

Research on the "New University" Management System from the Perspective of Finance

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Abstract: Since the release of the "Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010–2020)," "new universities" have garnered widespread attention. The system and mechanism of these "new universities" are different from those of traditional universities. They have their own ways of running schools, management systems, and personnel training methods, all of which bring a different kind of pressure to government management. Looking from a financial perspective, this is also the key research subject of finance and financial personnel. We put forward implementation suggestions for the construction of the "new university" management system based on the experience summed up in the work and contribute to the country's higher education.

Keywords: Local government; New university; Management system; Financial affairs

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1. Introduction

Eric Ashby, a famous British higher education expert and the former Vice-Chancellor of Cambridge University, once pointed out that any particular university is the product of its heredity and environment. He believes that from a genetic point of view, it is expressed as a common understanding of the "meaning of university" among university educators, but from an environmental point of view, it is the political system and the system itself that fund and support the university^[1]. Since the release of the "Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010–2020)," many "new universities" have emerged in China. What is a "new university"? "New university" refers not to the "new" in terms of time, but to the "new" with Chinese characteristics, differing from the educational philosophy, management system comprises the manager and the managed, that is, the government and the university. Beginning from the relationship between the two, this paper explores how to better improve the management system from the perspective of financial affairs.

2. Characteristics of China's "new universities"

At present, there is no official statistics on "new universities." For preliminary analysis, this article selects the "new universities" that have been established following the release of "Outline (2010–2020)" (**Table 1**).

School	Nature of running a school	School category	School location	Year of establishment
Southern University of Science and Technology	State-run	Science and engineering	Shenzhen	2012
Shanghai New York University	Sino-foreign cooperative education	Comprehensive	Shanghai	2012
Shanghai University of Science and Technology	State-run	Science and engineering	Shanghai	2013
Chinese University of Hong Kong (Shenzhen)	Regional cooperation (Mainland and Hong Kong, Macao and Taiwan)	State-run	Shenzhen	2014
Westlake University	Private	Science and engineering	Hangzhou	2018

Table 1. Representatives of "new universities" established after the release of "Outline (2010-2020)"

According to **Table 1**, it can be concluded that the "new universities" have the following characteristics: in terms of the nature of running schools, they are not only funded by the government, but also by social forces and cooperation; from the perspective of school category, they are mainly under the category of science and technology, but some are also considered comprehensive schools; in terms of school location, there is a trend of development from old first-tier cities to new first-tier cities.

3. Current situation of China's "new universities" management system

When it comes to the management system, the main bodies are the government and the "new universities." The relationship between the government and these universities has been in discussion for a long time, but no clear consensus has been reached so far. We will discuss the the status quo and problems in this section.

3.1. Status quo of government management

3.1.1. Decentralization of functions and increased pressure on local government management

Article 39 of the "Outline (2010–2020)" clearly states, "In order to implement and expand the school's autonomy in running schools, the government and its departments should sort out service awareness, improve management methods and supervision mechanisms, reduce and standardize school administrative approval items, as well as ensure that schools fully exercise their autonomy in running schools and assume corresponding responsibilities in accordance with the law." This is to emphasize the transformation of government functions, reduce the administrative burden of colleges and universities, and protect their autonomy. As can be seen from **Table 1**, "new universities" tend to develop from established first-tier cities to new first-tier cities. In the process of promoting the construction of the rule of law in China, government agencies have streamlined administration and delegated powers, and the responsibility of managing "new universities" falls more on the local government.

3.1.2. Local government lacks strong management agency

Most of the "new universities" are units under provincial administration. For those jointly built by provinces and cities, compared with provincial capital cities and municipalities directly under the central government, the functional organizations managed by local governments are not the top-echelon. They are lacking in strength and are incapable of overall planning and guidance. The phenomenon of "a small horse drawing a big cart" is particularly prominent. This inevitably leads to the lack of functions of the local government in the overall guidance and management of higher education. At the same time, the local government lacks top-level guidance for local higher education and has unclear higher education goals, which easily lead to arbitrary financial funding, poor policy orientation, and weak security capabilities. Therefore, the local government is constantly being criticized by the society and schools.

3.1.3. Performance accountability mechanism for financial funds

From the perspective of financial fund management, in order to make effective use and control of financial funds, local governments often use performance management methods to set grades and classifications for college qualifications, rank, and evaluation, in order to measure the size of investment in different colleges and universities. Theoreticians contend that the current government performance management model has weakened the autonomous legal standing of higher education, rendering it incapable of independent innovation and self-regulation, through the impact of its primary stage effect on higher education and the overtly administrative nature of higher education reform. It is even more of a shackle to the fledgling "new universities" that still require the blessing of the government.

3.2. Current situation of the "new university"

3.2.1. The majority of the fundings of "new universities" come from government financial appropriations

Since there is no official budget and final account disclosure platform for cooperative-run and private colleges and universities, the proportion of fiscal appropriation revenue and expenditure in the current year's revenue and expenditure based on the final account report of public colleges and universities is used to analyze the dependence on the government.

It can be seen from **Table 2** that most of the revenue sources of the "new universities" that have been established in recent years come from financial appropriations.

School	Founding year	Report year	Income		Expenditure	
			Amount (billion yuan)	Proportion	Amount (billion yuan)	Proportion
Southern University of	2012	2019	3.961	89.67%	3.335	93.97%
Science and Technology						
Shenzhen University	1983	2019	4.703	70.92%	4.601	76.49%
Shanghai University of	2013	2019	2.278	90.61%	2.153	90.12%
Science and Technology						
Shanghai Jiaotong	1896	2019	3.429	24.82%	3.396	27.45%
University						
Zhejiang University	1897	2020	3.600	25.58%	3.650	28.37%
Nanjing University	1902	2020	2.140	39.67%	2.146	43.31%

Table 2. The proportion of fiscal appropriation revenue and expenditure in the current year's revenue and expenditure in the final accounts report of some colleges and universities

3.2.2. The "self-hematopoietic capability" of "new universities" needs to be strengthened

According to **Table 2**, traditional colleges and universities with considerable scale have been running for many years, and most of the school's financial revenues and expenditures can break-even or even have surpluses; some domestic colleges and universities have strong "hematopoietic capabilities," which has laid a solid foundation for their subsequent development. For newly established "new universities," in order to stand out from the many "211," "985," and "double first-class" universities, it is necessary to focus on innovating school-running orientation, mechanism and system, talent training, teaching staff construction,

discipline development, as well as other aspects. The quality of running a school influences the growth of a university and depends on the level of the teaching staff to a large extent. In order to attract high-quality teachers, in addition to the positioning, philosophy, and prospects of the school itself, salary is also a factor that cannot be overlooked. Compared with traditional colleges and universities, the total expenditure of "new universities" are larger, and the proportion of personnel expenditure to the total expenditure is relatively higher when the level of factors or standards other than salary remains unchanged. Without government financial support, it would be challenging to overcome the financial difficulties in the growth period.

3.2.3. "New universities" need to be "de-administrative"

Since the release of the "Outline (2010–2020)," de-administration and autonomy in running schools have become topics of debate for the reform and independent running of colleges and universities. This is not unique to "new universities," but rather common to all colleges and universities. Chinese higher education has strong administrative dependency. This characteristic is directly related to the continuous improvement of comprehensive national strength and the overall management of the country in terms of social affairs. In the construction of the main body of higher education, universities have inevitably turned into vassals of the state and lost their independence and autonomy as academic organizations as a result of the state's political power, comprehensive control, and strong integration of universities in various ways ^[2]. For a long time, colleges and universities have developed the habit of relying on government procedures and resources; having also psychological dependence on the government, it has been extremely difficult for colleges and universities."

4. Suggestions for the construction of China's "new university" management system

From the perspective of the relationship between the two, several strategies related to the management system itself are proposed.

4.1. Government

4.1.1. Construction of management system and supervision means

The system is the foundation and guarantee of any management, and the premise of perfecting the construction of the system is by perfecting laws and regulations. "New universities" include a variety of school-running properties. Compared with public universities with relatively complete laws, regulations, and systems, the construction of cooperative education and private "new universities" is relatively backward. Taking cooperative education as an example, it is currently only supported by the "Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools" and "Measures for the Implementation of Regulations of the People's Republic of China of the administrative rules and regulations. The legal effect is relatively low. In the field of cooperative education, a high-level law is needed to carry out the top-level design, and the local government needs to study the implementation details.

By strengthening institutional construction, local governments can set up permanent institutions for higher education management directly under the responsibility of the main leaders of the local government and strengthen the overall planning ability of colleges and universities in the region, so that they can better implement "policies" based on "schools." The first is to strengthen the top-level design and strategic planning for the high-quality development of higher education, formulate relevant supporting policies for the development of different types of universities, adhere to the goal orientation, and clarify the investment. The second is to open-up multi-department coordination management channels, build efficient information upload and release channels, and run the overall management and coordination work in colleges and universities more smoothly. The third is to guide and motivate different types of colleges and universities to focus on major problems that need to be solved in various areas, including discipline construction, scientific research, talent introduction, achievement transformation, and social services; as well as encourage and guide the same type of colleges and universities to carry out healthy competition in relevant aspects and improve the level of running schools.

4.1.2. Carry out the transformation and upgrading of local industries well, and lay the foundation for the integration of production, education, and research

According to the "2021 Employment Report for College Graduates," which embodies a survey of 2021 graduates, released by 58.com, old first-tier cities, including Beijing, Shanghai, Guangzhou, and Shenzhen, are still the first-choice cities for graduates, and they are also well-known for employment of graduates. In local cities, including new first-tier cities, the local employment rate of graduates is low, and in some places, the employment rate of graduates with degrees or above remains in single digits. The low local employment rate is largely due to the insufficient integration of local production, teaching, and research. The inconsistency of integration goals is one of the factors contributing to the insufficient integration. Colleges and universities tend to pursue talent training and social benefits, while enterprises (research institutes) tend to focus on economic benefits and ways to enhance their competitiveness. The value pursuit between the two is clearly different, thus indicating that the integration of the two parties would definitely not work out spontaneously. Therefore, there must be some intervention through certain administrative means ^[4].

Local governments can transform and upgrade local industries based on local characteristics, guide policy formulation through industrial development, and direct the discipline construction of colleges and universities. Under the background that "new universities" are gradually moving closer to new first-tier cities, the upgrading of local industries is extremely urgent. At present, the growth of industries is guided by policies. The industry that needs the government's support would be developed under a series of policies. The traditional talent training model is driven by industrial development, that is to say, which industry develops better and implements the relevant professional setting and configuration of the talent training plan. However, talent training is a cycle, whereas the industrial transformation and upgrading of talent demand is immediate. This proves that there is a lag in the traditional talent training model. Therefore, education must move forward with the specific industry for talent training, and industrial development should in turn guide policies ^[5]. It is still necessary to transform the functions of local governments, reduce the management of educational needs, implement the service function of "new universities" and social connections well, and guide these universities in such a way that they can enhance their own "hematopoietic capabilities" and improve their capital operation capabilities.

4.1.3. Consider a variety of supervision methods and make full use of the power of social supervision

It has long been understood that the Chinese government has always played the role of a "paddler," steering social development through coercive or restrictive means, and concentrating power to make decisions on social management, instead of social service work. As a result of this kind of thinking, higher education now has led a single governing body, and administrative means are mainly used for supervision. In 2016, the Ministry of Finance issued the "Operational Regulations for the Disclosure of Local Budgets and Final Accounts" to promote the legalization, democratization, and scientificization of grassroots budget management as well as to protect the public's right to know, participate, and supervise the financial budget. However, due to the lack of local governments, the supervision of the management of cooperative schools and private colleges and universities has not received much attention. The local government can further enrich the supervision subjects by enhancing the information transparency and feedback of different types of colleges and universities in "new universities," encourage colleges and universities to establish a sense

of self-regulation, as well as exert the power of social supervision.

In this way, government compulsory supervision, social supervision, and self-regulation can play their respective regulatory roles from different fields and perspectives, rely on and influence each other, and jointly build a comprehensive and multi-angle three-dimensional regulatory framework on how to promote the sustainable development of education and continuously improve the standardization of running schools as well as the quality of education ^[6].

4.2. "New university"

4.2.1. Strengthen the awareness of the main responsibility of "new universities"

According to several analyses, the proportion of China's higher education financial expenditure in gross domestic product (GDP) and its index of public expenditure per student in higher education (that is, the ratio of per student expenditure to per capita GDP) are comparable to those of the United States, Britain, France, Germany, and Japan. Compared with other major economic countries, the Chinese government's financial investment in higher education is more prominent as reflected not only in the higher proportion of higher education financial expenditure to total financial expenditure, but also in the higher public expenditure index per student ^[7]. Although the Chinese government's efforts in financial investment in higher education are evident to all, the actual development of most colleges and universities is not as expected. It is absurd to attribute the poor development to the lack of investment from the government. The operation capacity of colleges and universities and the main body's sense of responsibility may be the reasons for it. "New universities" must rely on government support in the early stages of establishment and transformation, but after they have stabilized, they must adhere to the principle of "setting expenditure by revenue" and "setting expenditure by means," improve the efficiency of the use of funds and combine it with the construction of the internal control system, strengthen the awareness of capital risk control and the system of power checks and balances, as well as improve the performance management mechanism. It is worth noting that due to the establishment of a new management system for public institutions, the majority of "new universities" have canceled the institutional designation; additionally, the employment mechanism has become more market-oriented, and it is now more difficult to control personnel expenses. Attention should be paid to whether the proportion of personnel expenses is too high, resulting in an imbalance in the expenditure structure, which affects the level of education.

4.2.2. Establish a sense of local service

According to the "Zhumadian Consensus," issued by the first International Forum on Industry-Education Integration Development Strategy in April 2014, and the "Chengdu Consensus," issued by the National Joint Conference of Newly-Built Undergraduate Universities in October 2016, the integration of regional industrial development serves the local and industrial economy and societal development. Facing the needs of local social and economic development, the "new university" should discard the idea of running a closed school and use it to undertake social responsibilities and actively participate in the construction of the society. Compared with traditional research-oriented universities that emphasize the "combination of teaching and scientific research," "new universities" focus on the cooperation of production, education, and research ^[8]. At the 2014 symposium between teachers and students of Peking University, it was mentioned that a world-class university must have Chinese characteristics. Therefore, "new universities" must rely on industrial upgrading, serve the locality and industrial development, while considering their own conditions, break the concept of "one acre and three parts of land," and transform the development model of blindly imitating and borrowing. It is necessary to be orientated towards innovation, integrate education, industry, and research with local economic development, emphasize the qualities of service areas, seek to become quasi-demand oriented and first-class oriented, and pursue development with traits that would create a new

impetus.

4.2.3. Guide the diversification of capital investment and expand the autonomy of running schools

Burton Clarke analyzed the transformational entrepreneurial practices of universities that have had government funding curtailed, such as Twente, Warwick, Strathclyde, Chalmers, and Makerere. In order to survive and develop, it is necessary to face the changing needs of the external environment and internal development with a proactive attitude, strive to seek diversified sources of funding, and actively strive for as much autonomy as possible ^[8]. Compared with traditional research universities, "new universities" have more output and opportunities to socialize. This advantage should be used to garner social resource support, guide the use of social funds for the development of higher education, reduce their own financial pressure, and gain more autonomy in running schools. For example, a "new university" of the cooperative education type can make full use of the resources from both parties to establish an educational foundation, improve the donation mechanism, and broaden the sources of funding.

5. Conclusion

China's "new university" needs to deal with the management between its heredity and environment, its internal logic and social needs, and run it well while taking into consideration of the local area. The objective of the "new university" is to pursue excellence in its different types, each exhibiting its strengths and characteristics. Building a "new university" in the local area is a challenge to the local area and colleges and universities. It needs to be viewed with a new attitude that embodies innovation, openness, and tolerance. Daring to be the first in innovation will always be accompanied by thorns on the road. It is the responsibility of both parties to optimize the management system, jointly raise the flag of "new university," and contribute more to China's higher education.

Disclosure statement

The author declares no conflict of interest.

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