【Articles】

A Study on the Duality of University Policies and Management in China: Focusing on the Interaction between Selection-oriented Focused Support and University Autonomy

中国における大学政策の二元性と大学経営についての考察 ―選抜志向の重点支援と大学の自律性の相互作用に注目して―

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Contents

(Abstract)

The purpose of this paper is to elucidate the structure of university management in China. Specifically, it examines how the "duality" of recent Chinese university policies—namely, the restraint of government funding at the macro level (promotion of autonomy) and the focused investment in selected universities at the micro level—affects the practice of university management. The analysis reveals that this policy duality leads universities to a dual adaptation structure: "market orientation" and "participation in national projects". In particular, the study

clarifies the reality in selected universities where focused resource investment leads to an upgraded internal environment, which in turn promotes industry-academia collaboration and the acquisition of competitive funding, thereby creating a "positive circulation" that attracts further resources. By capturing the dynamic interaction between this macro-policy framework and micro-level university management, this paper seeks to clarify the management environment and the operational realities facing Chinese universities.

1. Introduction

The purpose of this paper is primarily to examine university management in China. Toward this end, we will specifically elucidate another aspect of the relationship between China's government and universities, which has been the focus of much attention, and use it as the starting point to address the structure of university management. Chinese universities have received significant attention in recent years, and the associated discussions often apply models based on universities in other countries. In this study, however, we have considered it necessary to emphasize the historical background of China, and we have focused on the intrinsic characteristics of China.

Examination of previous studies reveals much research on Chinese universities. In particular, studies related to the financing of university management have been conducted. These studies can be broadly categorized into the following three types.

The first type of research is mainly concerned with the university reforms promoted by the Chinese government, and these studies evaluate and discuss the diversification of funding that occurred under these reforms in a positive light. These studies include Guo (2003), Nanbu (2004), and Gao (2006). For example, Gao (2006) points out that "as a result of the reform, the authority of the central government has been reduced while the authority of local governments and higher education institutions has been expanded" (p. 139). Furthermore, Gao (2006) mentions that "universities and other higher education institutions have been freed to some extent from monopolization by specific ministries and the central government" (p. 139) and been "granted significant discretionary authority. Institutions of higher education, however, have had to break away from government dependency in terms of funding and acquire resources from society through their own initiative" (p. 140). In these discussions, the composition of the debate is based on the fact that the government has granted discretionary authority, including independent funding, to the universities, in response to financial pressures and difficulties in funding higher education institutions. These discussions also address universities' corresponding progress in marketization.

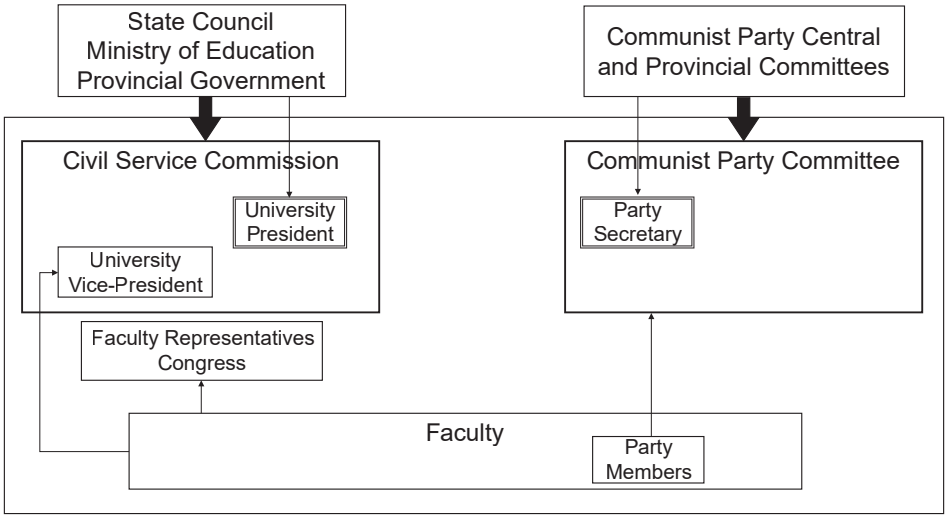
In relation to this research group, industry-academia-government collaboration research should also be mentioned. Furthermore, many industry-academia-government collaborative studies have been conducted from the perspective that universities played a role in the devel-

opment of the Chinese economy as well. The said studies are not necessarily intended to discuss the independence of universities per se. However, it can be said that research on industry-academia-government collaboration in Chinese universities has been flourishing (representative examples include Sunami (2003) and Seki (2007)). Since industry-academia-government collaboration is a form of self-financing behavior, it has attracted significant attention as a research subject and has resulted in "universities actively participating in the marketplace."

Second, vigorous research has been conducted to ascertain the realities of such multidimensional financing structures. These studies include Dong (2004), Xiong (2005), Sheng (2007), and Liu (2007, 2009). These studies have analyzed the status of the composition of funding in Chinese universities. This analysis includes the details of items comprising such funding, the usage of each item, the difference in composition and size by region and higher education type (e.g., key universities, general universities, and specialized schools), and the issues involved in these aspects. In addition, since changes in discretion have occurred in terms of funding and personnel, some studies have examined the changes in governance to comprehend the actual conditions related to these changes. While it is difficult to acquire information from universities in China, some studies, such as Kaneko et al. (2005) and Hu (2013), have begun to investigate the previously undiscovered internal organizations of Chinese universities. One important contribution is this illustration of the following governance structure (Figure 1), created with the aid of an interview survey.[1)]

Third, some studies have emerged that sound a warning bell regarding the perspective of "the development of university independence" in China, as based on the reality of the funding structure of universities. They can be regarded as a type of research under the second category of studies. Specifically, Bao (2009) states that "the Chinese government (among others) has put forth a policy philosophy to establish a multilateral financing mechanism." First, Bao (2009) questions the extent to which this philosophy reflects the actual situation (p. 116). Based on national statistical data, Bao further claims that, "Since the mid-1990s, it has become patently clear that the financing system of Chinese higher education has become a dualistic structure relying on 'government expenditures and student tuition fees.' Contrary to the government's policy concept of forming a pluralistic funding structure, in reality, the diversification of external funding for higher education institutions is only a false image" (p. 117). Although this point is applicable at least at the level of universities nationwide, it is possible to extract the following points: (1) it warns against underestimating the significance of government expenditures and (2) it may not be possible to evaluate whether independent financing is necessarily showing a steady transition. This suggests the need to maintain a cautious attitude toward "university independence" and "the realization of pluralistic financing" when examining the management of Chinese universities and the policies surrounding them.

We have reviewed prior studies in three stages. In terms of what has been discussed in existing studies, China's university system reform has attracted interest, and one of its multidimensional financing behaviors, namely, industry-academia-government collaboration, has



(Source: Kaneko et al., 2005, p. 84)

Figure 1: Governance Structure in Chinese Universities

flourished as a research subject. However, several studies that have attempted to comprehend the actual funding structure of universities suggest that, contrary to the government's policy concept, government funding is still an important axis. Therefore, it is questionable whether the "independence of universities from the government" is a reality.

The first point of departure in examining Chinese universities is the content of the university reforms that have promoted the expansion of university autonomy. Apparently, Chinese universities have been examined based on the basic premise of a government-university relationship in which the government has begun to withdraw from university management and administration and universities exercise managerial autonomy. However, it should be noted that even among the existing studies that are based on such assumptions, questions have been raised regarding whether the importance of government funds has been largely diminished as the financing structure has been repeatedly examined. This suggests room to reconsider the government-university relationship that has been the premise of the discussion. Furthermore, a reexamination of the government-university relationship will, in turn, lead to a reexamination of how universities should be managed. This is because if there is a different relationship between the government and universities than the traditional government-university relationship that has led to the issue of voluntary self-funding, new issues regarding university management will emerge. Based on the problem awareness mentioned above, this study will examine the relationship between China's government and universities and then approach university management.

Conventional research trends have tended to focus on either "direct state control" or "university autonomy through marketization." In contrast, the originality of this paper lies in elucidating how the seemingly contradictory "duality of policies"—namely, the macro-level

restraint of government funding (promotion of autonomy) and the micro-level focused support for selected universities—interact within university management to form a unique development model. The reason this paper spans from macro-level policy shifts to micro-level internal university management is that the essence of the "duality" facing Chinese university management can only be elucidated by capturing the dynamic interaction between these two levels.

This paper is structured as follows. First, in Section 2, we review the policy and macroeconomic facts related to "university reform," which have traditionally been the focus of attention. With this in mind, we will actively shed light on another type of government-university relationship from Section 3 onward. In Section 4, we will focus on the two aspects examined in Sections 2 and 3 and add our interpretation of what kind of structure exists in terms of university management. Finally, Section 5 presents the study's conclusions.

2. Decline in government funding and the rise of industry-academia-government collaboration

In this section, we will first review changes related to university reform.

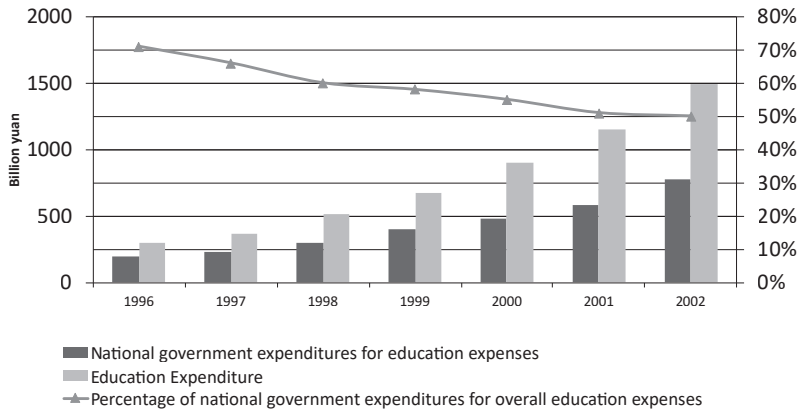
The series of university reforms that led to changes in government-university relations in China were driven by financial difficulties, and the reforms were primarily aimed at reducing the State's financial burden. The principle of competition was introduced to reduce the State's financial burden by consolidating universities and allowing them to raise funds freely to an extent through channels other than government grants. This has had a major impact on the way universities are managed, by forcing them to expand their search for funding sources other than the government, rather than relying solely on state-sponsored education.

The reforms that occurred at the time were in line with the series of reforms involving state-owned enterprises, such as the conversion of state-owned enterprises to joint-stock companies in 1993. The same institutional reforms that were aimed at separating the ownership and management of state-owned enterprises were also applied to universities. In other words, these reforms involved the promotion of the "incorporation of universities," the essence of which was institutional reform to separate ownership and management rights in universities. Through this reform, ownership was shifted to the State, but management was left to the universities.

More specifically, in 1993, the central government issued the "Outline of China's Education Reform and Development" regarding the relationship between the government and schools. It clarified the rights and obligations of higher education institutions through legislation. It dictated that "institutions of higher education become socially self-managed corporate entities." In addition, the "Education Law" was promulgated in 1995. Article 31 of the law stipulates that "schools and other educational institutions with the conditions of a corporation shall acquire the status of a corporation from the day they are approved for establishment or registered." Further, the Law on Higher Education, which was promulgated in August 1998, stipulated that "higher education institutions acquire juridical personality from the day they are approved for establishment, and the university president becomes the legal representative

of the university." In addition to the trend of promoting the incorporation of universities, the Law on Higher Education was unique in that it specifically stipulated the autonomy of universities. The series of educational system reforms that led to the granting of juridical personality to China's national universities and the gradual granting of autonomy in their management was a major change in China's university system.

Thus, against the backdrop of the government's financial difficulties, universities were gradually granted a certain degree of freedom, and this change was also evident in their funding. In China, the government did not experience a corresponding increase in expenditures, despite the increase in the expenses of universities as their needs increased. Concretely, China's 1998 university expansion policy led to a rapid increase in the number of university students, which in turn led to an increase in the expenditures of universities. Hence, as shown in Figure 2, while university education expenditures[2] increased between 1996 and 2002, the growth in State funding was not accompanied by a corresponding decline in the share of state-sponsored education expenditures (i.e., the portion of education expenditures that was sponsored by the State) in the total education expenditures. Consequently, the average annual increase in education expenditures as a source of university income was 28.9% from 1996 to 2002, while the share of State expenditure for education fell from 67.7% in 1997 to 48.7% in 2002. As indicated by this situation, sources of income other than State finances (i.e., acquisition by universities of their own funds) have become increasingly important and have increased in value.



(Source: Ministry of Education et al., 1997–2003, *China Educational Finance Statistical Yearbook*)

Figure 2: University Education Expenditures (1996–2002)

Tuition fees were important among self-acquired funds, but industry-academia-government partnerships also became increasingly important. This is partly because in China, industry-academia-government collaboration was originally required of universities owing to their economic policy. A series of economic reforms in China since its era of policies for reform and openness made it necessary for universities to contribute to society through the industrializa-

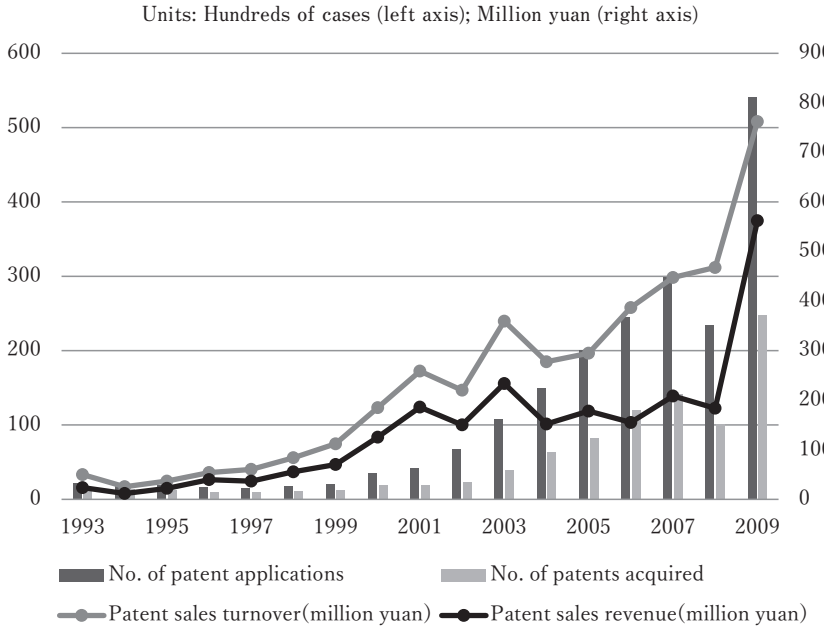
tion of science and technology. This is clearly indicated by China's slogan of "nation-building through science education." In this respect, the industry-academia-government collaboration that universities have been required to engage in has long had significance as a source of income for universities, and the institutional reforms that have been implemented since the 1990s have further increased its significance as an income source.

Table 1: Changes in the business conditions of university-launched enterprises (1997–2009)

Fiscal year (FY)	No. of companies (enterprises)	Total sales	Average sales per company	Total profit	Amount of tax due
	(Companies)	(Billion yuan)	(Million yuan)	(Billion yuan)	(Billion yuan)
1997	6634	295.5	4.5	27.2	12.3
1998	5928	315.6	5.3	25.9	13.5
1999	5444	379.0	7.0	30.5	15.7
2000	5451	484.6	8.9	45.6	25.4
2001	5039	603.0	12.0	48.2	28.4
2002	5047	720.1	14.3	45.9	36.3
2003	4839	826.7	17.1	43.0	38.7
2004	4563	969.3	21.2	49.9	48.7
2005	4311	1071.3	24.9	55.6	48.1
2006	3988	1167.3	29.3	59.5	44.7
2007	3665	1373.6	37.5	118.5	57.0
2008	3691	1232.4	33.4	71.2	94.7
2009	3643	1412.3	38.8	87.4	117.6

(Source: Ministry of Education et al., 2002–2010)

Owing to their need for operating funds to improve their research facilities and environments, universities were forced to expand their sources of income outside of the State coffers, and they actively engaged in industry-academia-government collaboration[3)]. The increase in efforts related to industry-academia-government collaboration is clearly illustrated in the series of figures shown below. For example, Table 1 shows that the number of university-run enterprises (the so-called university-launched venture companies or businesses), which are a characteristic form of industry-academia-government collaboration in China, reached 6,600 in 1997. The university-run enterprises subsequently increased their sales and profits, although the number of companies declined owing to systemic reforms and mergers. Moreover, Figure 3 clearly shows the steady growth in patent applications and acquisitions by universities as well as sales and profits related to these applications and acquisitions.



(Source: Compiled by the author based on Ministry of Education, 1994–2015)

Figure 3: Trends in Patent Status at Universities (1993–2009)

In summary, institutional changes in the environment of universities have occurred since the 1990s. As China was transforming from a planned to a market economy, reforms were also implemented in its higher education system. Consequently, universities were granted a juridical personality, and their autonomy in university management was gradually expanded. Meanwhile, efforts related to industry-academia-government collaboration, which was meant to be one of the self-financing actions implemented by universities, were increased significantly.

These facts indicate that the Chinese government's delegation of authority to universities has been successful, and the independent development of universities has progressed smoothly. However, these facts reflect only one aspect of government-university relations and university management under such relations. It is necessary to examine another aspect of government-university relations as well to comprehend the environment of Chinese universities and university management under that environment.

3. Selection-oriented focused support

This section aims to examine an aspect that differs from the university policies and government-university relations identified in Section 2. To state our conclusion somewhat preemptively, China had a policy of focusing funding and development on specific groups of universities long before the reforms described in Section 2 were implemented. Along with the reform of universities, a project was also being promoted simultaneously to bolster selection-

oriented, focused support for specific universities. The aims of this project were to utilize limited resources effectively and produce results. The relationship between the government and universities emerges in the university policy identified in Section 2 in terms of "university development independent from the government." However, the government-university relationship is strongly linked in the relationship with some universities.

Below, we will examine how this other university policy developed historically. In the following subsections, we will confirm the history of university policy and focused resource-allocation in China. We will then examine the relationship between the government and universities by briefly reviewing how such policies have been perceived from the perspective of Peking University, which is one of China's leading universities.

(1) The higher education system and the construction of key universities since the establishment of a new China (1949–1978)[4)]

China drafted its first Five-Year Plan in 1951 to promote planned economic construction. Since the educational system of the former Soviet Union was referenced, higher education institutions were also subject to centralized control. As part of this process, the collaboration of faculties, specialties, etc., in institutions of higher education was also carried out under the government plan. For example, the engineering schools of Peking University and Yenching University were incorporated into Tsinghua University. Thus, Tsinghua University was organized into an engineering university with multiple majors. On the other hand, the three faculties of Letters, Science, and Law that originally existed at Tsinghua University and Yenching University were incorporated into Peking University. Peking University was thus organized into a comprehensive university[5)]. Such government-led changes and mergers of faculties were also implemented sequentially at Tianjin University, Zhejiang University, Nanjing University, Wuhan University, Sun Yat-sen University, and others. The university reforms during this period were based on the policy of "fostering human resources for industrial construction," and in order to realize this policy, reforms were implemented systematically in universities throughout the country, starting with those in northern and northeastern China[6)].

Then, from 1958 until 1966, when the Cultural Revolution began, a bifurcated management system was temporarily implemented between the central and local governments (provinces, municipalities, and autonomous regions). In other words, the established management performed under a centralized administration that was bifurcated, such that decentralization no longer coexisted with centralization of administration. For example, as of 1965, of the nation's 434 universities, 34 were under the direct control of the central Ministry of Education, 149 were under the control of other central ministries and departments, and 251 were under the control of local governments (provinces, cities, and autonomous regions). However, the Cultural Revolution (1966–1976) brought changes to this system, and centralized control was strengthened again. Despite these changes, however, universities continued to be linked to the government, as it were, and were operated according to government plans. This aspect remained consistent from the establishment of new China until the end of the Cultural Revolution.

Another feature of new China that was influenced by the former Soviet Union was the recognition that the construction of several high-level universities was necessary to build a strong socialist country. This recognition led the then Ministry of Higher Education to issue a "Decision on Priority Institutions of Higher Education" in October 1954. Six schools were designated as "National Key Universities": Renmin University of China, Peking University, Tsinghua University, Harbin Institute of Technology, Beijing Agricultural University (now China Agricultural University), and Beijing National Medical School (now Peking University Health Science Center).

This designation of priority universities was later expanded. Specifically, in response to the rapid increase in the number of higher education institutions—from 227 in 1955 to 1,289 in 1960—the central government increased the number of key universities from 6 to 16 in 1959[7] and included 4 additional institutions[8] in the same year with the State Council's approval. Furthermore, the "Decision on Increasing the Number of National Key Universities" was announced in October 1960. Through this, 44 additional schools, including Jilin University, were added. Thus, the total number of key universities was increased from 20 to 64 schools. Moreover, Zhejiang University, Xiamen University, and four other universities were added in 1963, bringing the total number of key universities in the country to 68. Thus, the number of priority universities was increased.

(2) Preparatory stage for the increase of university autonomy and the construction of priority university departments (1978–1993)[9]

After the Cultural Revolution (1978 to 1985), the government refocused on the implementation of "bipolar management," with the central government on one side and provinces, municipalities, and autonomous regions under the unified guidance of the central government on the other. During this time, local administrative authority was expanded, and local governments were encouraged to actively participate in university construction and management.

Moreover, with the support of the "Decision on the Reform of the Education System" issued in 1985, it was determined that education system reform would "expand the autonomy of institutions of higher education under a unified national education policy as well as planning guidance." The "Decision on Science and Technology Reform," which was announced in the same year, clearly positioned higher education in the national science and technology system, and a policy stance of encouraging universities and research institutions to actively engage in industry-academia collaboration was adopted.

The 1992 "Opinion on Accelerating the Reform and Positive Development of Higher Education" and the 1993 "Outline for the Reform and Development of Chinese Education" further addressed the reform of the higher-education management system as an important issue. The government's management of universities was reexamined, and universities were encouraged to establish independent management systems on behalf of general society. In other words, the relationship between the government and higher education institutions shifted from direct government control of universities, as was the case in the past, to a macro-management system

centered on laws, regulations, allocation of funds, and provision of information and services. Accordingly, the autonomy of universities was expanded, and emphasis was placed on independent university construction (development) as a juridical entity in society.

However, the simultaneous strengthening of past university policy while the above-mentioned changes in university policy were being promoted should not be overlooked. In other words, after the Cultural Revolution, key universities were restored and strengthened, and, furthermore, more thorough efforts were made for the construction of key university departments. Specifically, the State Council reinstated the pre-Cultural Revolution system of 68 key universities in February 1978. At the same time, another 20 schools were added, thus bringing the total number of national key universities to 88. Thereafter, as the result of certain some mergers and adjustments, the total number of schools reached 96 by the end of 1981. From 1987 to 1988, 416 key university departments were selected from 107 universities nationwide, and priority funds were invested in these departments. The construction of these key universities and departments became the foundation for the construction of "world first-class universities," as was subsequently promoted by the government.

(3) First-class universities and priority department construction initiatives (1993–1998)[10] "Project 211" and "Project 985"

"Project 211" and "Project 985" were the chief policies for selecting target universities for the priority investment of funds.

First, Project 211 is considered. The "Outline of China's Educational Reform and Development" was issued in 1993. It set the goal of "concentrating the power of the central and local governments to create around 100 key universities and key departments, so that by the beginning of the 21st century, some universities and departments will reach world-class levels in both education and scientific research." Project 211 was implemented specifically for this Outline. The Project 211 selection process considered universities directly under the Ministry of Education and those directly under other departments of the central government. It was also decided that at least one school would be built in each province, taking geographical distribution into consideration, and that the total number of schools would be approximately 100. In August 1996, 27 schools, including Peking University and Tsinghua University, were designated as the first schools selected for Project 211. Gradually, more universities were added in the selection process: 91[11] in 2001, 95 in 2003, 107 in 2005, and 112 in 2011[12].

Next, Project 985 is discussed. In 1995, "Nation building via science education" became one of China's basic national policies. Subsequently, in May 1998, Jiang Zemin emphasized in a speech at the 100th anniversary ceremony of Peking University that "Nation building via science education" would be the approach used. He added, "We need to have several first-rate universities that are at the advanced levels of leading nations." Project 985 was followed in December 1998 by the "Action Plan for Education Promotion for the 21st Century" formulated by the Ministry of Education. This plan called for the construction of certain world-class universities and key departments over the next 10–20 years. In January 1999, when the imple-

mentation of this plan began, Project 985 was officially launched as the driving force behind it. In the early years of Project 985, only two universities were supported by the central government: Peking University and Tsinghua University. Between 1999 and 2001, the government invested 1.8 billion yuan (renminbi, RMB) in each of these two universities. Subsequently, additional universities were included in Project 985. These universities included China University of Science and Technology, Fudan University, Shanghai Jiao Tong University, Nanjing University, Xi'an Jiaotong University, Zhejiang University, and Harbin Institute of Technology. Thus, the number of universities receiving priority support under Project 985 was increased to nine (i.e., the "2 + 7" model). In 2000, more universities were added to Project 985, and the "2 + 7" model was converted to a "2 + X" model. Thus, the number of universities reached 39 in 2008.

Invested funds and their utilization

Next, we review the funds that the government has invested through these projects.

First, it should be noted that not all the funds were government funds, as the universities also invested their own funds. Regarding Project 211, a total amount of 10.894 billion yuan[13] was invested during period 1 (the so-called "95 period"; 1996–2000). During period 2 (the "15 period"; 2001–2005), 18.75 billion yuan was invested in total[14] (Bie and Yang, 2009, pp. 133–134). The amount of funds invested in Project 985 far surpassed the funding for Project 211. Specifically, the total amount of funds invested during the first (1999–2003), second (2004–2007), and third (2008–2012 end) periods was 25.5 billion yuan, 41.4 billion yuan, and 45.0 billion yuan, respectively. Thus, the selected universities were heavily funded by the government. The total investment over the 10 years of Project 211 amounted to 36.826 billion yuan. Of this amount, 16.541 billion yuan was used to construct key departments, 7.105 billion yuan was used to establish public services and systems, 2.409 billion yuan was used for teachers and staff, and 10.771 billion yuan was used to construct basic facilities (China Association of Higher Education, 2008, p. 509).

(4) The perspective of universities

The discussion thus far has focused on the policy aspect. We would now like to briefly review the content from the perspective of universities as well. Although there are limitations in terms of data, we will use Peking University as an example, as it is one of the leading universities in China and has been designated by the government for several projects.

Since Peking University initially applied for Project 211, it regarded the project as a unique opportunity for its development process. The project was set as the top priority for the entire university (Peking University Yearbook Committee, 1999, p. 25). With its selection for Project 211, Peking University's investment of funds for the initiative followed the trends shown in Table 2. Specifically, during the "95 period" (1996–2000), Peking University invested approximately 555 million yuan (Peking University Yearbook Committee, 2001, pp. 430–431), of which 61.2% was from the central government (State Planning Commission, Ministry of

Finance, and Ministry of Education), 6.7% was from donations, and 32% was self-financed. The total investment for the following "15 period" (2001–2005) was 485 million yuan (Peking University Yearbook Committee, 2003, p. 294), with 365 million yuan (75.3%) coming from central government funds and 120 million yuan (24.7%) from the university's own funds, indicating that the university received significant funding from the government. Furthermore, Peking University was also selected for Project 985. During the first phase (1999–2003), 1.8 billion yuan was invested, and another 1.8 billion yuan was invested in the second phase (2004–2007). This confirms that huge sums were invested in a single university, namely, Peking University. Regarding the utilization of these funds, we will consider the first period of Project 211 as an example. During this period, Peking University mainly focused on the construction of key departments and basic facilities (infrastructure) and the establishment of public services and systems within the university (development of the library and the university's Internet system). This shows that the funds were invested in Peking University's infrastructure (Peking University Yearbook Committee, 1999, p. 24).

Table 2: Project 211 funding at Peking University, 1996–2000 (Unit: 10,000 yuan)

Fiscal year (FY)	National Planning Commission	Ministry of Finance	Ministry of Education	Donations	University self-procurement	Total
Before 1996					162	162
1996	8125	4375	1000		1841	15341
1997	7150	2275	1000		3277	13702
1998		1575	1000	3732	4478	10785
1999	2600	1400	1000		4463	9463
2000	1625	875			3562	6062
Total	19500	10500	4000	3732	17783	55515

(Source: Peking University, 2001, p. 430)

We can confirm from the content of the speeches delivered by the presidents of Peking University, etc., that the acquisition and utilization of such enormous government funding, which was not available to not-selected universities, have been extremely important in the management of the university. For example, as recorded in the Peking University Yearbook Committee (1999), Chen Jia'er, president of Peking University, stated in a speech at the Spring Executive Congress (February 1998): "From a national perspective, next year (1999) will mark the 50th anniversary of the founding of the nation. We need a national general university that is somewhat complete in its departments, is of a high level, and can truly represent the standards of the nation. This reflects our need to join the ranks of world first-class universities. Currently, Peking University has many departments, but none are as important as medicine and engineering. We are still not a comprehensive university. As Vice-Premier Li

Lanqing told us, 'There is no world first-class university without a medical school.'"

As part of its efforts, Peking University incorporated Beijing Medical University into Peking University in 2000, and the university became the Faculty of Medicine of Peking University. In his speech at the university-wide executive conference on February 24, 2005, then-President Hsu Zhihong stated:

"In the second phase of the construction of Project 985, while emphasizing the liberal arts, sciences, and medicine, we should focus on supporting departments that have advantages and a bright future, and that can reach world first-class advanced standards in a relatively short period of time. The policy of Peking University is to maintain its traditional advantages while focusing on the construction of departments that can solve critical national problems, which is urgently needed for the national economy, society, and the development of science and technology (Peking University Yearbook Committee, 2006, pp. 14–19)."

The priorities of Peking University were thus clarified. The university emphasized the following: the global high standards that the nation as a whole was striving for, departments that could quickly achieve these standards, and departments that could address the problems for which the nation was demanding solutions. While maintaining its competitiveness, Peking University clearly placed importance on national policy when supporting and building new departments.

The above case is an example of university administration policy at Peking University. Next, we consider the case of Tsinghua University, which is also a representative selected university. In 1993, Tsinghua University set the goal of becoming a world first-class university by its 100th anniversary in 2011 (Tsinghua University Yearbook Committee, 2000, pp. 12–14). Tsinghua University, which was founded in 1911, had become the most competent engineering university in China after the adjustment of its faculties and departments in 1952. The first step that Tsinghua University took was to become a comprehensive university to join the ranks of the world's top universities. Although most of the world's top universities are general universities, Tsinghua University, owing to its historical background, has a strong foundation in the field of engineering. However, there was a large gap its global competitiveness in the departments of science, literature, and administration. Hence, few of the university's departments were at top world levels. Therefore, while continuing to demonstrate its superiority as an engineering university, it further promoted the construction of its science, business administration, and liberal arts departments, thus transforming itself into a general university. The second step was the establishment of a collaborative relationship with Peking University. Tsinghua University and Peking University planned to complement their mutual advantages, share resources, and work together to build world first-class universities. Specific efforts included inviting professors to visit the other university, allowing students to take courses at each other's universities, sharing library information, and jointly applying for National Priority Scientific Research Projects. Tsinghua University's administration policy was to divert from its status as solely an engineering university, while maintaining its prowess in engineering. Meanwhile, Peking University was already more of a general university. However,

compared with Tsinghua University, Peking University was relatively weak in engineering. Hence, in the sense of retaining its differentiation from Beijing University, Tsinghua University maintained and strengthened its superiority in engineering. Meanwhile, the two universities mutually sought ways of coexistence and co-prosperity in their quest to become world first-class universities. This point is interesting, as it shows the orientation of university management at two of China's representative universities.

The above examples of Peking University and, to a lesser extent, Tsinghua University, were included to confirm the universities' responses to the two projects. The example of Peking University confirms that the acquisition and utilization of enormous government funding were extremely important as the basis for the university's further development. Additionally, in the promotion of these funds, emphasis was placed on efforts that emphasized the government's intentions. In contrast to Peking University, Tsinghua University, another representative university in China, took the direction of coexistence and co-prosperity with Peking University. It aimed to become a world first-class university while maintaining its distinctiveness as a university with a strong engineering background. This kind of university management enables us to glimpse aspects of the mutual differentiation among key universities, which occurs even while they are growing with the government's support.

(5) Summary

In this section, we reviewed aspects of university policy that differed from university policies focusing on the expansion of management autonomy. We achieved this by tracing the history of university policy. Thus, we confirmed that historically, some universities have been given priority as well as priority funding. Strong government-university ties exist, and at least in the case of Peking University, we have confirmed that the university also places great importance on aligning with and following government policies in the management of the university.

In considering university management, it is important to capture the kinds of relationships that develop in tandem with the government. In this respect, as discussed in this section, the reality is that in China's case, a dualistic university policy has been implemented, whereby funds are invested in selected groups of universities in a focused and proactive manner, even as funds are restrained at the macro level. University reform is emphasized in China's university policy. Therefore, university-government relations are often understood from the perspective of the government withdrawing from direct management of universities and reducing the importance of government funds among all sources of funding. However, it is essential that one be clearly aware that the formation of university-government relations is based on an awareness of the university's ability to obtain priority funding, especially in the case of leading universities.

4. Selected universities under the duality of university policies

Through Sections 2 and 3, we have elucidated the duality of China's university policy, which tends to focus on the suppression of funding for universities at the macro level while promoting ample funding for selected university groups. The reason it is important to capture this duality of the policy is that the government-university relationship influences the direction of management by the university. If only one aspect of the government-university relationship is considered, the problem of being unable to fully grasp the issues that are important in the management of universities will arise.

In the case of selected universities under the influence of both sides (i.e., the government and the university) of a dual policy, an issue arises regarding how the composition of the university's management should be interpreted. In other words, while universities that receive priority funding clearly have an advantage over non-selected universities, the question arises regarding how to integrate both the independent acquisition of funds from the government and the university's need to strengthen its relationship with the government. The significantly widening gap between selected and non-selected universities has become a social problem in China. It can be said that selected universities are overwhelming non-selected universities in various aspects of university management, including industry-academia-government collaboration. It seems necessary to approach such issues as a clue to considering these problems.

It is carefully noted that this is a hypothetical interpretation based on what we have discussed thus far, considering that empirical data are insufficient. Therefore, it is essential that more evidence be accumulated in the future. Nevertheless, the duality of university policy can be interpreted as bringing about a "positive circulation" in selected universities, as illustrated in the figure below, and it is discussed further in this section.

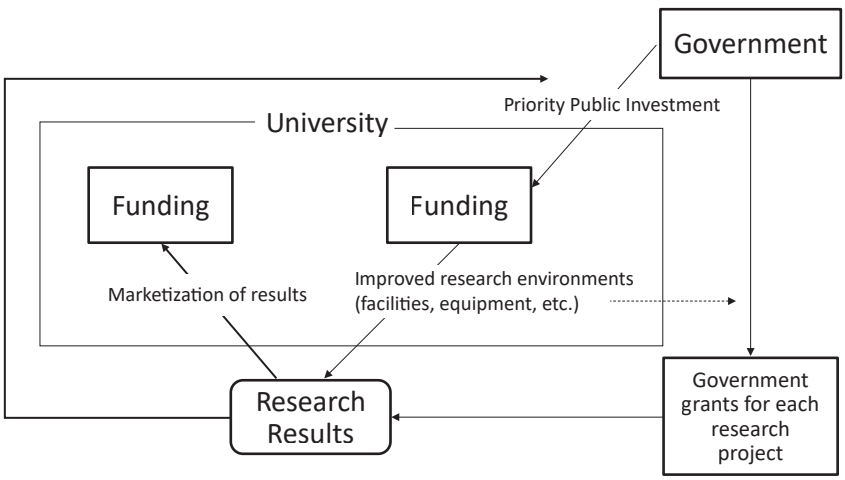


Figure 4: The Structure of "Positive Circulation" in Selected Universities

The mechanism of "positive circulation" shown in Figure 4 consists of the following four logical steps. First, there is the intensive investment of resources through "focused support." Through national projects such as "Project 211" and "Project 985," vast funds and authority are allocated to specific universities. Second, the invested resources lead to the "upgrading of the environment." This enables the modernization of research facilities and the recruitment of top-tier human resources. Third, based on this enhanced environment, universities move to the stage of "outcome generation and marketization." Leveraging high-quality research results, universities become more adept at securing industry-academia collaborations, patent royalties, and external competitive funding. Fourth, these achievements enhance the university's reputation, leading to the stage of "acquiring further resources" from both the state and the market. This series of cycles constitutes a structural factor that drives sustained growth in selected universities and widens the gap with non-selected institutions.

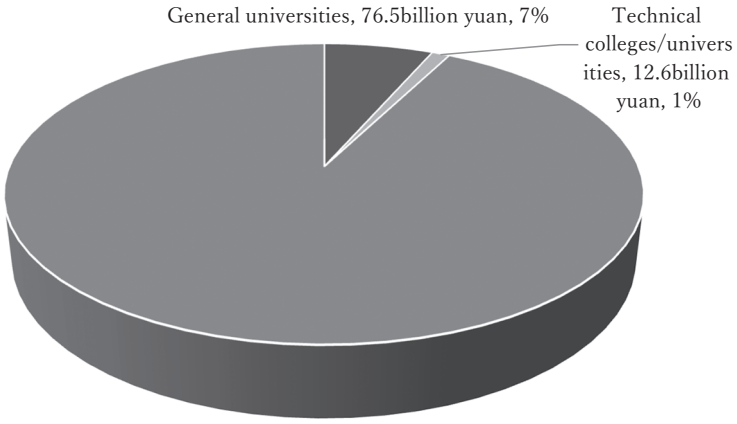
First, if universities are selected as a target of priority funding, they can improve various aspects of the research environment on campus. This includes the purchase of equipment for research, recruitment and employment of pioneering personnel, and improvement of faculty compensation. These factors will promote the production of research results that will realize a progressive environment in terms of research infrastructure, etc. Furthermore, the facts that the university is a selected university and its environment is well-developed will facilitate access to research grants by individual researchers within the university (China Research and Communication Center and Japan Science and Technology Agency, 2013, p. 42).

In fact, the acquisition rate of Grants-in-Aid for Scientific Research is significantly higher in selected universities. For instance, in 2014, while there were 1,146 universities nationwide, Project 211 universities obtained 67.8% of the national scientific research budget of 124.427 billion yuan (Ministry of Education, 2015, p. 90). Similarly, in the 1995–2005 period, Project 211 universities were awarded approximately 75% of the projects from the National Natural Science Foundation of China ("Project 211" Inter-Ministerial Coordination Group Office, 2007). Thus, research funds are heavily concentrated in designated universities, creating a situation that is increasingly favorable for their sustained accumulation of research results.

Second, it is clear that coupled with the autonomy granted to universities, opportunities for these universities to obtain their own funds will also expand. Advanced research facilities and the production of research results directly contribute to joint research, technology contracts, and the acquisition of patents. These factors also facilitate research and development (R&D) functions and technology transfer to university-owned companies. Furthermore, proven research results serve as a foundation for attracting companies to university science parks.

The dual nature of these policies means that selected universities can not only receive priority government funds but also market their results with managerial autonomy. Generally, universities that lead in obtaining government funds also "simultaneously" lead in obtaining independent funds. For example, most universities engaged in industry-academia-government

partnerships with top Chinese firms belong to the selected university group, which is also reflected in their dominance in patent acquisition and joint research (Science and Technology Development Centre of the Ministry of Education, 2012). One indication of this is that approximately 92% of national university-run enterprises belong to priority universities (see Figure 5). Although these figures are based on 2006 data, it remains clear that this structural trend continues under subsequent policy frameworks.



(Source: China Association of University-Run Industries et al., 2007)

Figure 5: Composition of University-Run Enterprises by University Type (2006)

Third, the series of achievements in producing progressive research results and collaborating with external entities serves as a crucial basis for securing future government funding. Consequently, the cycle of the first aspect leading to the second and then the third is likely to be repeated.

In this way, selected universities benefit from the results of both focused government funding and self-financing enabled by managerial autonomy. This creates a "positive circulation," allowing these institutions to steadily increase their advantage over non-selected universities. It can be argued that this advantage is reproduced in a path-dependent manner. Under the historical planned economy, each selected university was assigned a specific role and prioritized for development. As a result, these institutions excelled in their respective fields, leading to further investment and development. For instance, Tsinghua University, which was originally assigned the role of an engineering university, has maintained its importance within that field through this continuous reproduction of status and resources.

5. Conclusion

A common starting point in examining Chinese universities is to discuss the results of

reforms that have expanded university autonomy. However, approaching university management solely from the perspective of government-university relations often results in overlooking essential operational aspects.

The primary goal of this paper was to examine the management structure of Chinese universities as a means to elucidate a different facet of the government-university relationship. In this pursuit, the paper first clarified the "duality" of China's university policy. While reforms have restrained government funding at the macro level, they have simultaneously focused resources on selected universities at the micro level. Based on this duality, the second contribution of this paper is the interpretation of the management structure within these selected institutions. We argued that these universities created a "positive circulation" by leveraging both government funds and self-acquired funds—a structure that enables them to incorporate the benefits of policy duality into their management. Thirdly, although resources are limited, our analysis of the management policies of Peking University and Tsinghua University revealed glimpses of strategic differentiation and coexistence. Further research into this interrelationship will provide deeper clues into the actual situation of university management in China.

Furthermore, the dual structure examined here has been intensified by the "Double First-Class" initiative launched in 2015. As "Project 211" and "Project 985" evolved into this new initiative, resource investment became more competitive and outcome-oriented. Under the strong initiative of the State, aligning with national industrial strategies has become an absolute prerequisite for securing resources. Thus, the dual framework—comprising macro-level autonomy and micro-level focused management—continues to function as a fundamental pillar of contemporary Chinese university management.

Nevertheless, certain issues remain. The most critical requirement is further empirical progress. This study provides an interpretive framework, but document-related limitations make exhaustive empirical studies difficult. It is necessary to verify this interpretive structure through data-driven research and clarify the management characteristics of individual universities, including Peking University and Tsinghua University, with diachronic and synchronic comparisons.

Notes

1) This information about the governance of Chinese universities and changes in it is briefly supplemented as follows. Under the planned economy system in China, the government had comprehensive control over universities. This included educational planning and the establishment of faculties and departments. However, around the mid-1980s (specifically, according to the "Decision of the Party Central on the Reform of the Education System" of 1985), a system of university presidential responsibility was introduced as part of the expansion of university autonomy. This has allowed university presidents independence in the planning and coordination of educational plans and the establishment of faculties and departments, as well as a certain amount of authority over personnel matters.

2) The breakdown of education expenses for universities in China includes education expenses paid from the

State's (national) financial budget (state-sponsored education expenses), social donations, tuition fees, and the amount returned to universities by school-affiliated enterprises. Education expenses refer to all such education expenses.

3) A portion of the profits earned through industry-academia-government collaboration was returned to the universities to compensate for the shortfall in educational funding at the universities, and the funds were also used to improve education and educational facilities.

4) The discussion in this section draws primarily on China Association of Higher Education (Ed.) (2008), pp. 493–497, and Ying (Ed.) (2008), pp. 12–20.

5) As for Yenching University, the name of the university was eliminated.

6) The basic reform of the organization of university faculties and departments was completed in 1953, and the 182 universities nationwide comprised 14 general universities, 38 technical universities, 31 normal universities, 29 agricultural and forestry universities, 29 medical and pharmaceutical universities, 6 universities for finance and economics, 4 universities for politics and law, 8 foreign language universities, 15 arts universities, 4 sports (physical education) universities, 3 minority national universities, and 1 other university (meteorological college).

7) The newly added key universities were East China Normal University, Fudan University, Tianjin University, Shanghai Jiao Tong University, Xi'an Jiaotong University, Beijing Institute of Technology, Beijing University of Aeronautics and Astronautics (now Beihang University), University of Science and Technology of China, Shanghai First Medical College (now Shanghai Medical College, Fudan University), and Beijing Normal University.

8) These were China Union Medical College (now Peking Union Medical College), Harbin PLA Military Engineering Institute (now Harbin Engineering University), Fourth Military Medical University (now Air Force Medical University), and Army Engineering University of PLA (also known as PLA University of Science and Technology).

9) The discussion in this section draws primarily on China Association of Higher Education (Ed.) (2008), pp. 498–501, and Ying (Ed.) (2008), pp. 20–31.

10) The discussion in this section draws primarily on China Association of Higher Education (Ed.) (2008), pp. 501–506, and Bie and Yang (Eds.) (2009), pp. 129–140.

11) These included 57 universities directly under the Ministry of Education, 11 universities affiliated with the Central Committee, 20 provincial universities, and 3 military universities.

12) No additions were made thereafter.

13) In addition, another $7.472 billion yuan was allocated by central ministry departments and local governments for expenses related to basic facilities.

14) The breakdown of funds for Project 211, period one (the "95 period"; 1996–2000) was as follows: 2.755 billion yuan in specialized funds from the central government, 3.172 billion yuan from central ministries and departments, 2.489 billion yuan from local governments, 2.363 billion yuan from universities' own funds, and 115 million yuan from other sources. During the second period ("15 period"; 2001–2005), the total amount of central government funding was 6.0 billion yuan, central ministry and department funding was 5.97 billion yuan, and 6.78 billion yuan was from universities' own funds.

References

Bao, W. (2009) "Empirical analysis of the financial characteristics and borrowing behavior of universities in China after the period of rapid expansion," *The Journal of Finance and Management in Colleges and Universities*, (6) 115–135.

Bie, D. and D. Yang (Eds.) (2009) *30 Years of Chinese Higher Education Reform and Development*, Shanghai Education Press.

Cai, K. (Ed.) (2003) *Chinese Higher Education in the 20th Century: Institutional Volume*, Higher Education Press.

China Association of Higher Education (Ed.) (2008) *Review on the development and reform of higher education in China over the last 30 years*, Educational Science Publishing House Ltd.

China Research and Communication Center and Japan Science and Technology Agency (Eds.) (2013) *China's four major universities: Towards the world's top level with overwhelming human-resources power*.

Dong, X. (2004) "Policy and practice of diversified funding system for higher education in China," (Huang, Meiying, trans.) *The Journal of Finance and Management in Colleges and Universities*, (1) 265–285.

Gao, Y. (2006) "The striving for the marketization of higher education in China," (Huang, Meiying, trans.) *The Journal of Comparative Education*, (32) 137–148.

Guo, R. (2003) "A study on social changes and higher education policy in China: With focus on reforms of higher education finance," *Bulletin of the Graduate School of Education, Hiroshima University*, Part III, (52) 63–68.

Hu, J. (2013) "Changes in governance in Chinese universities," *Nagoya Journal of Higher Education*, (13) 177–192.

Kaneko, M., G. Xu, X. Dou, Y. Cao, and W. Bao (2005) "Chinese higher education at the turn of the century: Observations from field trips to South-East Provinces in 2004," *Bulletin of the Graduate School of Education, University of Tokyo*, (44) 83–109.

Liu, W. J. (2007) "System differentiation and shifts of funding in Chinese higher education," *The Journal of Finance and Management in Colleges and Universities*, (4) 151–167.

Liu, W. J. (2009) "An empirical study on distribution of research expenses in Chinese higher education," *The Journal of Finance and Management in Colleges and Universities*, (6) 161–170.

Ministry of Education, Department of Science, Technology, and Informatization (Ed.) (1994–1998) *Higher education science and technology statistics, Data compilation edition*, China Statistics Press.

——— (1999–2015) *Higher education science and technology statistics, Data compilation edition*, Higher Education Press.

Ministry of Education, Finance Department, and the National Bureau of Statistics (Eds.) (1997–2003) *China Educational Finance Statistical Yearbook*, China Statistics Press.

Nanbu, H. (2004) "Diversification of financing routes and improvement in efficiency in Chinese higher education," *The Journal of Comparative Education*, (30) 32–43.

Peking University Yearbook Committee (2000–2014) *Peking University Yearbook*, Peking University Press.

"Project 211" Inter-Ministerial Coordination Group Office (Ed.) (2007) *Project 211 Development Report: 1995–2005*, Higher Education Press.

Science and Technology Development Centre of the Ministry of Education, Chinese Association of College-Run Industries (Eds.) (2002–2007) *Chinese higher education (university, etc.)-run enterprises statistical report*, Southwest Jiaotong University Press.

——— (2008–2010) *Chinese higher education (university, etc.)-run enterprises statistical report*, South China Univer-

sity of Technology Press.

——— (2011–2012) *Chinese higher education (university, etc.)-run enterprises statistical report*, Beijing Institute of Technology Press.

Seki, M. (Ed.) (2007) *Industry-Academia Collaboration in China*, Shinhyoron Publishing Inc.

Sheng, S. (2007) "Analysis of the structure of educational income, expenditure, and its allocation within higher education institutions in China: The case of four-year city colleges," *Bulletin of the Graduate School of Education, University of Tokyo*, (47) 419–428.

Sunami, A. (2003) "Collaboration in China's industry-academia research and university-launched venture companies," *RIETI Discussion Paper Series*, No. 04-J-026.

Xiong, Q. (2005) "Independent management of national universities in China: The case of universities attached to the Ministry of Education," (Huang, Meiying, trans.) *The Journal of Finance and Management in Colleges and Universities*, (2) 171–189.

Ying, W. (Ed.) (2008) *30 Years of Chinese Higher Education Reform and Development (1978–2008)*, Shanghai University of Finance and Economics Press.

（要旨）

本稿は，中国における大学経営の構造を解明することを目的とする。具体的には，近年の中国の大学政策における「二元性」―すなわち，マクロレベルでの政府資金投入の抑制（自立化の促進）と，マイクロレベルでの選抜大学に対する重点的な資源投入―が，大学経営の現場にどのような影響を与えているかを考察した。分析の結果，この政策的二元性が，大学に対して「市場への適合」と「国家プロジェクトへの参画」という二重の適応を強いる構造を浮き彫りにした。特に選抜大学においては，重点的な資源投入が学内環境の高度化をもたらし，それが産学連携や競争的資金の獲得を促進し，さらなる資源獲得へと繋がる「正の循環」が形成されている実態を明らかにした。本稿は，これらマクロな政策構図とミクロな大学経営のダイナミックな相互作用を捉えることで，中国の大学が直面する経営環境と経営の構造を提示したものである。