in colleges and universities, science and technology departments and other relevant government departments will pay more and more attention to the scientific research, and the funding sources of double-class construction will become increasingly diversified. With the increase of investment in scientific research, it is inevitable to promote the overall infrastructure construction and the large-scale development of discipline special construction, focusing on the development of advanced and characteristics of disciplines and discipline construction teams. Therefore, how to make full and reasonable use of scientific research funds to achieve low investment and high output of scientific research funds in higher education, and use funds effectively and economically, and utilize resources in the most needed areas, remains a major concern for the financial management department in our colleges and universities.

The double-class construction is an important strategy to for building high-quality education of a country with in this new stage, with its overall construction goal showing a new reform direction for financial work of colleges and universities, also representing an important challenge and opportunity for the financial management. Double-class construction sets a five-year cycle of assessment, supervision and evaluation, and implements a rolling support system, which undoubtedly means fierce competition and strict assessment pressure for colleges and universities. As a whole, the financial transformation of double-class colleges and universities are facing the challenges posed by the double-class construction, such as discipline construction, talent team building, talent training, and transformation of scientific research achievements, and also to undertake other required management responsibility functions, including strengthening supervision, optimizing risk control, strictly implementing budgets, and strengthening assessment management. Consequently, to adapt to the new requirements of the double-class construction, the financial work of colleges and universities must solve problems during the development process and meet the challenges, actively seek reform and innovation, improve the efficiency and effectiveness of financial management, and create a good environment for the subject construction, talent cultivation, and scientific research, steadily promoting the double-class construction, and achieving the goal of sustainable development of colleges and universities.

4. Construction and Reform of the Financial System Adapting to the Double-class Construction

In September 2017, the China's Ministry of Education, the Ministry of Finance, and the National Development and Reform Commission jointly issued the Notice on the Publication of the List of World-Class Universities and Universities with First-class

Disciplines and Construction Disciplines, with the geology and geological resources and geological engineering majors in China University of Geosciences (Beijing) shortlisted in the list of construction discipline [6]. Under such a new development opportunity, China University of Geosciences (Beijing) should earnestly strengthen the construction of its advanced disciplines according to its own characteristics, and promote other geoscience related disciplines to form a complete group of geosciences disciplines, so as to realize the grand goal of becoming a world-class university in the field of geosciences [7, 8]. Based on the situation of double-class construction of China University of Geosciences (Beijing), it is necessary to strengthen the financial management innovation, enhance the financial autonomy of colleges and universities and the ability to coordinate and arrange funds, and specific measures are put forward to promote efficient finance to adapt to the development trend of double-class construction.

4.1. Construct and Perfect the Financial Management System of Colleges and Universities

Financial management system is a complex system engineering, and is an organic combination of financial institutions, accounting personnel, and accounting work. A perfect financial management system mainly includes internal control management system and financial budget system. To construct and improve the financial management system of colleges and universities, four aspects are indispensable, i.e., fund raising, system construction, technical support, and personnel training. The school-running funds are the foundation of the school development; the system is to better ensure the standardization of the use of scientific research funds; the technology is to guarantee greater efficiency and quality in funds; talents are the core of fund management and utilization; and the main goal is to serve the double-class construction of colleges and universities [9]. In order to ensure the efficiency of the use of funds and realize the institutionalization and standardization of financial management, the construction of the overall financial internal control mechanism can be gradually strengthened and improved, and the functional departments should actively form a more mature management mechanism, thereby enhancing the level of financial scientific decision-making [10]. Meanwhile, the risk prevention and monitoring of financial internal control in colleges and universities will help to avoid loopholes in the financial system. In the process of financial budget management, relevant financial budget agencies should actively communicate with functional departments within colleges and universities, to increase the efficiency of the construction of the internal financial system, and play an important role in the internal financial management. To strengthen the collaborative management of the use of budget funds within relevant departments can facilitate the further refinement of personnel training, special funds and other related budget items, and realize the effective management and control of financial project funds.

4.2. Strengthen Financial Policy Training and Publicity Work

During the process of financial management in colleges and universities, talent training mode is rather important, and adequate support of excellent talents is the guarantee of the smooth proceeding of the overall management activities. A com-prehensive training and promotion plan to help financial managers develop their careers, which is the basis of realizing scientific financial management. However, with the country's more and more standardized management of funds, the audit pressure is gradually increasing, and the existing financial training management methods are difficult to adapt to the requirements of the new situation, and a financial training innovation is imperative. Colleges and universities can carry out training activities for financial management staff in combination with the specific requirements of the double-class construction, utilize more professional management theories, and introduce a scientific, reasonable and systematic training system to manage and guide the internal financial training structure. Our colleges and universities should gradually improve the regular training system for the financial management team, hold financial and accounting management exchange meetings, and conduct objective and quantitative analysis on the mastery of financial management skills of relevant personnel in the financial training process according to a scientific and standardized evaluation model. When necessary, a multi-level and targeted differentiated training should be carried out to realize rotation training of all staff, enhance the professional level of financial managers, establish a lifelong learning mechanism for financial managers based on the new normal of business training, so as to ensure that the team keeps pace with the times, and lay a solid foundation for the smooth operation of overall financial management work.

4.3. Improve the Informatization Level of Financial Management in Colleges and Universities

At present, the financial management of colleges and universities involves a large quantity of projects, large scale of funds, as well as complex business structure, and the business volume shows a growing trend. In this case, in order to rapidly improve work efficiency and service quality through limited manpower and material resources, the most effective method for financial management departments in colleges and universities is to rely on the new generation of complete information systems. The new generation of information technology represented by financial big data and intelligent finance is developing vigorously. Colleges and universities should fully grasp the current development opportunities, enjoy the convenience brought by advanced technology, and actively apply modern information technology to improve the scientific governance of finance. Great efforts should be made to enable the accounting personnel to skillfully use financial software and technical tools, and let the teachers and students can master financial system fill process, continuously improving the level of financial governance [11]. In recent years, colleges and

universities have introduced intelligent account systems, usually including accounting system, online reimbursement system, and labor declaration system. The online reimbursement system mainly supports daily reimbursement, travel expenses, conference expenses, and loans businesses, while the labor declaration system is mainly used for various types of labor business declaration. At the same time, the office automation (OA) platform is well integrated with the existing platforms and resources to enhance the exchange and communication of information, and realize the sharing of financial information, further to improve the level of internal financial information control and management in colleges and universities, and make the reimbursement business more intelligent and efficient. The Age of Big Data provides more possibilities for the financial management of colleges and universities, and the construction of an information-based system is an inevitable development direction [12]. Only by learning to use information financial management tools and continuously innovating in technology and concepts can we ensure the steady development of financial management in colleges and universities.

4.4. Promote the Construction of Financial Management Team in Colleges and Universities

Talent is at the heart of establishing a financial management system. In February 2022, the State-owned Assets Supervision and Administration Commission of the State Council issued the Guiding Opinions on Accelerating the Construction of a World-Class Financial Management System for Central Enterprises, proposing to improve the future-oriented financial talent team construction system, which is the fundamental guarantee for the effective operation of the financial management system, and is also the main line and key point of promoting the financial management transformation and upgrading [2]. With the full promotion of the construction of China University of Geosciences (Beijing), Xiong'an Campus, and the further expansion of the scale of school running, the funds management will face greater pressure. It is imperative to improve the level of financial management and optimize the allocation of school resources. Relevant functional departments should establish a talent reserve and a long-term training mechanism, and focus on talent echelon construction, mentoring construction, and comprehensive ability improvement. Our colleges and universities should constantly strengthen and improve the professional training of financial personnel, strengthen post exchanges, and pay attention to cultivating compound talents in the directions of informatization, management accounting and business-finance integration, and promote the development of financial personnel towards one post with multiple skills [12]. Meanwhile, it is necessary to create a good talent environment, and a satisfactory incentive and welfare environment, establish a reasonable financial personnel assessment and incentive mechanism, and fully motivate the staff [1, 13]. Building a high-quality college financial management team with a reasonable structure and superb business skills can

provide efficient and scientific solutions for the optimization of financial systems, strengthen the budget management of colleges and universities, enhance financial supervision, guard against financial risks, and improve the efficient use of funds, further to promote the development of school education better adapt to the double-class construction.

5. Conclusion

Financial management of colleges and universities is an indispensable financial guarantee for the university organization, and is conducive to the sustainable construction and development of colleges and universities. Therefore, under the back-ground of double-class construction, relevant financial management departments of colleges and universities should fully recognize the problems existing in financial management, and actively respond to the challenges brought by the double-class construction, and strengthen the management of internal financial information management. In addition, the internal control risk prevention and supervision in colleges and universities should be noticed to ensure the integrity and scientific integrity of financial information. Taking the double-class discipline construction of China University of Geosciences (Beijing) as an example, four corresponding measures are put forward to improve the financial management ability and improve the financial service level, i.e., constructing and improving the financial management system of colleges and universities, strengthening financial policy training and publicity, improving the informatization level of financial management, and promoting the construction of financial management talent teams, further to improve the financial management ability and enhance the level of financial services, and guarantee that the development of the financial system construction of colleges and universities complies with a scientific, reasonable and efficient model under the double-class background.

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