

Expansion and Evolution through Marketization
- Chinese Higher Education Since 1998 -

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Chinese higher education has undergone a steady development under the Open-Door Policy of the 1980s. The expansion in enrollment since the 1998 has been particularly tremendous. Behind the change was the shift in the higher education policy to integrate the market forces aggressively. In this paper I will describe the background of the policy (Section 1), analyze the development since the turn of century from the perspective of marketization in education, research and investment (Section 2), and discuss some of the consequences from these changes (Section 3).

1. Chinese Higher Education and Its Rapid Expansion

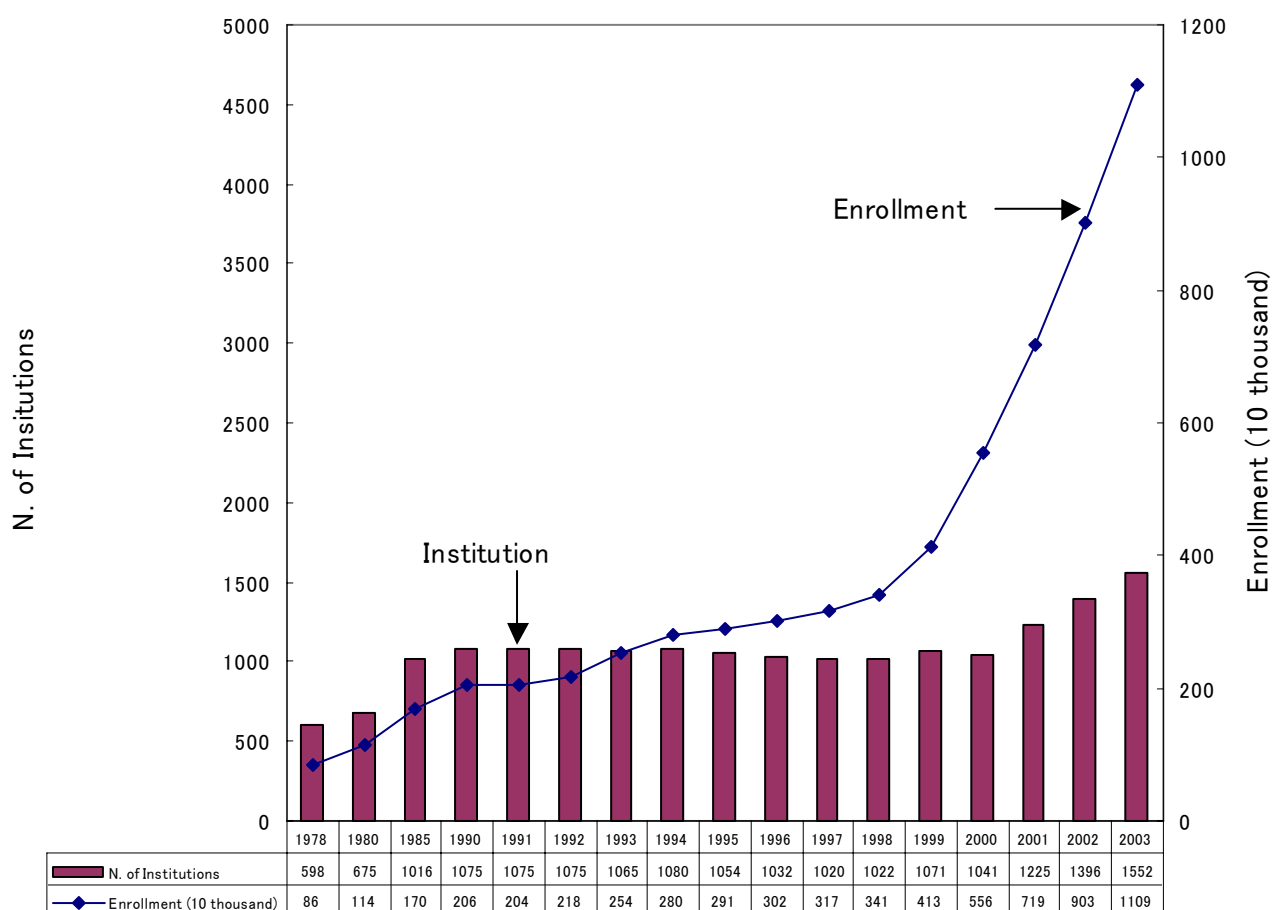
Higher education in China started development in the early 1980s, when the Reform and Open Door Policy took effect. The development since then can be divided into three periods; i) reforms to correct the confusions created in the process of Cultural Revolution, ii) steady growth in enrollment and institutional building for a new higher education system in the 1990s, and iii) rapid enrollment expansion since the end of the 1990s to the present (Yuan 2005,2004,)

Through these periods, the higher education system in China went through substantial changes. Tuition fees were introduced and raised steadily. Private institutions of higher education were introduced. Many small and specialized universities were consolidated. Universities and colleges that used be controlled and supported under the jurisdiction of various Departments of the Central government were reorganized into roughly three segments: institutions under the Central Department of Education, those under the local governments and private institutions. Most of the private institutions are short-cycle institutions requiring three years or less for completion.

As a result higher education in China now consists of three-sectors (national, local public and private institutions) in combination with two tiers (traditional four-year institutions and short-cycle institutions requiring three or two years to complete). Thus higher education constitutes a matrix of six cells. At the core of the system sit

the traditional universities under the national department of education. Especially the Priority Institutions designated by the government assume the status of core institutions. On the other hand, at the margin of the system are the private and local public short-cycle institutions. Altogether, the system has grown to be one of the largest in the world. In 2003, there were 1,552 institutions of higher education that enroll more than 11million students

Figure 1. Number of Institutions and Size of Enrollment (in 10 thousand)
in Higher Education – 1980 to 2003.



Source: Educational Statistics Yearbook, Various Years.

Since 1998, Chinese higher education started a new cycle of tremendous expansion with substantial shift in the shape of system described above (Figure 1).

The size of enrollment in higher education institutions exploded more than three-fold in the four-year period from 1998 to 2003. Enrollment in four-year and the short-cycle institutions grew from 3,410 thousand to 11,090 thousand, The institutions increased from 1022 to 1,552.

This tremendous growth since the turn of century was not necessarily a product of deliberate educational planning. Rather, it was a result of economic circumstances. In the latter half of the 1990s it was apparent that the national Department of Education had taken conservative stance in expansion of higher education.

Meanwhile, the rapid growth in exports in the 1990s brought a sizable savings accumulated domestically. On the other hand, since most of the export industries were investments from the overseas, the opportunities for investment within China were limited. Moreover, because of the dual economic structure, the growth in income was limited to a limited number of middle-class living in the urban area. As a result, the economy faced a severe shortage in consumer demands. The problem was exacerbated through the credit crunch in Asia in 1998. The Chinese economy needed a path to investment or consumption to enhance effective domestic demands.

It was against this backdrop that some economists started advocating for expansion of higher education. They argued that by removing the restraint policy on enrollment, the accumulated savings could be led into to construction of higher education institutions. They also argued that the increasingly wealthy urban population is ready and willing to pay substantial amounts for higher education for their children. It will create a substantial amount of needed domestic consumption in the economy.

On the other hand there were opinions, mostly from the education sector, opposing to this argument. They argued that the higher education in China was already suffering from the lack of public expenditure. Further unchecked expansion would only exacerbate the problem. Also, college graduates, especially those from the short-cycle institutions were facing with lack of adequate opportunities of employment in the labor market. Further expansion would obviously create unemployment problems among college graduates.

Eventually, the former argument for expansion must have prevailed among the national leaders. Nonetheless, the cabinet eventually went into the course of rapid expansion, thereupon instructing the Department of Education to that effect.

The subsequent shift in policy thus created a tremendous expansion and transformation of higher education in China described above. Considering the

circumstances under which the expansion policy was chosen, the changes were brought out with significant interaction with market forces. I will delineate below the influences in three aspects, i.e., education, research and investment.

2. Aspects of Marketization

As the circumstance of the shift in the policy would predict, the rapid expansion and evolution in Chinese education since the turn of century were made possible by radical introduction of market forces. The process can be summarized with three aspects: education, research and the investment for expansion.

Education

Increased Dependence on Tuition and Other Incomes

Under the socialist regime, it was not only that higher education institutions did not charge tuition, but also subsidized heavily on room and boards. Since the 1980s, however, they become gradually dependent on the contribution from students.

In 1990, the government started introduction of student fees by creating a category of students called “Fee Paying” students who were willing to pay the tuition and selected on a different basis from regular students. Since then charging tuition became more a standard practice, and in 1997 all students in higher education institutions were required to pay fees. Since then the level of tuition has increased steadily (Figure 2). The tuition level, which was 1,500 Yuan (about 210 U.S. dollars assuming 1 Yuan = 0.14 U.S. dollars), increased to 4,500 Yuan (about 630 U.S. Dollars) by 2000.

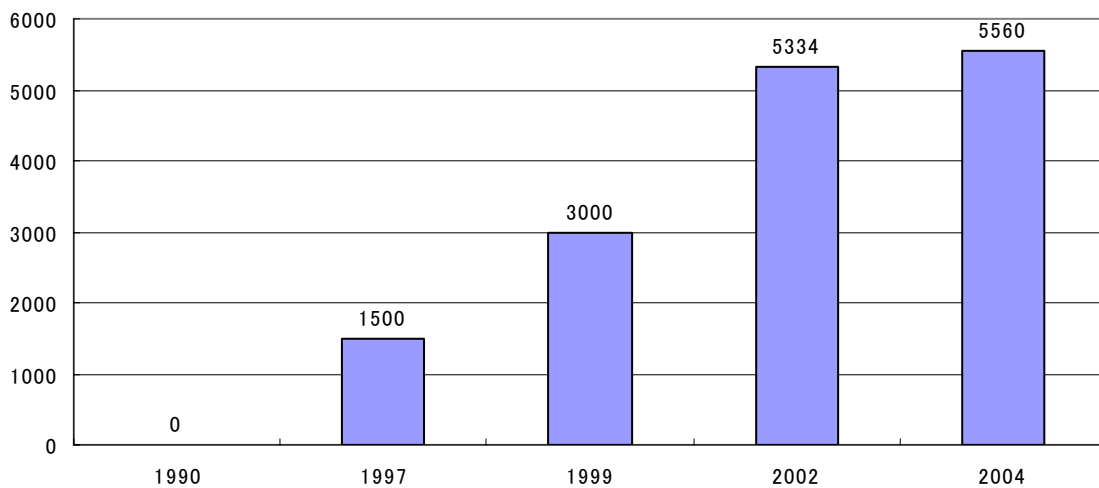
With the expansion since 1998, the shift towards increasing reliance on non-governmental resources intensified. The government outlay for higher education institutions grew only modestly compared to increases in wage levels and other prices. Moreover, the government took the policy to concentrate available resources on selective institutions and on research projects through competitive processes. The increases in basic amount of government outlays given to higher education institutions for maintaining the basic wage costs and maintenance fell far short of those for the society and economy that was growing at almost 10 percent per annum

The public institutions of higher education therefore had a strong incentive to raise tuitions for them to survive. It was therefore natural that, when the national government sent a signal in 1998 indicating that expansion of freshman class could be increased substantially, the higher education institutions drove to increase intakes by a large margin. This was the basic reason that the enrollment level in the national institutions expanded vigorously in a short time period.

The national Department of Education had expressed concerns on the negative effects of rising tuition. Higher education institutions, being squeezed by the

stagnating government budgets, had to resort to increase tuition fees. Recently the government allowed institutions to set their tuition levels, but set the upper limit. Currently, the maximum tuition level for the public institutions in Beijing is set at 6,000 Yuan (840 U.S. dollars).

Figure 2. Changes in the Tuition Fees in Public Institutions (Yuan)



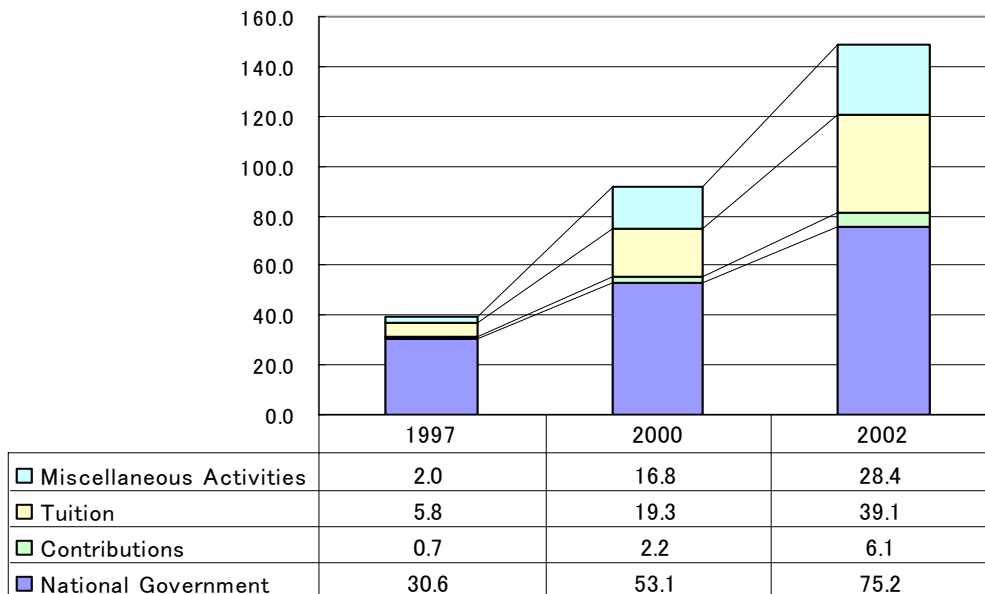
Note: The figures for 2002 and 2004 are estimates from Xu 2005.

At the same time, Chinese universities became active in creating training programs for the adults and business corporations. Since the economic structure was changing rapidly, the demands for such training was abundant. Moreover, in the mobile labor market, higher academic degrees such as Masters or Doctors assumed market values as credentials showing general competence, if not specific skills. The flourishing industries printing out bogus certificates are testimonies of such trend. Because a substantial proportion of the additional incomes made through such activities was paid to the faculty members involved in those schemes, there was a strong incentive to expand such activities within the institutions.

As a result of these changes, the non-governmental incomes of public institutions soared since the end of 1990s (Figure 3). It should be noted that the government expenditure increased substantially, partly reflecting the expansion in selective research funds. Nonetheless, the expansion of non-governmental incomes was tremendous. Tuition revenue increased six-fold, and incomes from miscellaneous activities as much as fifteen-fold. As a result, the share of government expenditure in the total revenue decreased from 78 percent in 1997 to 51 percent in 2002. On the

other hand, the tuition revenue increased from 6 to 39 percent, and miscellaneous from 5 to 19 percent. ”

Figure 3. Composition of Revenues in Public Institutions, 1997-2002



Source: Estimated from Educational Statistic Yearbook, 1997. P.347; 2001. P.368; and 2003, p.626 and p. 627.

Independent Colleges as a New Private Sector

As stated above, private institutions of higher education were made possible and legally established by a series of new legislations in the 1990s. Most of these institutions are dependent on tuition revenues. .

A new development since the turn of century was the birth of “Independent Colleges.” These colleges have their origin in the “second class” colleges created in the public universities to enroll students who would pay extra fees to be enrolled in the institutions. These students were called then as “Fee Paying Students.” Since the late 1990s, the latent demands for the four-year colleges had been increasing. The Second Class colleges were then transferred to the outside of the university as the “Independent Colleges.” Normally, private enterprises or banks provide the capital outlays, while the “mother” university offers academic supervision by sending academic and administrative staffs. For the enterprises and banks, the investment represents

an opportunity for making profit. For mother institution this scheme is a device to relent the pressure to over -extend enrollment. Moreover, the mother institution can cut their own costs by sending some of the surplus employees to the Independent Institution. This arrangement created a degree of confusion since the diploma from the Independent Institution tend to carry the name of mother institution. The government took the policy to legally formalize this scheme and stipulated that the diploma has to explicitly specify the name of Independent College. Nonetheless, the enrollment kept growing. (Cao 2005)

In a few years after its start, the Independent Colleges grew in number and in enrollment. By 2003, the number of Independent Institutions increased to 294, and the enrollment reached the level of 1.4 million. Almost all of these institutions are dependent on the revenues from tuitions. Since they provide full credentials, as opposed to those from short-cycle institutions, they charge especially high tuitions. Most of these institutions charge tuitions more than 10,000 Yuan (1,400 U.S. Dollars), and some charge as much as 16,000 Yuan (2,240 U.S. Dollars).

In this aspect, the Independent College constitutes a pocket in the higher education system that is characterized particularly high price. They cater to the affluent class in the urban area, while barring the rest of population by the barrier of high price.

Link to Labor Market

Another area that changed dramatically was the relation with the labor market.

In the socialist regime, the link between higher education and work was strictly controlled by the national and regional governments. Under the Open and Reform policy, the link became to be born by labor market. The shift revealed a number of areas of mismatch between supply and demand. Especially for the short-cycle institutions faced a serious problem in placing their graduates in the labor market. Since the short-cycle institutions were designated as the shorter version of four-year institutions, the graduates were characterized as an inferior substitute of the graduates from the four-year institutions and were therefore particularly vulnerable to the oversupply of graduates. At the same time, the government stressed the need for training of technical manpower.

These factors prompted the policy in the late 1990s to transform the existing short-cycle institutions into Vocational and Technical Institutes. Most of the private short-cycle institutions took this option. Also, many public training institutions at secondary and post-secondary level were converted into this type. As a result, the

number of institutions and size of enrollment in the short-cycle institutions expanded enormously. (Bao 2005).

The largest subject area covered by these institutions at around 30 percent is technology. Nonetheless, the expansion took place more in miscellaneous areas of services industry. For example, one of the more popular area is training of cabin attendant of aircraft. Since many institutions are private and critically dependent on tuition revenues, the shift the areas of training quickly after the shifts in demands in the labor market.

Research

As the economic growth proceeded the Chinese government started stressing reforms in research activities in higher education institutions in the 1990s. The major instrument of the policy was the concentration of government resources on selected institutions which should induce competition among institutions and individual academics.

The drive started when the government launched “211 Projects” in 1993. This scheme aimed at building one-hundred centers of excellence either at the institutional or departmental level by the beginning of the 21st century. In 1998 then President Jiang Zemin declared that the government was going to invest a massive resources to create universities rated at the first level in the world. He promised to invest heavily on Peking and Tsinghua Universities and other leading universities. This initiative, called the “985 Projects” provided basis of governmental investment on research today.

Through these initiatives some leading universities received substantial funds for building facilities and funds to undertake advanced researches. There is no doubt that these policies have already achieved substantial success in raising the levels of academic research in China. The number of publication in international journals has risen steadily in past few years.

On the other hand, the universities that failed to secure these funds faced serious shortages in undertaking research given the dwindling institutional support from the government. At the same time, the academic areas that were not included in these initiatives suffered from shortages of funds. The government has retained the non-tuition policy for graduate students by the beginning of the 2000s, but it relaxed such requirement. Individual universities are able to set tuitions for graduate students, and some are in fact charging the same level of tuition as undergraduates. While in the area where abundant resources were provided, the tuition fees are born by the research projects, graduate students in less favored areas are not provided such support.

The trends described above show similar characteristics with the emerging quasi-marketization in research funding, with the concentration of resources accompanying severe competition among institutions. One striking characteristics in the Chinese case is that the research funding involves strong financial incentives to individual academics.

It was the formal policy of the government that, in the academics in the designated institutions for creating centers of excellence, academic members are given additional salary according to the ranks in research achievement. The highest amount of such additional salary is set at 50 thousand Yuan (7,000 U.S. Dollars) per annum, which far exceed the amount of basic salary. Yangtze River Scholar Promotion Program, initiated by the Department of Education and funded by a successful businessman in Hong Kong, offer a huge amount of salary and research funds for the Chinese scholars competing degrees in overseas universities. It also provides cash prize moneys for excellent achievement in research. In most universities, recipient of large funding receive bonus in additions to the basic wage. It is not rare that universities pay an amount for each article published in major journals. The government is fairly lenient over the expenditure of research subsidies, and academic can exploit that to their private advantage.

Investment

It was stated at the outset that the development of higher education since the end of the 1990s was catapulted by macro economic factors, particularly amounting savings. That affected higher education in three major routes.

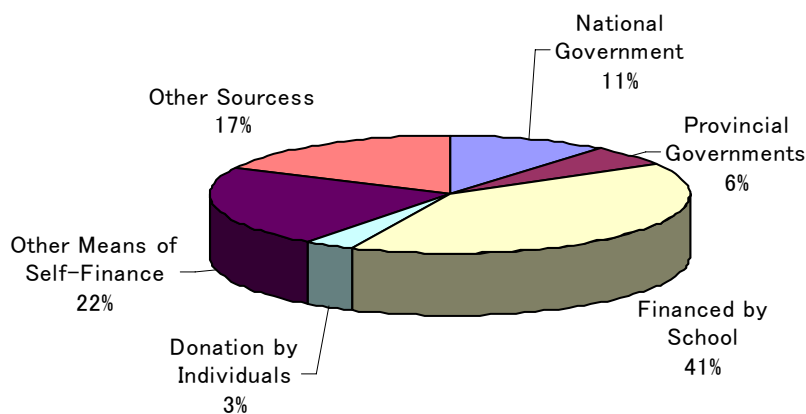
One was obviously the increase in financial contribution from the family induced by the policies described above. Particularly, the creation of high tuition sector among four-year institutions, and proliferation of short-cycle institutions extended the channel through which family incomes are induced to higher education.

The second route was investments on physical facilities of higher education institutions made by banks and private businesses. Symbolic in this regard is the proliferation of what is called "University Castles." These are large areas, normally near large cities, that were developed to house new campuses of higher education institutions. Many institutions, being located in the cities and unable to expand facilities enough to accommodate the exploding enrollment, sought to construct new campuses in these development areas. It is also uncommon that newly established private short-cycle institutions build their campus in these areas.

For these and other types of construction, it was common that individual institutions seek for loans from banks and private businesses. Even the public

institutions started borrowing from these sources. Indeed, the statistics showing the distribution of sources for investment at public institutions shows a striking picture (Figure 4). Out of the capital expenditure of public institutions in 2001, only 17 percent was accounted for by the expenditure from national and local governments. The rest came mainly by the institutions themselves, mostly from borrowing from the bank (41 percent). Even though individual universities do not reveal their balance-sheet, interviews with some public institutions revealed that the amount of borrowing from commercial banks amounted to the level two or three times the annual tuition revenue.

Figure 4. Capital Investment by Source in Public Institutions, 2001



Source: Estimated from Educational Statistics Yearbook of China 2001, Page 370.

Naturally, private and Independent institutions rely heavily on borrowing for capital expenditure. Typically, the business firms will receive returns from these investments at the interest rate of around 8 percent per annum. Traditional universities, almost all of them public, have borrowed heavily from banks to accommodate the increasing enrollment.

A case study of a large Independent College revealed that it was established by contribution from a city government and a government enterprise. That represented relatively small debt. However, when it started its ambitious expansion plan for construction of a new campus, it had to borrow funds from commercial banks. The total amount was about six times the annual revenue.

As a result, most of the higher education institutions assume substantial debts, and their sizes often exceed the amount of their annual income. Legal aspects of this practice, however, remain murky. Many banks consider that, since the universities are public institutions, ultimately the government will be held liable. The government, however, has not acknowledged its responsibility.

The third link between higher education and the capital market was loans extended to students. After a trial, and failure, of a loan scheme developed by assistance of the World Bank, the government started a new scheme of student loans in 1999. Under this scheme, the students had to repay the loan within four years after graduation with an interest rate of which half was subsidized by the government. It is important, however, to note that this loan was not made directly by the government but by commercial banks. The banks therefore not only had to offer the capital but also bore the risks involved in retrieving the loans. As expected, the number of loans made under this scheme has been insignificant compared to the latent demands. The government started a new loan scheme in 2005, but its consequences are not clear at this point.

3. Consequences and Issues

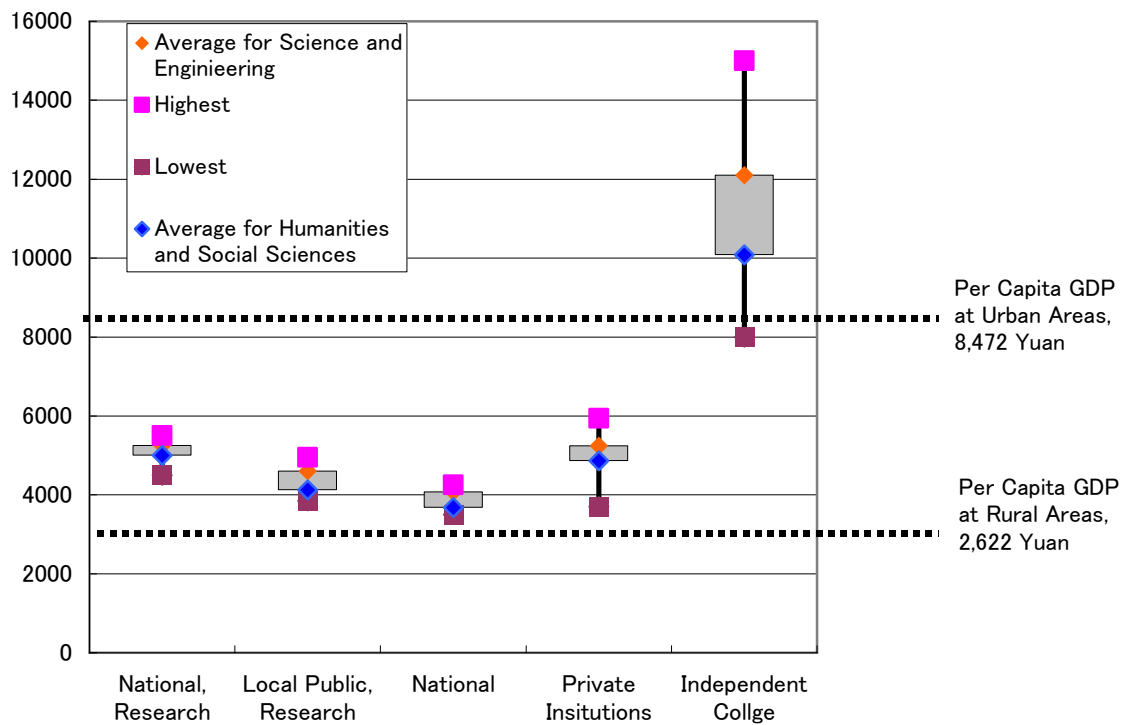
The above discussion revealed that the rapid expansion of Chinese education, together with the steady advancement of research activities, since the turn of the century was made possible by introducing market forces and quasi-market mechanisms. The development, however, entailed significant problems that may cause concerns. There are three basic issues.

Equity and Fairness

The first issue obviously lies in equity and social fairness in distributing the opportunities of higher education. As analyzed above, the expansion of higher education through marketization brought about not only a substantial level of tuition charged in public institutions, but also the Independent Colleges that charge particularly high tuition.

Figure 5 shows the levels of tuition at different types of higher education institutions at Anfei Province and the averaged per capita GDPs at urban areas and at rural areas in 2003. The figure demonstrates that the amount of tuition at any institution of higher education represent about half of the average per capital income in the urban households. This shows that even for the average urban residents, paying for the cost of higher education is not easy. Moreover, the tuition levels far exceed the average per capita income. Considering that actual enrollment needs living expenses, for the majority of farmers, paying for tuition should constitute an absolute barrier.

Figure 5. Tuition Levels (2004) and Per Capita GDP(2003)



Source: Tuition levels are estimates in Xu 2005. Per capita incomes are from China Statistical Yearbook 2004.

Also the figure indicates that for most of the population the cost for Independent College constitutes an absolute barrier. Independent Colleges represent an opportunity of higher education that is open only to the wealthy households.

In the industrialized nations, where the cost of higher education accounts for relatively small proportion of annual incomes, the economic barrier against entrance to higher education may not be absolute. Under those conditions, the opportunity of higher education can be considered to be the subject of relative choice among alternatives that bring out better returns. Student loan schemes can be effective under these circumstances. In contrast, Chinese economy on the whole is divided sharply into the urban residents who are enjoying the rising income levels and the vast majority of farmers whose income levels lags behind significantly. Since for the majority of the farmers the cost of college education far surpasses their annual income, the increased cost has created an absolute barrier for entrance into higher education.

Moreover, the government policy to limit the supply of four-year higher education, while allowing the creation of Independent Colleges may induce. In effect, that implies that limited opportunity can be purchased by money rather than through strict selection based on academic merit. This may induce a strong sense of unfairness in the society.

Governance

The second issue concerns with the governance of higher education institutions and organizational moral.

The above analyses showed that Chinese higher education system underwent a tremendous change, both structurally and quantitatively, in a relatively short period. This is a remarkable achievement for a country that has been under tight control of the government and still is controlled by the communist party. Especially, the higher education institutions presented a remarkable flexibility in accommodating the changes. In a closer look, however, it turns out that the political regime may have indeed provided the basis for the flexibility in peculiar ways. For one, there are little legal frameworks that define the mission, administration and finances of higher education institutions. Changes in higher education policies are made by the government and implemented without much debates in legislature. Moreover, each university is controlled not only by the government, but also by the Communist Party. Even though the government may not control the institutions through detailed regulations, the Party organ in the university directs the institution from the standpoint of interest of the general public. The decision of individual institutions is thus justified. Under this regime, the individual university may indeed take autonomous behavior.

It was indicated that the various schemes for development of higher education resulted in a range strong incentives to individual members of higher education institutions. The adult education courses or corporate training programs provide good

bonus for faculty members engaged in such activities. Some graduate courses render similar merits. In research, obtaining research grants or projects results in substantial economic returns to the faculty members. These incentives no doubt created a vast energy from within to change the shape and behavior of higher education institutions in correspondence to the change in society and economy.

On the other hand, these factors proved to create serious moral hazards. The responsibility in governance can be blurred and politicized easily. Some faculty members are reported to open courses commercially attractive beyond the level that they actually engage in. Some faculty members are reported to write Masters and Doctorate thesis for money. These factors may alienate critical academic members.

Viability in the Long Run

The third issue is viability of the current strategy in the long run. This can be problem in a few critical aspects.

The critical issue to be faced soon is the employment of graduates. It was pointed above that the expansion of higher education since the turn of the century was to a large extent propelled by the factors outside higher education. Even at the outset, there were concerns about employment of increased college graduates. Now that the first generation of students under the expansion policy is graduating and pouring into the labor market, the consequence has become a serious social concern. The labor market may as well absorb the large cohort of college graduates over time, and the lowered wage levels may in fact cool off the aspiration for higher education. If that occurred, the natural equilibrium will be achieved by market mechanisms. It is, however, also possible that the imbalance in the labor market create a certain degree of dissatisfaction in the society.

Problems may arise in the capital market. So far the higher education institutions have been able to pay the interests incurred by the heavy borrowing. The institutions have been in financially favorable conditions due to the increases in tuition and enrollment levels. When, however, such growth stopped for some reason, the payment may become difficult, let alone repayment of the principal of borrowing. Under those circumstances, the higher education institutions may face a difficult position.

These considerations indicate that Chinese economy and higher education institutions should keep growing at a high rate to avoid negative consequences. Whether such strategy turns out to be viable remains to be seen.

References

- Bao, Wei 2005. "Tanka Shokugyou Gijutu Gakuin no Taito." (Development of Short-Cycle Institutes of Technology and Vocational Training.) *IDE* 471 (June). pp.76-80.
- Cao, Yan. 2005. "Atarashii Shigaku Sekutar-" (The New Private Sector – Independent Colleges). *IDE* 467 (February). pp.66-69.
- Dou, Xinha. 2005. "Chuugoku Kotokyoiku no Chiikikakusa," (Regional Inequalities in Chinese Higher Education). *IDE* 472 (July/August). pp.76-80.
- Ding, Xiaohao. 2000. "A Survey on University Students and Family Income." (In Chinese). Tsinghua University Journal of Higher Education.
- Yuan Fujie. 2005 "Chinese Higher Education Policy Since 1980 – " in Takeiuchi Kiyoshi, ed. *University Campus Life*. Sophia University Press August 2005, pp.203-221.
- Yuan Fujie. 2004 " Chuugoku Koutoukyouyiku no Gurobaruka Senryaku"(Global Strategy on Chinese Higher Education)*IDE* 466 (January). pp.72-77
- Xu, Guosing. 2005. "Jugyoryou Kotohto Koutoukyouiku Kikai no Kinto" (Rise in Tuition and Equity in Education.) *IDE* 469 (April). pp.65-69.