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HIGHER EDUCATION POLICIES AND DEVELOPMENT: APPROACHES TO FUNDING HIGHER EDUCATION IN JAPAN

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Higher Education Policies and Development:
Approaches to Funding Higher Education in Japan

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Abbreviations

CNUF  Center for National University Finance
FILP  Fiscal Investment and Loan Program
IAI   Independent Administrative Institutions
JSPS  Japan Society for the Promotion of Sciences
MEXT  Ministry of Education, Culture, Sports, Science and Technology
NUC   National University Corporation
NSSA  National Schools Special Account
NIAD  National Institution for Academic Degrees
SJP   School Juristic Person
INTRODUCTION

Japan’s higher education system is similar to those in many East Asian counties in the sense that it comprises both public and private sectors. The public sector consists of the National Universities, which are established by the national government, and Local Public Universities, which are established by prefectures and other local governments. While the private institutions enroll three-quarters of undergraduates, the national institutions play significant roles in research and graduate education.

With the advent of globalization and ‘the knowledge society’ on the one hand and the increasing pressure of financial stringency on the other, both national and private institutions are faced with pressures for change. Private institutions will have to respond to the challenge of the declining number of eighteen-years old. Meanwhile, from the perspective of the restructuring the Japanese economy and society for the coming ages, reshaping higher education certainly assumes particular importance.

It is for these reasons that over the past decade the national government set out for radical changes in the institutional basis of higher education. The Ministry of Education Culture, Sports Science and Technology (henceforth “MEXT”) sought to change the nature of national universities. The Law for Incorporation of National University was enacted in 2004, thus transforming the legal status of the national universities as a kind of governmental facilities to legal an independent legal entity. The new legal form, Kokuritsu Daigaku Hojin, can be roughly translated as “National University Corporation.”

The private institutions have experienced a radical shift of governmental subsidies, with their weight shifted from the mandatory current-cost subsidy to discretionary subsidies. For FY 2007 the current-cost subsidy fell from the previous year for the first time in thirty years. The government also revised the Private School Law to enhance accountability in governance and finance of private institutions.

Yet, reforms are incomplete. There are various political initiatives to bring in further changes in the higher education system. In this sense the future of Japan’s higher education is still open. How is Japanese higher education constructed? What are its major consequences in the society and economy? How is the Japanese government trying to change the system, and what are the major issues in this context?

In order to answer these questions the present report describes the outline of the higher education system and its socio-economic contexts(Section 1), describes the scheme of incorporated national universities and its problems(Section 2), examines policies on private institutions in the context of declining demands (Section 3), and summarize current policy debates over the level of higher education expenditure in the national economy (Section 4).
1. Outline of the System and Socioeconomic Contexts

The Higher Education System and Enrollment

At the post-secondary level there are three types of institutions: Technical College (Koto Senmon Gakko) admit graduates from junior high schools and require five years for completion, implying two years at post-secondary level. Total enrollment in this type of institutions is minor, comprising less than one percent of total enrollment at post-secondary level. Miscellaneous Schools (Kakushu Gakko) include various types of schools, mostly private, offer a wide range of education and training. The entrance requirement varies, from completion of compulsory education to high school completion, or to even higher. Special Training Schools (Senshu Gakko), which require high school diploma for admission, provide occupational or technical training lasting regularly two years. They constitute the second largest segment of the higher education system. In most cases these institutions had originally been proprietary schools offering various types of occupational training before they received charter from the Ministry of Education, Science and Culture.

Two types of institutions offer higher Education. Universities and colleges (both called daigaku, and called Universities hereafter), which in most cases require four-years for completion except in the cases of Departments of Medicine and Dentistry which require six years. Of these institutions about two-thirds offered graduate courses where 99 thousand students were studying for a Master's or a Doctor's degree. Junior Colleges resemble universities in the basic structure of curriculum, but require two years for completion. With student bodies predominantly female (90 percent), most of these institutions offer terminal education in non-technical subjects such as Literature or Home Economics. Unlike the case of the Community College in the United States, transfer from a two-year to a four-year institution is exceptional.

Recent statistics show that more than 70 of eighteen-years old advanced to some form of post-secondary and higher education in 2007. Of those more than half (About 37 percent) went to four-year institutions. The distribution across different types of post-secondary education differed considerably by gender. Girls tended to go to junior colleges than boys, but the difference has been diminishing in recent years. The shares of those entering the post-secondary courses at Special Training Schools are similar between males and females.
Figure/Table 1. The School System

Age 22
- Graduate School
- University 4 years
- Junior College
- Special Training School

Age 18
- Upper Secondary - 3 years

Age 15
- Lower Secondary - 3 years

Age 12
- Primary - 6 years

Age 6

Figure/Table 2. Size of Enrollment – SY 2007

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>National</th>
<th>Local Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four-Year Institutions</td>
<td>756</td>
<td>87</td>
<td>89</td>
<td>580</td>
</tr>
<tr>
<td>Two-Year Institutions</td>
<td>434</td>
<td>2</td>
<td>34</td>
<td>398</td>
</tr>
<tr>
<td>Special Training Schools</td>
<td>2,995</td>
<td>11</td>
<td>202</td>
<td>2,782</td>
</tr>
</tbody>
</table>

| Number of Insitutions (5) |       |          |              |         |
| Four-Year Institutions     | 100.0 | 11.5    | 11.8         | 76.7    |
| Two-Year Institutions      | 100.0 | 0.5     | 7.8          | 91.7    |
| Special Training Schools   | 100.0 | 0.4     | 6.7          | 92.9    |

| Number of Students |       |          |              |         |
| Graduate           | 262,113 | 153,900 | 14,471       | 93,742  |
| Undergraduate      | 2,566,595 | 473,502 | 115,121     | 1,977,972 |
| Two-Year Insitutions | 186,667 | 184     | 10,815      | 175,668 |
| Special Training Schools | 663,349 | 765      | 27,281    | 635,303 |

| Number of Students(%) |       |          |              |         |
| Graduate             | 100.0 | 58.7    | 5.5          | 35.8    |
| Undergraduate        | 100.0 | 18.4    | 4.5          | 77.1    |
| Two-Year Insitutions | 100.0 | 0.1     | 5.8          | 94.1    |
| Special Training Schools | 100.0 | 0.1     | 4.1          | 95.8    |

School Basic Survey 2007
Legal Framework

The legal framework in which Japan’s education is set is rather complex, because it comprises both public and private institutions. These differ significantly from each other with respect to the relationship with the government.

National Institutions

National universities play the most important role in developing academic research, in training researchers and in providing postgraduate education. Being located almost evenly throughout the country, national universities have supported the infrastructure of regional education, culture and industry, and provided opportunities for higher education that are less dependent on students’ economic situations. The national policy agenda, including the provision of certain professional courses and the promotion of science and technology, has been reflected more in funding of national universities than that of private universities.

There has been a major change in the legal definition of national universities in 2004. In the old system he national universities was established by the National School Establishment Law, were parts of the government’s administrative structure. The assets, including lands and buildings, for the use of national universities are owned by the state. Their members of staff, including academic, administrative and technical staff, are civil servants. By the National University Corporation (henceforth “NUC”) Law, implemented as of 1 April 2004, the national universities were incorporated. Through incorporation, each of the former national universities was assigned a legal personality to become a “National University Corporation.” The lands and buildings of the universities are owned by the National University Corporations. Staff members are no longer be civil servants.

Private Institutions

To be officially qualified as "private school," it has to be established by School Judiciary Person. Usually, one school has its own Judiciary Person, but some times a few schools are established by single Legal Person. The Legal Person is governed by its Board of Governors. The School Judiciary Person is a legal entity that can act similarly to regular judiciary persons such as private enterprises -- it can borrow funds from private financial agencies. It is, however, a subject to government regulation.

The finances are audited not directly by the Ministry of Education, but by certified public accountant. The regulation on finances has evolved over the years. In principle, School Judiciary Persons are not allowed to make profit. Moreover, the present regulation allows the transfer from the annual budget only for building and maintenance of the facility. In other words, they are not allowed to accumulate what may be called the capital in business corporations. It is intended to assure that the contribution from the present student body has to be returned in the form of service to themselves.
Financial Flow

The national government, through the MEXT, contributes to the finances of higher education institutions through several channels including institutional and non-institutional funding. The public expenditure on higher education is provided chiefly by the Ministry of Education, Science and Culture (Ministry of Education). In the national budget, its contributions to the finance of higher education are channeled mainly through the following four expenditure items: (i) transfer to the National Schools Special Account; (ii) Current Costs Subsidy to Private Schools; and (iii) Non-Institutional Subsidy including Grants-in-Aid for Science Research and lending to the Japan Scholarship Foundation.

(i) Subsidy to National University Corporations

Before incorporation, the expenditure on national institutions of higher education was collectively financed by the National Schools Special Account (NSSA hereafter). Transfer from the national government to it was the major means for the national government to support the national institutions of higher education. It also is the largest expenditure item of public expenditure on higher education.

The National University Corporations is markedly different funding mechanisms from the present one. After the reform, the new National University Corporations remains basically “national” in the sense that the state remains responsible for their functions, providing the major part of the funds that they need. Their personnel and other operational costs will be covered by ‘operational grants’ from the government. The grants will be ‘block grants’ which can be used at the discretion of each university without designated applications. It will be also possible to carry the grants over to subsequent years. The costs necessary for construction of new facilities will be funded separately.

In the Budget for FY 2008, as much as 1,181 billion Yen was allocated to this item. It accounted for 60 percent of total government expenditure on higher education.

(ii) Current-Cost Subsidy to Private Institutions

The total amount of this subsidy was 428 billion Yen for FY 2008, or 22 percent of the total expenditure on higher education.

The government subsidy to the current expenditures in private universities and colleges accounted for more than 20 percent around 1980. The proportion declined since then down to 10 percent. The subsidy is channeled, together with the subsidies to private institutions at lower levels, through the Japan Private School Promotion Foundation.

Substantial national subsidies to private institutions for their current expenditures started in 1970. In 1975 the Private Schools Promotion and Assistance Law was enacted to allow the government to contribute to the private institutions of higher education the amount not exceeding half of the current expenditure. Since the provision did not specify any obligation on the part of the government, the actual amount allocated to the subsidy fund is determined by the government every year.

In the actual process of distribution, the Japan Private Promotion Foundation first estimates,
according to a pre-determined formula, the total current expenditures of the applying private institutions. At the same time, the educational condition of the institution is measured with one or two simple indices - such as the size of actual relative to the standard enrollment, or the size of full-time faculty relative to actual enrollment. Based on the indices a proper value is found in a table of "coefficients" that represents the proportion of the current costs to be subsidized. The amount of subsidy is obtained through multiplying the estimated total current cost by the particular value of coefficient. The table of multiplication coefficients thus functions as an incentive system to encourage changes desired by the Ministry of Education. The table is also adjusted to account for the total amount of government appropriations.

(iii) Non-Institutional Subsidies

Two types of government expenditure do not go directly to either public or private institutions. One is the Scientific Research Subsidy, which is given to a group of researchers in academic institutions. The other is the subsidy to Japan Scholarship Foundation, which in turn will become the basis for loans to the students in various types of schools. These indirect expenditures account for relatively small proportion of the whole expenditure.

Grants-in-Aid for Scientific Research ("Science Research Grants" hereafter) constitute the major vehicle for the national government to provide financial support for research activities in addition to direct institutional supports. In FY 2008, the total government expenditure for this purpose amounted to 193 billion Yen, or 10 percent of the total national expenditure for higher education. It should be noted that this amount does not include the direct expenditures on various types of research institutions supported by the Ministry of Education or by other branches of the national government.

These grants are primarily given to the research projects undertaken in institutions of higher education or in academic research institutions. Qualified researchers may apply to the Ministry of Education for grants. If accepted, a typical grant would encompass one to three years. The applications are reviewed in appropriate selection committees, of which members are partly nominated by the Science Council of Japan. The selected projects are then administered by the Ministry of Education. The awarded grant is in principle administered by the institution that the researcher belongs to, and is subject to auditing by the Ministry of Education and by the governmental Board of Audit.

Government Loans

The government provides loans through Japan Scholarship Foundation. There are two categories of Loans, one without any interest, and the other with subsidized interest rate of about 2 percent per annum. For FY 2008, the government earmarked 152 billion Yen, or 8 percent of the total expenditure, for this purpose.

The government contribution accounts for only 16 percent for the revenue for Japan Scholarship Foundation. Borrowing in various forms constitute as much as 58 percent of the revenue. The repayment of loans from the past recipients provided another 26 percent of revenue.
Socioeconomic Contexts

Historical Backgrounds - Mass Participation and Its Legacies

In the postwar period, various post-secondary institutions were integrated to form new national universities and colleges. Since most of these institutions lacked adequate facilities, the priority in higher education finance has been to their development. In order to secure enough resources for this purpose, the finances of the national institutions were standardized, and the budgets for each institution were allocated according to standardized unit-. The mechanism still constitutes the basis for financing the national institutions, and has been attracting criticism for its inflexibility.

In the 1960s, policies continued to concentrate the limited resources available for higher education upon the upgrading of existing national universities and colleges, rather than upon increasing their number. However, popular demands for higher education led to an expansion of enrollment in the private sector of higher. By the end of the 1960s the private sector accounted for three-quarters of total enrollments. At the same time, since most of the private institutions were financially dependent solely upon tuition, they had to charge considerably higher fees, and yet offered less favorable educational conditions, than the public institutions. The quantitative predominance of the private, together with qualitative disparities between the public and the private sectors, thus created one of the most basic characteristics of the Japanese higher education system.
Equity

The Japanese society deems equity in educational opportunities among the highest priority in the public sphere. Any incidence of mistreatment in entrance examination causes a major social reaction. There are strong social resistances against raising tuition fees not only in national institutions but also those in private institutions. Japanese families have tended to sacrifice their wellbeing to send their off-springs to universities.

Indeed, various surveys and studies have shown that the chances to advance to higher education are determined by academic achievement at high school to a much higher degree than the economic factors. If a student demonstrate a level of high academic achievement that chances for participating higher education is likely to be very high irrespective of the family income.

Nonetheless, there are significant differences in participation rates across family income level. Figure/Table 4 summarizes the estimated participation rate in higher education among high school graduate by family income quintile class.
From the Figure it is apparent that the participation rate is as high as 50 percent for males even at the lowest quintile class. Nonetheless, it is apparent that there are distinct differences in participation rate by family income class. The elasticity of participation rate with respect to family income tends to be greater with females and with the students in the rural areas.

It should be noted that a substantial part of these differences by family income rises from the indirect effect through academic achievement: the children from low income families tend to achieve less academically in high schools, and that causes the major hindrance to participation in higher education. Nonetheless, there are distinct direct effects of family income, and those tend to be stronger with female and rural residents.

Another dimension of the equity issue is the sharp hierarchy among the institutions with respect to selectivity. The sharp hierarchy among higher education institutions implies that it is not whether you ever enter university, but which university you enter, that really matters. It is also known that the students at prestigious universities tend to have family backgrounds characterized with higher educational and occupational status of fathers. It is likely that the indirect influences of the parents to their off-springs are
routed through non-school investment. If it were true, the non-school expenditure may be significant in reproducing social inequality. Yet, researches have not found conclusive evidence that such expenditures in fact affected achievements in examination.

Policy Environment

At the same time as Japan is struggling to rectify the negative consequences and confusions arising from the legacies of past expansion, it is faced with the similar challenges to those experienced in other countries.

One such currents is the coming of what might be called the Knowledge Society, where knowledge assumes an increasingly central role in society. That such trends are becoming salient will be apparent to many. Fierce competition and rapid innovation has made it inevitable that research and development becomes critically important in producing competitive consumption goods.

Another important trend is the move away from the predominance of the government and towards the utilization of market mechanisms. Some argue that those moves were a reflection of financial crises brought about by exponential increases in social spending. Others argue that such moves reflect more fundamental shifts in the mode and direction of social development. Since the increased diversity and complexity of the modern society and its needs necessarily have made centralized decision and control obsolete it is argued, market mechanism will be the only way to the diversified and multi-dimensional changes.

Under these contexts, Japanese higher education is faced with serious challenges. Among them there are three major issues with significant implications for the future of higher education. First is the incorporation of national universities, which will only significantly alter the nature of national universities and colleges, but also the structure of higher education finance. Second is the restructuring of the private sector of higher education due to the decrease in the size of college-going population. Third is the current debates over the size of expenditure on higher education in the national economy, which presumes a particular importance in envisaging the new stage of development of higher education in Japan.

Each of these three issues will be examined in the following sections.


2. Incorporation of National Universities

Under the socio-economic environment, national universities were transformed into National University Corporations in 2004.

Background

The idea of transition from the old national university to the new model can be summarized in Figure/Table 5. In the old concept, the national university has two sides. On one hand, it is a part of the government organization. Its budget is specified in the national budget, and the purpose of the expenditure is specified in the lines of budget into details. The faculty members and administrators are government employees. The facilities are properties of the government. On the other hand, the academic side of operation is governed by the faculty members.

Figure/Table 5. The Relation between the Government and the University

In the new model, the government and the university are two separate legal entities. This raises two questions. First, how should the national university be governed as an independent entity? Second, how should the relation between government and the university be regulated? Obviously, the government loses its direct power to control the university, and yet the government provides support to the university. The support and the performance of the university have to be balanced, and proper incentives for efficient use of resources should be built in this regulation. In a way, it is a contract between the government and the university.

These questions show that incorporation of national universities is critically dependent upon the design of governance of institution and the device of latent or overt contract between the government and the university.

While the creation of the NUC scheme was directly a product of many political and economic
factors, the design of the scheme was based on a body of logic. Basically, it was influenced by the New Public Management or Institutional Economics that gained momentum in last two decades. In the core of the thought are the relation between the “principal” and the “agent” and the explicit contract between the two. The scheme of Independent Administrative Institution is built on this concept: the government as the principal commissions an Independent Administrative Agency to achieve a public purpose. The terms are specified in the Mid-Term Goals and Plan; subsequently the level of achievement will be evaluated, and the result of which will lead to consequences including financial rewards or punishment, or even discontinuation of the contract.

It is argued that by separating the principal and agent, the agent will gain efficiency. The agent, free from the strict and minute control by the government and has to face competition with other agents, is able to exploit local knowledge and initiate innovations. Moreover, it is given an incentive to gain efficiency through explicit goals. Provided with these mechanisms, the government is able to gain efficiency in provision of its services and become more accountable.

In order to realize the assumed function, it is imperative that the contract should be clearly stated with an instrument to measure the level of achievement. It is also necessary that the chief executive of the agent should be designated as personally responsible for the contract, although the institution as a whole functions as an agent for the government. The chief executive then directs the whole organization towards achievement of the set goal, and the members of executive board assist the chief executive.

Being one of the variations of the Independent Administrative Agency, the same argument should be applied as the justification of the construct of the NUCs. From this perspective it is natural that the Midterm Goals and Plan, and the corresponding evaluation, should assume the core of the new relation between the government and the NUC. It is also understandable that the president of NUC has to be given an unusually strong power. On the other hand, there are arguments that the theoretical framework can not be simply applied to universities, which encompass a very wide range of objectives, and rely on the spontaneous intellectual activities among the members.

Legal Status and Governance

The basic framework of the NUC is outlined in the NUC Law of 2004.

Legal Status

Under the NUC Law, each NUC constitutes a legal person under the Civil Law. As a legal person it is able to sue other legal entities and can possibly sued by others. It owns its own assets, which are called the capital of the corporation, consisting mainly of the buildings and lands that were contributed from the government at the time of incorporation. In principle, it is supposed to be able to borrow funds, issue bonds or invest on other entities, but the government maintains strict conditions and restrictions.

Governance

By stipulations of the Law, each national university corporation has a President, an Executive
Board, an Academic Senate, a Management Council and Auditors. The relations among these bodies are presented in Figure 2 below. In this scheme, the President assumes the ultimate power and responsibility for decision-making and execution, while important decisions have to go through deliberation of the Executive Board. The Academic Council, upon request by the President, deliberates on academic matters and report to the Executive Council and the President. Meanwhile, the Management Council, more than half of the member of which should be selected from outside the university, gives advice to the President. The auditors are selected by the university, but appointed by the Minister of Education and reports to the Minister directly.

Table/Figure 6. Governance Structure of National University Corporation

The president, who used to be elected by the Academic Senate in the old system, is now elected by the Committee for Selection of President. The committee consists of the same numbers of representatives from the Management Council and the Academic Senate; the President and the members of the Executive Board may join as the member. The elected, in principle, is appointed by the Minister of Education as the president. The length of term and the exact procedure taken for election are to be decided by each university. The Committee also has the power to relieve the president of duty through a similar procedure to election.

The scheme of incorporation does not necessarily require the change in the status of the workers from government employees. However, the cabinet, which was politically committed to the restructuring plan of the government organizations, pushed forcefully the change in employment status. Meanwhile, the resistance from the national universities failed to gain momentum. Consequently all the academic and administrative members of the NUCs changed their status from government employees to employees belonging to one of the NUCs. The pension and health-care funds, however, remain practically a part of that for government employees.
Because of the strong power given to the President, its selection process bears not only symbolic but also practical significance to the governance of the NUC. While the NUC Law required that the President should be selected by a President Selection Committee consisting of equal numbers of representatives from the Academic and Management Councils, it does not stipulate the details of the procedure. Depending on the design of the procedure, it may as well lead to a significant departure from the tradition of participatory governance.

As it turned out, most NUCs bypassed this problem by implanting the participation of faculty members in the new selection process. In most cases, the President Selection Committee decided to include a step of “reference ballot,” in which individual faculty members cast a vote on preferred candidate. The details of selection of the candidates and the specific rules for reference ballot differed substantially by institution.

Nonetheless, a few NUCs started considering alternative schemes. The Board of Directors of Tohoku University, one of the Seven former Imperial Universities, decided in early 2005 that the next President would be elected by the President Selection Committee itself, not allowing direct involvement of the faculty members. It remains to be seen if this practice would be diffused to other NUCs.

**Governance Structure**

For each NUC, the first task for transition was to organize the basic governance structure. According to the NUC Law described above, each NUC organized the Executive Board, Academic Council and Management Council.

The number of members of Executive Board is stipulated by an Ordinance issued by the government basically according to the size of the institution. Various surveys showed that by far the majority of the board members were recruited from the professoriate, most of them being former vice presidents and faculty deans. In many NUCs, mostly those of large size, the Boards included a non-academic, who are assigned to oversee managerial and financial matters. Many Board members carried the title of Vice President.

The Academic Board, as the NUC Law stipulates, consists mainly of faculty members. In most universities, its size, while not stipulated by any ordinance, tended to be smaller than the former University Council that it replaced. In most universities, the members were elected in the faculty meetings. The new Council practically retained the conventions and procedures taken in the old Council.

The size of the Management Council was the subject of discretion of each NUC. In most cases they included executives in the local business firms. It was common to include a member from local mass-media. Some NUC appointed former government officials.

In most NUCs, each Executive Board member was assigned to a specific area of administration such as education, research, financial management and others. The Board members were designated to direct the particular administrative section corresponding to his/her assigned function. There were differences among NUCs with respect to the Secretary of the University, who had been practically
nominated by the Ministry of Education. In some NUCs, the Secretary was appointed to be one of the Board members, and the title was abolished. In some others the title and the position were retained.

Finances

In the old system, the finances of national universities were constituted a part of government budget; they were classified into separate lines, and the expenditure had to be made for the designated purpose of each line. Tuition collected at the national universities were treated as the revenue for the national treasure. On the expenditure side, the national universities had to follow the budget and various government regulations in spending the funds. Moreover, the number of personnel was under a strict control by the government. On the other hand, necessary costs for operation of the university were in principle assumed to be born by the government.

The NUC Law stipulates that the NUCs are financially autonomous entity with their own budgets. After incorporation, the government subsidy was given to each university in lump sum, without any division by line item. The NUC was given in principle the basic autonomy in the expenditure of the budget.

With the enactment of the NUC Law, the government contributed most of the facilities, lands and buildings to the NUCs. The evaluated prices of those facilities constituted the capital fund of each NUC. In contrast to the old system in which the budget for a fiscal year had to be executed in the designated year and accounted for within the fiscal year, the NUCs were allowed to carry the balance to the next accounting period. Within a limit, each university is free to make investment: it can borrow money either from government or from commercial banks: it also can issue a bond with the permission of the government.

Figure/Table 7. Old and New Schemes of Financing National Universities
At the same time, the NUC Law stipulates that the finances of NUCs will be accounted for according to the NUC Accounting Standards, which are similar to the accounting standards required for business corporations. In the old system the budget was divided in line-items, and the accounting procedure simply implied executing the budget according to the budget without any infringement on governmental regulations. In the new system accounting takes the form of double-entry book-keeping. The financial report should include Balance Sheet, Profit-Loss Statement, Cash Flow Statement and other...
necessary statements.

One of the critical issues in this reform was naturally the level of government contribution to the NUCs. While the Law does not provide for specific mechanisms to determine the level of government contribution to the NUCs, the 2003 Report of the Experts Committee for Incorporation of National Universities outlined the basic principle. First, the necessary amount of total cost was calculated for individual areas of study employing a formula that involves such indices as the number of students, that of teachers and other expenses and their corresponding unit-costs. From the required amount, the institution’s own revenue is subtracted to derive the necessary amount of government subsidy. In other words, this method assumed the basic principle that the government had the responsibility to secure the necessary level of funding for each institution.

Last, and probably the most significant, aspect is finance. While the NUC Law stipulates the framework of the NUCs and their relation with the government, it does not specify the financial obligation on the part of government to support the NUCs. As a result, there is a substantial range for alternatives in the level and methods for financial support of the government. That, however, will be a decisive factor for the nature of the NUC in significant aspects. There are three sets of important issues revealed in the process of implementation.

**Government Subsidy**

It was stated above that the original design laid out in the 2003 Report of the Expert Committee for Incorporation of National Universities assumed that the government remains to be responsible to secure necessary level of revenues, calculated on a formula, for each institution. In other words, the government would maintain the “Compensation Principle,” implying that the government will fully compensate for the gap between the calculated cost and the own income in each university. This principle had to undergo a series of significant alterations in the following periods.

In the fall of 2003, when the NUC Law had been enacted and the national universities started preparation for incorporation, the Ministry of Finance released its own plan for funding the NUCs. This plan did not follow the Expert Committee that proposed a set of the formula to derive the amount of government contribution to each institution. Instead, the Ministry of Finance indicated that each NUC will be given the amount that the institution received in the previous year irrespective any change in the numbers of students and faculty members. A fixed rate of across-the-board reduction in government expenditures would apply to the allocated amount. In the case of NUCs, the rate will be 1 or 2 percent. The Ministry of Education, under the political climate of government restructuring had no other way than obliging.

In the short run, this may not make much difference from the original design with respect to the amount of subsidy, but it implied a significant shift in the principle of government contribution - not only any prospects for increasing the allocated budget were closed, but also the compensation principle was abandoned.
**Government Regulations**

Meanwhile, the Ministry of Education retained a substantial number of regulations on finances. Even though the government subsidy is allocated in lump sum including wage costs, the Ministry enforces NUCs to limit the numbers of academic and administrative employees to the level specified in the Mid-Term Plan. This in effect allowed the Ministry to maintain a significant level of control over management of NUCs. Also each NUC has to get approval from the Ministry of Education to get either surplus or deficit for a given fiscal year, to borrow funds from banks, to issue bonds, or to make investments. In each of these cases the NUC has to satisfy rigorous conditions.

Under these circumstances, the NUCs are left in the situation where they have to seek to survive with gradually decreasing funds under still heavy control. Over time, it is likely that these regulations will be gradually reduced to allow increased level of financial autonomy to the NUCs. On the other hand, that would necessitate a new set of instruments for the Ministry to oversight the management. How such arrangements should be made is still unclear.

**Financial Management and Accounting**

Prior to the reform, each national university was given the budget separated into line items. Because the formula to calculate the allocated budget was known, it was clear how much each faculty received in the budget. Under this circumstance, the faculties had strong basis for demanding allocation. On the other hand, the university administration was given very small room to maneuver.

With the transformation into NUC, which receives government subsidy in lump sum, the university administrators are given a considerable degree of arbitration. In distributing the fund to faculties and other constituent units, most universities set the basis at the previous year and then deduced institutional fund by applying the same rate across-the-board. Through this measure, most institutions increased the resources at discretion at the institutional level. Some institutions introduced redistribution schemes to provide incentives related to achievements in research. These reforms appear to indicate that the management at the institutional level is increasing resources at their discretion.

Meanwhile, the disappearance of line items implies that each institution has to have sufficient ability in financial management in order to gain efficiency on the one hand and to avoid risks on the other. The Accounting Standards for National University Corporation was designated exactly for that purpose. For most of the administrative sections, however, it was difficult enough to introduce the new book-keeping system. Moreover, the organization of universities is extremely complex, with numerous sub-units cutting across each other. It is, in a sense, a nightmare for cost-accounting. Moreover, each unit has its own source of income through research funding.

It will take time to use the new accounting system for strategic financial management. This implies that the financial mechanism of NUCs, as it currently stands, is not only incapable to lead appreciative gain in efficiency but also involves substantial risks.
Relation with the Government

The relation between the government and each NUC, which is legally independent from the government, is mainly regulated by Mid-term (six-year) Goals and the corresponding Mid-Term Plan, which as a set function in effect as a contract between the two. Figure 3 presents the basic framework.

**Mid-Term Goals and Plan**

As the Law stipulates, the Ministry of Education assigns each NUC with Mid-Term Goals that specify the goals to achieve within the period of six-years in enhancing the level of education and research, in improving efficiency in management of the institution, and in other areas. Based on this Goal, the university should prepare a Mid-Term Plan to achieve the specified goals, which should be approved by the government. Reflecting the criticism that this clause will give the government an overwhelming power over the NUCs, both Houses passed attached resolutions that required the government to respect autonomy of NUCs. In practice, the Ministry of Education asked each NUC to draft its Mid-Term Goals, and then approved them without substantive changes.

**Evaluation**

Towards the end of the six-year period, the newly established a Council for Evaluation of National University Corporations (“NUC Evaluation Council” hereafter) will evaluate the levels of achievement of the goals with the assistance of National Institute for Academic Degrees. The law states that, depending on the results of evaluation, the government examines the needs for continuation of the institution and necessary actions to be taken to the institutions. The last clause implies that the results may be related to government subsidy to the institution. The attached resolutions of both Houses again draw attention to the possibility that this mechanism may lead to encroachment of academic freedom, and require request the government to take cautions. Further details in either the method of evaluation or the consequences of evaluation are not worked out yet.

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**Figure 8. Mid-Term Goals and Plan Cycle**

![Diagram of Mid-Term Goals and Plan Cycle](image)
As stated above each NUC is in principle an independent organization under the Public Law, implying that the finances are completely separated from the government even though it may receive subsidies from the government.

The above discussion indicates that the backbone of the scheme of NUC lies in the cycle encompassing Goal-Evaluation-Reward. That is, the success of the scheme is critically dependent on the power of the evaluation methods as the key of the cycle.

**Evaluation**

The Independent Administration Agency Law stipulates that the government can take a range of actions, including discontinuation, on the institution after deliberation on the results of evaluation. This principle applies to NUCs. The report of experts committee under Ministry of Education indicated that evaluation results in a mid-term period will be reflected on the Mid-Term Goals, and in consequence the level of government subsidy, of the following period. Exactly how they are related was not specified in the report, leaving the issue to be solved after the new scheme is implemented.

The process involves a wide range of practical questions. The central problem is that the Mid-Term Goals, and accordingly the corresponding process of evaluation, have to cover the whole activity of a university. At the same time, the results of evaluation should be given a reasonable level of reliability. Since the results entail significant consequences for the NUCs including budget allocation, the lack of reliability should lead to a number of problems including the credibility of the scheme as a whole and the collapse of the incentive system that the scheme was supposed to create.

Reactions and Problems in the Future

It is beyond the scope of the present paper to describe the complex process of evaluation. Probably, this is the most comprehensive and, probably the most ambitious, scheme of evaluation in the world. It is comprehensive in three ways.

First, it involves both the judgment on achieving the goals specified in the mid-term plan on one hand, and evaluation of the absolute levels of education and research on the other. While the logical construct of incorporation requires only the judgment on whether the mid-term goals has been achieved, it does not necessarily demands judgment on the absolute levels of academic abilities. The government and NIAD argued, however, that in order to make judgment on goal-attainment, one needs the basis of evaluation on the levels.

Second, it requires both self-evaluation by the university and objective evaluation by NIAD. The Incorporation Law requires that the incorporated universities not be subject to arbitrary control by the Ministry of Education. In other words, the mid-term goals are set as an agreement by both the Ministry and individual universities. This principle applies to the evaluation procedure. Self-evaluation is also
indispensable for practical reasons. Since the evaluation has to be undertaken for all the eighty national university corporations at the same time, NIAD is not able to start gathering information by itself.

Third, its scope covers both education and research, at the institutional as well as the School level. Even though evaluation of research is difficult, it may be still feasible if provided with enough time and resources. In contrast, evaluation of education raises more serious problems. One may remember that in the UK, where research assessment exercise has been undertaken for some time, assessment on education has not been implemented even though it was proposed by the government persistently. In the case of the incorporation scheme in Japan, the mid-term goals which plays the role of comprehensive contract between the government and the university, evaluation has to cover the whole scope of mid-term goals including education.

These issues points to the fundamental assumptions under the scheme built on contract and evaluation. If the contract covers a single or very small number of objectives, it is likely that the results can be easily evaluated and translated into rewards or punishment. That may lead to higher levels of accountability and efficiency. On the other hand, to the extent that the contract covers wider range of objectives, and for longer periods of time, the evaluation should become technically involved and difficult.

It is evident that such a comprehensive evaluation entails an enormous amount of costs if it is feasible at all. More serious problem is how the results will be connected to the next mid-term goals. This critical point is still unclear.

It should be evident from the discussion above that incorporation in fact introduced a range of radical changes in the ways that the national universities operate. How was it received by the universities, and where are the problems?

In 2006, two years after incorporation, an opinion survey was undertaken to ask the opinions among the presidents of national university corporations as to the consequences of incorporation (Figure 6). The result shows that, so far, the presidents regarded incorporation had on the whole positive effects. Especially, they thought the reform improved the management easier and the activities efficient. It is in a way, a reflection of the frustration that they harbored under the old system of national universities.

Figure 9. Presidents’ Opinion on the Consequences of Incorporation
The ultimate judgment, therefore, should be given after the cycle of the first mid-term be completed - that is, the scheme of evaluation be implemented and the next mid-term goals are set.

The uniqueness of the NUC model derives from its direct application of the theoretical scheme based on principal-agent relation with contract-evaluation sequence. Even though such concepts are used in the analyses of the existing economic institutions, Japanese NUC is probably the first case to apply it to the design of public institutions. As discussed above, such a construct engendered a number of contradiction and ambiguities. At present the factors of the State Facility model still remain strongly, and they function as adhesive to prevent the contractions from creating real problems. Remaining regulations from the Ministry of Education, the academic participation in election of the president, and the inertia among administrators are among such factors.

Over time, however, such compromises will have to be replaced by a more realistic scheme of government level. Such a scheme will include a regime of government monitoring and partial evaluation, together with stronger capacity in financial management. One thing clear is that, for the time being, the reform has created among

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**Source:** Center for National University Finance and Management, 2007, Appendix.
a substantial proportion of academics an atmosphere that each national university have to seek their own way to realize what they wish.

Moreover, the current political climate moving towards radical restructuring of the government organization and reduction of government outlays has started to threaten the basis on which the original design of NUC scheme was built. If that goes further in that direction, the NUC scheme may lose its original characteristics and shift to a different entity.

Between the innate problems in details in the original design on one hand, and the political climate towards further radical restructuring of government on the other, NUCs will keep exploring its destination for some years to come.
3. Financial Crisis among Private Institutions

The second issue is the decline in the demand for higher education as a consequence of the diminishing size of 18 year old.

Demographic Shift and Private Institutions

Japan’s higher education experienced a major rise in participation rates until mid 1970’s. Since then the momentum of expansion has been rather contained, due to the restraint policy of the Ministry of Education on the establishment of new institutions and expansion of existing institutions. The restraint policy was concomitant with a new government subsidy to private institutions. Through these schemes the Ministry of Education regained the power to control the total enrollment in the private sector of higher education. Through this power the Ministry has been able to sustain the quality of higher education by limiting the proportion of high school graduates entering college. At the same time, existing private institutions have been able to enjoy a practical monopoly over the market of higher education at the undergraduate level. Such a situation had to change due to the decreases in college-going population.

The size of college going population came to the second peak after the world war when the second baby boom generation that reached 18 year old around 1990 (Figure/Table 10 below). The growth of population under limited expansion of supply resulted in a decrease in participation rate. The following cohort, however, stated shrinking rapidly. The size of 18 year old, after reached 2 million level, shrank to about 1.5 million by 2000. Since then the decline became slower, but it is continuing steadily. It is envisaged that the population size of 18-year olds will go down to about 1.2 million in 2010. The population will remain at that level for foreseeable future.

Until recently, the participation rate has steadily increasing, to cancel out the effect of decrease in 18 years old. In fact, the participation rate, which was less than 25 percent in the early 1990s has grown to 46 percent in the spring of 1998.

Nonetheless, it is unlikely that the participation rate keeps growing at the same pace as before. The decline of 18-year will create redundant enrollment capacity at the Universities; and the supply-demand gap will disappear. The selection of students will undergo significant changes, and it is likely that the economic benefit from a university education will decline at least for some students. Moreover, some private institutions began to face the possibility of insufficient applicants for admission, and hence the chance of closure.
In fact, many institutions, most of them with relatively short history and small in scale, are faced with the effect of demographic shift already.

The direct consequence of the shrinking market will be the prospect of institutional closure. Some institutions are already facing the decline of applicants, and in a number of cases the freshman class failed to fill the legal sitting capacity. The situation will be further aggravated towards the 2010’s. It should be noted that the effect of the demographic shift is not the same across the institutions. In general, those institutions at the higher tiers in the institutional hierarchy are least affected by this change. On the other hand, those at the bottom are hit most hardly. Most of these institutions are new and small – the new comers among the Entrepreneurial Type. Because the average size of enrollment is small, the number of institutions affected will be large for a given size of total reduction in demands.
The reduction in the size of enrollment will inevitably affect the financial health of the affected institutions, in some cases leading to closure of the institution. In a sense such a crisis has already started. The risk of closure can be measured by two indices.

**Fulfillment Rate:** \( \frac{\text{number of entrants}}{\text{enrollment capacity}} \).

**Application Rate:** \( \frac{\text{number of application for enrollment}}{\text{enrollment capacity}} \).

The “enrollment capacity” is prescribed by the National Council on University Establishment for each institution. Even though the government does not have authority to enforce the capacity, admission of students significantly above this capacity will result in reduction in, or in severe cases cancellation of, Current Cost Subsidy from the government. On the other hand, if the institution is enrolling less than the capacity (and therefore the fulfillment rate falls significantly below 1.00), then the institution will not able to collect sufficient tuition income to support its operation.

Meanwhile, some of those institutions admitting capacity may be very selective in admitting students. Those institutions are receiving fewer students than the capacity to maintain the academic standard for admission as dictated by their policy. From that perspective, application rate is an important source of information.

The two indices for the year of 2004, derived from the data made available for four-hundred ninety-three (493) institutions, or about 90 percent of total number of private institutions, are presented in Figure/Table 11. Each institution is represented by the dots in the space where the vertical axis stands for the fulfillment rate, while the horizontal axis for the application rate in logarithmic scale.

The space is further divided by two lines. The horizontal line stands for the fulfillment rate of 0.9, implying that the institution below this line are admitting only less than 90 percent of capacity. The vertical line indicates the application rate of 1.0, signifying that the institutions left of this line are receiving less applications than the capacity. By combining these lines, the institutions can be divided into three groups:

- **Low Risk** institutions accepting more than 90 percent of the capacity;  
- **Medium Risk** institutions, that are receiving less than 90 percent of capacity, but the application rate is higher than 1.0, and  
- **High Risk** institutions that are located in the lower-left quadrant, receiving fewer than 90 percent of capacity and the number of applying students does no reach the capacity.

The figure shows that more than one-hundred institutions belong to the medium and high risk institutions thus defined. There are forty-four institutions, or 9 percent of the all institutions, that belong to the high risk group. Most of the institutions of the high risk group are small in scale and relatively young in their history. That implies that their financial basis tend to be weak.
Viability of Institutions

Despite the large number of institutions of high and medium risk groups, there has been very few case of closure as a consequence of genuinely fiscal reasons. Many institutions appear to have sizable margins in their current revenue over the cost. Some of them have succeeded to slash cost by either decreasing the number of employees or slash down the wage levels. Nonetheless, the prospect of closure, however, is definitely looming. How many, and when, institutions will have to close depends on many factors and remains uncertain at this point.

What will happen if an institution is faced with financial difficulty? There are few scenarios. In the most peaceful case, the institution may seek for financial help from an individual or an organization. Or, another institution may approach to acquire the university in difficulty to take them under its arm. If the prospect for such solution turned out to be small, then it can declare bankruptcy: the students will be transferred to neighboring institutions. In the worst case, the SJP may stop operation and, even after liquidation, leaves significant debt and unpaid salary for the employees. Not only the employees and
creditors may not be able to recover their loss, but also the student may have to move to other institution and pay for tuition again. (MEXT 2005).

The social attitudes towards the prospect of closure remain ambiguous. The media has been reporting the likelihood of closure with the tone the incidence is inevitable. Some social critiques are arguing that the natural selection is healthy and useful for improving the efficiency of higher education. Nonetheless, in the event of massive closure takes place, the public attitude may change quickly.

As a consequence of these changes, private institutions appear to be increasingly polarized in their interests. Accordingly, they will seek very different direction toward future.

On one hand, there are a number of institutions that are positioned at the higher echelon in the market and therefore faced with less acute risk in the market. These institutions tend to be of large or medium in size, and belong to either Voluntary or Sponsored Type. Their strategic goal is to enhance their market-position, and to increase competitiveness not only against their peers but also against the national institutions.

If these institutions wish to obtain those goals, they have to achieve certain conditions. They tend to be less attached to the Current Cost Subsidy. They are also less persistent on the financial scheme of the Accounting Standards. They are already receiving competitive subsidies to primary institutions. They may welcome the shift from institutional subsidy to individual subsidy through either a direct grant to students or some form of voucher.

A more significant issue will be the how the donation to the private institution is treated in the tax system. Under the current system, the donation to private institutions can be deducted from the taxable income to an extent (Income Deduction), but not from the amount of tax itself (Tax Amount Deduction). The institutions will have to seek the tax-deduction status in order to become competitive against public institutions. This change, however, should require corresponding changes in the governance. Being given Tax Amount Deduction implies that the organization is permitted to accumulate the public funds as their asset. The asset should be owned by a group of responsible persons who can not get any benefit from the operation of the university. The decision-making by membership group, or the practice of participatory management, may have to be seriously questioned.

On the other hand, there are a number of institutions that are faced with the pressures of reduction in demand. Many of these institutions are striving to strengthen their competitiveness in their segment of market, and eventually survive the struggle. Nonetheless, they wish to secure the ground for survival. From this standpoint, the provision of Current Cost Subsidy is indispensable not only for their value as a source of stable income, but also a sign of recognition by the national government for their function as an educational institution. They would also oppose to the further disclosure of the finances, on the ground that the disclosure may generate misinformation. Particularly in the institutions of Entrepreneurial Type, it is unlikely to change their governance and management. In that sense, they would not expel the element of private ownership. In these senses, they may take the direction of entrenchment in
so far it is possible.

Ironically, the entrenchment strategy may be challenged by an unexpected competitor – for-profit institutions allowed currently on a trial basis. The proponents of the for-profits argue that the present private institutions established under School Juristic Person are in fact generating interests to the people engaged in management. At the same time, it is likely that some of the bankrupt universities may be purchased by the enterprises who wish to build for-profit institutions. In these senses, some part of the private sector is moving towards the private domain.

The discussion above indicates that the private sector of higher education in Japan has been changing, and it will keep changing towards the future. There have been a wide variation among private institutions, and there will be a wide variation, albeit of different nature, in the future. Such variation and changes are created by the dynamism of the markets forces in higher education together with the shifts in demographic, social and political factors.
4. National Expenditure on Higher Education

The most fundamental issue in financing of higher education is the level of expenditures on higher education in the national economy. Recently, there have been public debates concerning this issue.

Higher Education Expenditure in the National Economy

One of the outstanding characteristics of Japan with respect to higher education finance is the low level of government expenditure on higher education relative to the size of total economy. According to the OECD statistics, government expenditure on higher education as a proportion to GDP stands at 0.5 percent, compared to the OECD average of 1.0 percent. In fact, Japan, along with Korea, is ranked at the bottom among the OECD countries in this respect. On the other hand, the higher education system is heavily dependent on private contributions. The OECD statistics show that the private expenditure on higher education stands at 0.8 percent of GDP, as contrasted with the OECD average of 0.4 percent. Indeed, the level ranks the third among OECD nations, after US (1.9 percent), Korea (1.8 percent). The high level of private contribution is a reflection of the high share of private institutions in enrollment and their dependence on tuition revenue. This pattern of dependence on private contribution is not unique to Japan in the East Asia region. To varying degrees, other East Asian countries including Korea, Thailand and Taiwan show

In Japan this characteristic derives from the unique path through which Japan’s higher education developed. As indicated in Section 1, the demands for higher education in Japan started growing at relatively early stages of its economic development. As the government still lacked the financial resources to supply sufficient rooms in public institutions, the excess demands had to be supplied by expanding the private sector of higher education. After Japan went through a period of rapid economic development, Japan shifted its direction towards a Welfare Society by promptly raising the levels of social expenditure including higher education. The government started the Current Cost Subsidy in 1975, which would have substantially increased the level of public expenditure on higher education. However, such a development was short-lived. By the end of the 1980s, rising budget deficit became apparent and the government turned to a stringent fiscal policy. This shift had to be accelerated even further in the later period by the explosive increases in the expenditure on national pension and health plans on one hand, and the economic recession after post-bubble boom.

There have been persistent demands for greater government expenditure on higher education, and one of the grounds for the argument was the low standing in international comparison. The voices for argument have been heard from the associations of national and private institutions of higher education and the Central Education Council under MEXT. On the other hand, there have been strong criticisms against this argument from the Ministry of Finance and various economic advisory committees. It is claimed that the low level of government expenditure does not constitute the main issue – after all the
government expenditure is financed by tax revenues, one of the main sources of which are taxes on individuals. Japan’s higher education tends to be financed through direct contribution from the households, not through tax and government expenditure. The latter argument gained even greater momentum in the context of fiscal stringency and the popularity of marketization orientation.

Quality Shift and Funding

A new dimension has been added recently to this debate. A few members of the Central Education Council issued a statement claiming that, having reached the stage of universalization of higher education after fifty years of quantitative expansion, Japanese higher education should initiate a new drive for restructuring towards qualitative upgrading. On one hand such a shift is critical in responding to the challenges created by globalization and the fierce economic competition that require high competencies among college graduates. On the other, it is necessitated by the changing behaviors and values among the youth.

The group claimed further that such a shift towards qualitative leap is impossible without substantial increases in expenditure on higher education. One of the grounds of this argument is again an international comparison.

Figure/Table 12 below presents the distribution of OECD countries with respect to unit-cost of higher education institutions (vertical axis) and the level of per capita GDP (horizontal axis). The two indices are expressed in equivalent US dollars converted using PPPs purchasing power. It is shown that, in general, the unit cost increases as the per capita GDP rises. The difference by country, however, is substantial especially among more wealthy countries.

Particularly striking is the high level of unit-cost among a few countries including the U.S., Switzerland and Canada. Especially in the former two countries the unit costs lie in the range around 25 thousand dollars. On the other hand, a large group of OECD countries – including Finland, Denmark, Netherlands, UK, Germany, France, Australia and Japan – are located in the range between 10 and 15 thousand dollars.
Figure/Table 12. International Comparison in per capita cost

![Graph showing international comparison in per capita cost]

Data: OECD Education at a Glance 2006

Obviously, the figures should be interpreted with caution for there are substantial problems of international comparison in unit cost due to the difference in the range of higher education institution and other factors. Nevertheless, it seems to be true that there seem to be a substantial difference among the OECD countries with respect to unit cost in higher education institutions.

It should be noted that the differences among the OECD countries have developed in the past two decades. Particularly, the present high level of unit cost in the U.S. is the result of the steady increase in unit cost since the end of 1980’s until the recent years.

The rapid rise in unit cost in the U.S. was not necessarily induced by explicit government policies either at the Federal or State level. In fact, there have been strong criticisms against higher education institutions for the sharp increases in tuition fees that partly financed the increase in unit cost. Rather it was induced by the leading universities that increased spending on education, and then they were followed by other institutions.

Nonetheless, the shift in the direction of development appears to have corresponded to the economic strategy that the U.S. was pursuing. Threatened by the rise in productivity of the manufacturing sector in such countries as Japan, the U.S. economy had to assume its hegemony by strengthening its power in the global economy. It required a number of talented college graduates who can handle the particular
demands required in the multinational enterprises. And this had to be the area where the U.S. had the advantage (Reich, 1992). From this perspective, the increasing investment on higher education constitutes a significant part of the strategy for fortifying the strength of the U.S. in the globalized economy.

If Japan has to remain competitive in this environment, its can no longer rely entirely on the high productivity on factory floors. The competence of regular white-collar workers or engineers should be the critical factor for competitiveness, and higher education is expected to contribute to enhance it. Arguably, that will not be possible without radical reformation of higher education through increased investment.

It is interesting to note that, recently, the EU committee made a statement to the same effect.

Benchmarking with the U.S.

Even if the above argument for the necessity for increased spending is accepted, there remain a number of issues to be considered. Who should pay the costs, how should it delivered and who should receive them? From this perspective, it will be informative to compare closely the components of higher education expenditure in Japan to those in the U.S.

Figure/Table 13 presents the result of a benchmarking exercise to estimate national expenditure on higher education by different forms (direct government subsidy to higher education institutions, government funding for research on competitive basis, tuition fees and donations to higher education institutions. These amounts are further divided into revenues to public institutions and those to private institutions. Observation from this figure can be summarized in the following three points.

First, the contributions from households through tuition fees are similar in the two countries, at around 0.7 percent of GDP. The distributions by public and private sectors, are different reflecting the relative sizes of the two sectors in the two countries. The difference in total expenditure on higher education between the two countries arises from the differences in other three sources of funding.

Second, the major source of difference between the two countries comes from the government expenditures. Direct institutional subsidies amounts 0.8 percent of GDP in the U.S. as compared to less than 0.5 percent in Japan. Funding for research activities through competition stands at 0.2 percent of GDP in the U.S. as contrasted with less than 0.1 percent in Japan.

Figure/Table 13. Components of National Expenditure on Higher Education – Japan and the U.S. circa 2003.
Third, there is a substantial difference in private contribution in the form of donations. In the U.S. this source stands at 0.2 percent of GDP, as compared to about 0.05 percent in Japan. This is particularly important for private institutions.

These results do not necessarily imply that Japan will inevitably have to follow the U.S. in the pattern of expenditure if it were to increase the total amount of expenditure. It will be also unrealistic, because that implies to double the present level of government expenditure. Private donation will be welcome, but it may take a while to foster the culture for voluntary contribution for social causes. More realistically, significant increases in tuition fees will be inevitable if Japan was to uplift the level of expenditure on higher education.

Nonetheless, the exercise does seem to indicate that the further increase in expenditure will necessitate, along with tuition revenues, at least a marginal increase in government expenditure on higher education in the form of various incentives for qualitative improvement and a reorganization of national student loan system. Whether that option is viable under the present political climate remains to be seen.

Source: estimation by the author from various sources
Conclusions

After a half century of robust expansion, higher education in Japan is clearly at crossroad. In order to respond to the new challenges, it has to undergo a significant transformation in which changes in financing assume the critical role.

Some of the changes has been already been translated into concrete policies, most prominent of which is the incorporation of national universities that took place in 2004. The other changes are about to take place, as the case of reconfiguration of the private sector of higher education. There are also debates on the macroscopic basis of higher education expenditure.

All of these developments involve a number of issues over which there are significant differences in opinion. In this sense, Japanese society is struggling to find a definite direction of higher education finance towards the future.

Reich, Robert. The Wealth of Nations.