Research on Financial Management Strategies of Colleges and Universities from the New Accounting System of Colleges and Universities Based on Computer Technology

Xiuhua Cai1,*

1Finance office, Shandong Normal University, China, 250014

*Corresponding author e-mail: 313005@sdnu.edu.cn

Abstract. On December 30, 2013, the Ministry of Finance promulgated the newly revised “Accounting System for Higher Education”, which was officially implemented on January 1, 2014. The new system has been supplemented and improved from many aspects, which not only promotes the improvement of capital utilization rate, but also promotes the stable and sustainable development of education in higher education institutions. This paper analyzes the main changes of the new accounting system based on computer technology, and proposes several recommended measures, which is more conducive to the financial management of colleges and universities.

Keywords: Universities, Accounting System, Financial Management, Computer Technology

1. Introduction
In recent years, the scale of colleges and universities has been expanding, the sources of funds have been diversified, and the scale of assets is large and business activities are complex. In order to meet the needs of the economic development of colleges and universities and improve the quality of accounting information, the Ministry of Finance issued the revised “Accounting System for Higher Education” in December 2013, referred to as the new system, and required universities to implement it from January 1, 2014.

2. Changes and major issues in the new "accounting system for colleges and universities"

2.1. The accounting basis is moderately introduced into the accrual system
Appropriate introduction of accrual system means that the government's appropriation, social donation income, expenditure and other accounting calculations still adopt the system of payment and payment, but the accrual system is used as the basis for accounting for some of the specified economic operations or events [1-3]. The coordination relationship between the two accounts is mainly reflected in the external financial report of the enterprise, as shown in Figure 2 below:
2.4. Improve the accounting subject system

The new system sets the income classification into financial subsidy income, education business income, scientific research income, superior subsidy income, affiliated unit paid-off income, operating income and other income according to the source of funds. Expenditure subjects correspond to the income category, which is divided into five categories: education, scientific research, administration, logistics and retirement expenses. As shown in Figure 2 below, it is the financial management system between government, society and schools:

![Figure 1. Comparative analysis of the development system of university accounting.](image-url)

In the above figure 2, the change of financial accounting information in colleges and universities caused by tax accounting, based on this principle, requires colleges and universities to accrue depreciation of fixed assets and amortization of intangible assets. When depreciation and amortization are not included in the expenditure item, the “non-current asset fund” subject is offset and the funds occupied by the non-current asset account are reduced.

2.2. Infrastructure accounting is incorporated into the “big account” accounting of college finance

The new system requires that colleges and universities should separately account for infrastructure investment and incorporate infrastructure accounting data into the “big account” accounting of colleges and universities. Set up the “Construction in Construction” and “Non-Liquid Assets Fund – Construction in Progress” subjects, and set up the “Infrastructure Construction” detailed account under the “Construction in Construction” subject to calculate the cost of construction in progress that is included in the infrastructure account. It also stipulates that the infrastructure-related business should be accounted for in the “big account” according to the new system at least according to the amount of relevant subjects in the infrastructure account.

2.3. Laying the foundation for education cost accounting

As the country's investment in education has increased year by year and the scale of colleges and universities has continued to expand, the cost of education in colleges and universities has become an important message of concern to government education departments and managers. In order to facilitate the statistical analysis of education costs, and further standardize the cost accounting model of college education, the new system sets up the subject of “education expenditure”, which is used to calculate the expenditures of daily teaching and supplementary activities in colleges and universities.
As shown in Figure 2 above, such subject setting can more clearly reflect the proportion and structure of colleges and universities' income and expenditure, and is conducive to strengthening the accounting and management of income and expenditure. In the current assets, subjects such as “zero balance amount” and “financial return amount” were added.

2.5. Financial statement structure optimization information comprehensive

The new system has improved the financial statement system, and added “financial subsidy income and expenditure statement” and notes to the accounting statements on the balance sheet and income and expenditure statement. The format of the three accounting statements is specified in the system, and the report structure is optimized to further improve the versatility and practicability of the financial statements.

3. Reflections on the implementation of the new accounting system in universities

3.1. How to understand the new system requirements

The new accounting system regulates the accounting of colleges and universities, but there are no supporting implementation rules. It is not convenient for the old and new systems to be connected. There are certain difficulties in the actual business operations, resulting in inconsistent calibers. For example, there is no clear extraction ratio for “special funds”. The new accounting system stipulates that higher education institutions can withdraw special funds, including student award funds and employee welfare funds.

3.2. Income and expenditure level detailed accounting is difficult to distinguish

According to the requirements of the new system, colleges and universities are accounted for at the level of basic expenditure and project expenditure, financial subsidy expenditure, and non-financial subsidy expenditure in expenditure subjects such as education expenditures and scientific research expenditures. Considering the difference in the base size of each group of samples, in order to eliminate the influence caused by the difference in the size of the base, the coefficient of variation the sample standard deviation is divided by the sample average, which is calculated as:

\[
CV = \frac{\sigma}{\bar{X}}, \quad \sigma = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{X})^2}{n}}
\]

Among them, n is the number of samples, \(x_i\) is the sample value of the i region, the mean value of the sample, and the standard deviation. The indicator uses all the data of the region, so the amount of information contained is adequate. The commonly used weighted coefficient of variation is also called
the Wilson coefficient. Its formula is:

$$V_U = \frac{1}{x'} \times \sqrt{\sum_{i=1}^{n} \left(\frac{x_i - x}{P_i}\right)^2}$$

(2)

Therefore, as long as the ability of teachers is decentralized, not only in the profession, but also in different disciplines, there must be different academic teacher leaders to promote the improvement and development of teachers' academic standards, and to create for academic teachers.

4. Conclusion
The implementation of the new accounting system will promote the more detailed and scientific accounting of colleges and universities. In the actual implementation, the financial department of colleges and universities should pay more attention to the accounting of teaching costs, optimize the allocation of teaching resources, improve the awareness of risk prevention and control, change the concept, and transform from the traditional focus on accounting and reimbursement to strengthen financial management awareness and improve financial management efficiency.

References
[1] Qin, Huan Chang. Financial Management System Design of Guangxi Colleges and Universities[J]. Advanced Materials Research, 2014, 1044-1045:1745-1748.
[2] Yang H Q, Xi, Fei, Zhang, Hua Gang, et al. Research on Energy Saving Supervision System of Colleges and Universities Heating Based on Control Theory of Time & Temperature Sharing[J]. Applied Mechanics & Materials, 2012, 226-228(7):2398-2401.
[3] Hao Y. Platform Design of Sports Meeting Management System for Regular Colleges and Universities Based on B/S Structure[J]. Wireless Personal Communications, 2018, 102(2):1-10.