Corporatization of National Universities in Japan: An analysis of the impact on governance and finance

Kiyoshi YAMAMOTO (The Center for National University Finance and Management /The University of Tokyo)

1. INRODUCTION

In 2004, Japanese national universities were transformed into national university corporations (NUCs). Each national university is a juridical public body separated from the central government, although the former position was just a branch of the Ministry of Education. The transition was implemented through the National University Corporation Law which was the enactment of the report entitled "New Vision for National University Corporations". The report indicates three reforming points: identifying the missions and goals of universities, defining the responsibility and giving much autonomy in management through adopting business management tools, and introducing a competitive mechanism among universities in addition to respecting more needs of students and business world. Evidently these principles have broadly appeared as new public management (NPM) or new managerialism on higher education reform in other developed countries (Teixeira et al., 2004; OECD, 2004) whose focuses are on result and customer-oriented, market mechanism, and devolution or decentralization (Hood, 1991; Pollitt, 1993).

As Yamamoto (2004a) mentioned, corporatization of national universities has a greater element of public sector reform while the Ministry of Education calls it an education reform (Toyama, 2004). In fact, the basic regulatory framework for the Independent Administrative Institutions (IAIs), which are semi-autonomous public bodies implementing public services (Yamamoto, 2004b), applies to NUCs. The incorporation has dramatically changed the governance and management system of national universities.

First, NUCs are at present placed at an arrangement of multiple-principals and agent relationship (Bernheim and Whinston, 1986), by contrast to the hierarchical or simple principal-agent model (Holmstrom, 1979) within the ministry. Second, much flexibility in management is given to NUCs in exchange of strengthening accountability for the results through the medium-term plan, which is approved by the Education Minister. NUCs are required to set the targets on enhancing the quality of teaching and research, improving the operations and their efficiency in addition to finance etc. (Article 30 of the Law). Before corporatization, there was no need for national universities to prepare their strategic or medium-term plan, just to be complied with administrative laws and regulations in which described few targets on results. Third, NUCs have full discretionary power in allocating and using the operating revenues including operating grants that basically subsidizes the difference between current expenses and revenues like tuition fees. In other words, national universities have to manage the balance of spending and revenues, although in the previous system, they have just an obligation not to overspend the allocated money in terms of Spending Budget by the Ministry of Education in accordance with line-item control.

Therefore, to investigate the impact of corporatization on governance and management in national university system gives an example to what extent the managerial approach in higher education does work and some lessons learned. There are however few studies on the outcomes of reform, while managerialism or marketization diffuses in higher education policy around the world (Harman, 2001). Besides, many authors examined the reforming process such as incorporation or transforming funding system in higher education (Eades et al., 2004).

From this perspective, in the second section, the analytical models will be examined to investigate the governance and accountability structure for NUCs. The third section describes the real positions of NUCs in multiple-principals and agent relationship. Also the actual contents and structure of accountability will be shown. Then it is investigated how a competitive funding in operating grants has been introduced to the new national university system. In the fourth section, the management behavior is investigated by analyzing the first accounts of NUCs published in summer of 2005. The analytical results will show that NUCs are motivated to have profits or surpluses as the corporatization presumes, although universities having hospitals are inclined to make a profit by generating more income in contrast to those holding hospitals gain a surplus through rather reducing or cutting spending. Finally, some conclusions and future research issues are mentioned in the fifth section.

2. ANALITICAL FRAMEWORK

Governance Model

Before corporatization, national universities were institutionally educational organizations within the Ministry of Education, therefore common rules and regulations for government agencies were applied except for the financial and personnel management, owing to the specific nature of teaching and research in higher education. In this regard, the governance structure in the former system was a hierarchical relationship. However the corporatization separated national universities from the Ministry and located them at a multiple-principals and agent relationship. In addition, each national university as a public corporation (juridical person) interacts with the society through delivering public services, and competes with private or local public universities.

Here in order to investigate the situation where NUCs are placed at a wider, more complex regime, we adopt a multi-interrelated model that Talbot et al.(2005) called the Performance Regimes Model(see Figure 1). In the model, eight categories of institutional actors are identified as affecting the performance of service delivery unit and interact with one another. If the model applies to the case of NUCs, Legislature means the Diet, Central Ministries involve the Cabinet Office, the Ministry of Finance, while Ministry corresponds to the Ministry of Education. Then Regulatory Agencies are the Evaluation Committee for NUCs and other accredit institutions. On the other hand, Audit/Inspection includes the Board of Audit (National Audit Office) and the external auditors appointed by the Education Minister. Partners/Contracts are companies and other research or education institutions implementing joint activities such as research and teaching. Further, Users equivalent to students and service recipients, while Professionals are Academic Institutions like the Association of National Universities. Given the new scheme for national universities, five institutional actors of eight categories shall significantly affect the performance of NUCs. Because the Diet just determines the operating grants and subsidies for capital expenditures which are part if the total budgets in budgeting for NUCs, while previously the total expenditures and revenues were determined and approved in a line-item such as personnel and traveling costs. Also Partners and Contractors with NUCs are fundamentally horizontal and equal relation, not a principal-agent relationship. In the similar vein, Auditors are not principal for NUCs although financial audits by external auditors (audit firm) would improve the transparency and reliability of accounts.

Consequently the expected governance structure is shown Figure 2.

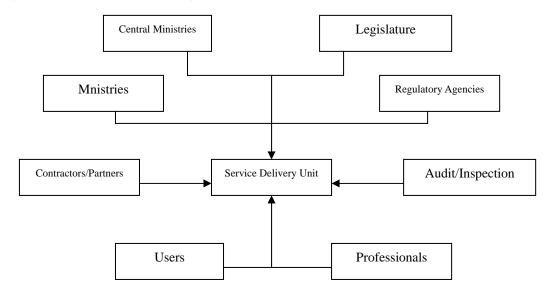
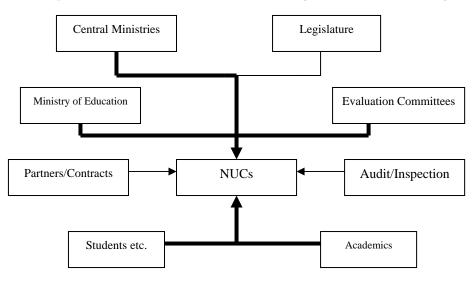


Figure 1. Performance Regimes Model

Figure 2. Expected Governance for NUCs- Managerial and monitoring model



Accountability Model

As mentioned before, in the former system, national universities were internal organizations within the government. At the same time, academic staff in national universities had academic freedom in teaching and research, although the finance and the execution were under a bureaucratic control, in other words, straightforward vertical relationship in compliance with the procedural or input oriented and process regulations. By contrast, the corporatization transformed national universities into a separated body from the government while giving a greater freedom in management in exchange of introducing a management by objectives into the universities including academic works. The transformation in accountability relationships may be described well by using a typological model which Romzek and Dubnick (1994) developed (see Figure 3). The divide accountability mechanisms into four categories through two dimensions, source of control and degree of control. The first dimension of source of control relates to the origin of the expectations, that is, internal or external, and the relationship of the stakeholders. The second dimension is the degree of control present in the accountability relationship. A high degree of control involves close specification of duties and intense scrutiny of actions, while a low degree of control involves much less scrutiny and the agency is granted a great deal of discretion.

Applying the model into national university system, we can show that the former system composed of bureaucratic and professional mechanisms, by contrast in the new system accountability dimension shall expand to legal and political mechanisms. In more correctly, NUCs are legally separated bodies from the Ministry of Education, and granted much freedom on resource management by contrast to the previous situation where finance was line-item control, staff were under the regulation for civil servants, and assets and debts were directly controlled by the Ministry as government assets and debts. Of course, NUCs are accountable for the medium-term goals to the public through the responsible minister. Academic staffs no more enjoy teaching and research in the sheltered collegial world, because expected academic outcomes shall be described in the medium-term goals and plan, also their performance will be reported to the society through annual reporting and reviewed by the Evaluation Committee as in their operation and management results. Consequently it is assumed that accountability mechanisms would be changed toward more external and flexible dimensions (see Figure 4).

Figure 3. Accountability Model

	Internal	External		
High	1. Bureaucratic	2. Legal		
8	Superior/subordinate	Principal/agent		
Degree of	Supervision,rules,Standard	Fiduciary		
Control over	operating procedure	Oversight monitoring		
Agency Actions	3. Professional	4. Political		
Low	Layperson/expert	Constituent/representative		
		Responsiveness		
	Deference to experience	to stakeholders		

Sources of Agency Control

Figure 4. Expected Transition of Accountability Model

Administration

Academic work

1.Bureaucratic	2.Legal	1.Bureaucratic	2. Legal
3.Professional	4.Political	3.Professional	4.Political

3. GOVERNANCE AND ACCOUNTABILITY

Impact on Governance

First of all, since the Special Account for National Schools was scrapped through corporatization. The Diet's mandate in budgeting now is limited to the operating grants and subsidies for capital expenditures. In other words, the legislature is unable to control thoroughly in spending and revenues of national universities; the scope of parliamentary control decreases.

Second, the new scheme has granted the Executive, the Central Ministries (the Ministry of Finance, the Ministry of Internal Affairs and Communications) and the Line Ministry (the Ministry of Education) more influential power above NUCs. The Ministry of Education not only approves the medium-term plan submitted by NUCs but also prepare the annual budget requests for NUCs to the Ministry of Finance. The Ministry of Finance examines the budget requests each year and has the mandate to discuss with Education Minister on financial matters such as approving the medium-term plan, borrowing or issuing bonds and so on. The Ministry of Internal Affairs and Communications has take a greater power on overseeing the semi-autonomous public bodies (IAIs and NUCs) established by the recent public sector reforms in 21st century. The Committee of Policy Evaluation and Evaluating Independent Administrative Institutions is set up in the Ministry and the Committee reviews the evaluation results by the Evaluation Committee in responsible Ministry (in case of national universities, the Evaluation Committee for NUCs) and recommends the amendment or abolishment of activities to the responsible Minister. Of course, NUCs are subject to the National University Corporation Law which differs from the Basic Law for Independent Administrative Institutions in respecting the specific nature of higher education. Accordingly, the Evaluation Committee in the Ministry of Internal Affairs and Communications is limited to examine the management and operational issues on NUCs.

Third, the Evaluation Committee for NUCs plays an oversight body: it evaluates the performance of each national university. In the first evaluation process in 2005, the guidelines of annual performance report affected the priority in management of NUCs. They work as a good practice. In practice, the Committee is supposed to encourage presidential and strategic management rather than critically examine to what extent NUCs have made a progress towards medium-term goals. In other words, so far, it might be considered a supporting institution for NUCs, although in the end of medium-term period (in 2009) the evaluation results will be have to be fed back to the resource allocation of operating grants in the next medium-term. The policy might be caused by the composition of the members: seven from the former presidents or professors of national universities, four from the private universities, and five from the business worlds.

Fourth, the power of Users as a constituent stakeholder has been growing, while Academic Institutions remain be a limited influential actor on the governance. It is noteworthy that some national universities regard students and patients as customers for them.

Impact on Accountability

In administration, every NUC prepared the medium-term plan describing how to teach and research, manage resources and evaluate performance in order to accomplish the medium-term goals. Many national universities already set up the missions or long-term goals before corporatization. However they were abstract and general, most had no implementation strategy. Now in the medium-term plan from 2004 to 2009, quantitative targets on management and operations are defined in accompany with the explanation how to accomplish them. Moreover the performance against the medium-term goals and plan are disclosed to the public.

Of course, as mentioned earlier, input and process control was replaced with output control by giving NUCs much freedom on resource management. Under the new scheme, how to spend the operating grants is a discretional matter for national universities. Now it is possible to pay a fairly higher salary/wage to the distinguished professors or manager/skilled persons, although in the former system staff were civil servants and wages were determined by the regulation. In addition, the annual performance reports and medium-term plans are disclosed, although few people see them and most national universities still have adopted the former personnel system for public employees into the new scheme. Also mass-media more often takes up the topics of NUCs.

Accordingly, we can say that the accountability mechanism in administration has moved toward external and low degree of control, although NUCs so far have not be fully adapted to the new mechanism. In teaching and research, NUCs are required to set up the medium-term goals and plans in promoting the quality of academic works. Also the outcomes are reviewed by the Evaluation Committee for NUCs every year and at the end of medium-term to what extent each NUC will accomplish the medium-term goals shall be examined. Of course, considering the specific character of higher education in which it takes some time to make a result, the annual review of teaching and research is limited to check the progress against the medium-term goals, not an in-depth examination. Any way, through the introduction of a management by objectives in academics, faculty activities in NUCs also are subjected to external evaluators including non-academicians like business persons. In this perspective, faculties are now accountable to the stakeholders other than professional colleagues or peers. Besides, since some quantitative targets in teaching and research (for example, employment rate and passing rate of examination) have been defined in the medium-term plan, the degree of control over academic activities becomes higher than in the former system. In the previous system, most of the targets in teaching and research were qualitative and the universities had no responsibility to reach the targets.

Consequently, the accountability mechanism in teaching and research

activities is shifting to more external (political) and higher degree of control (legal). NUCs no longer are placed in "Ivory Tower".

Competition among Universities

The corporatization, as the final report on incorporating national universities describes, intends to introduce a market mechanism or competitive environment among NUCs in resource allocation or government funding. In practice, new scheme stipulates that the performance of each NUCs shall be linked to the funding (operating grants) for the next medium-term. Also the Ministry of Education set up a partly competitive scheme within the operating grants; a specific amount is reserved as the Special Teaching and Research Fund other than the standardized operating grants. Each NUC submit the proposal(s) in accordance with the pre-determined subjects to the Ministry. After appraisal of the external members, the Special Fund is allocated to the NUCs.

The amount of the Special Fund is not large and just six percent of the total operating grants, because the grants are considered a basic fund for teaching and research. In practice, analyzing the allocation of the Special Fund into national universities, the variance is much smaller than that of the largest competitive research fund, the Grant-in-Aid for Scientific Research (the coefficients of variance are 0.6233 and 2.4083 respectively).

4. FINANCE AND MANAGEMENT

Financial management in NUCs transformed from traditional cash-based expenditure control to accrual-based income and expense control owing to an independent legal entity. The tuition and entrance examination fees including hospital income are now the revenues of each NUC, by contrast to the previous system in which their revenues were directly national revenues. This means that the balancing between revenues and expenses is delegated to each NUC: whether deficits or surpluses, they are responsibility for NUCs, not the government. The new scheme encourages NUCs to make a net surplus through cost savings or income generating. The surplus will be retained as a reserve fund for the specific purposes defined in the medium-term plan, if it will be caused by management effort of the NUC. In particular, the conditions for which the responsible minister (Education Minister) approves the NUC to reserve the net surplus, are much relaxed compared to IAIs. While IAIs are required to make a proof that the surpluses are caused by their own efforts, it is sufficient for NUCs just to explain a completion of annual plan by indicating that the enrolled students are beyond 85 percent (since 2007, 90 percent) of the approved full quota. However, increasing revenues for NUCs are quite limited, because it is neither allowed to implement a profit-making business nor set tuition fees more than 110 percent of the standardized tuition level. The exception is in management of university hospital.

Considering the characteristics of NUCs, it is assumed national universities having no hospital will seek to cut expenditures while those having hospital will endeavor to make a profit or surplus. In theory, there are six balancing figures (more correctly the difference between actual and planned amounts) of net operating surplus (loss) as indicated in Table 1. Clarifying all NUCs into six categories, financial management types might be reduced to largely three groups: the first is to seek financial health through increasing revenues and decreasing costs, the second is to adopt a growth strategy by increasing revenues and costs, and the third is trying to shape up (downsize) through decreasing revenues and costs, although all three groups accomplished the net surplus over the planned balancing in the first financial year (2004). Comparing NUCs with and without hospital, the second type is dominated by national universities having hospital while those having no hospital dominate over the third type. In case of having hospital, the average rate of change in revenues is positive and the average rate of expenses is negative, by contrast in case of no hospital, the former and the latter rates are both negative. It is remarkable that whether having or not having hospital, the average net operating surpluses are positive and the difference is not statistically significant.

Item	1	2	3	4	5	6
$\Delta R = R_1 - R_0$	+	+	_	_	+	_
$\Delta C = C_1 - C_0$	—	+	_	+	+	_
$\Delta \pi = \Delta \mathbf{R} - \Delta \mathbf{C}$	+	+	+	_	_	_
With hospital(n_1 =42)	15	17	9	0	1	0
Without hospital(n ₂ =47)	16	8	22	0	0	1
Total (N=89)	31	25	31	0	1	1

Table 1. Types of financial management

Item	With hospital			Without hospital		
	$\Delta R/R$	$\Delta C/R$	$(\Delta R - \Delta C)/R$	$\Delta R/R$	$\Delta C/R$	$(\Delta R - \Delta C)/R$
Mean	2.20%	-0.66%	2.86%	-0.19%	-2.95%	2.76%
SD	3.88	3.64	1.96	3.33	4.86	2.33
CV	1.76	-5.50	0.68	-13.53	-1.64	0.84

Table 2. Financial Results

Table 2. Financial Results

Item	With hospital			Without hospital		
	$\Delta R/R$	$\Delta C/R$	$(\Delta R - \Delta C)/R$	$\Delta R/R$	$\Delta C/R$	$(\Delta R - \Delta C)/R$
Mean	2.20%	-0.66%	2.86%	-0.19%	-2.95%	2.76%
SD	3.88	3.64	1.96	3.33	4.86	2.33
CV	1.76	-5.50	0.68	-13.53	-1.64	0.84

5. CONCLUSIONS

Japanese national universities were transformed into semi-autonomous public corporations, National University Corporations (NUCs) in 2004. The reform is the major and rapid changes in governance and management of higher education in Japan. Each national university becomes an independent public corporation separated from the government and granted much freedom in management through introducing a result-oriented control. In practice, the IAI's governance framework, which is a hiving-off policy of public service delivery, basically is applied to NUCs. Besides NUCs have been placed at a more market-oriented and competitive environment. Since IAIs are modeled on the Executive Agencies in the UK, which is an organizational reform of NPM (OECD, 1995), the corporatization of national universities is considered a development of NPM in higher education.

From this perspective, analyzing the governance structure for NUCs by adopting a multi-principals and agent relational model for service deliveries, it was shown that Central Ministries, Line Ministry and Evaluation Committee were the primary actors to the NUCs. By contrast to the expected outcomes, students as customers or users and academic institutions as professionals so far do not have a great power over the NUCs. On the other hand, it is assumed that accountability mechanisms for NUCs also are changed through transforming the governance structure. Using the two dimensional classification model composed of the sources of control and degree of control, it was indicated the corporatization has moved NUCs into more external and flexible control in academic works other than administration.

Turning to the impact on finance and management, NUCs are obliged to balance the accounts by themselves. Under the new scheme, all revenues and expenses are attributed to the NUC, although in the previous system revenues were directly attributed to the national account and national universities just expensed the expenditure budgets allocated by the Ministry of Education. This means that NUCs are expected to have a net surplus through generating income and/or cutting costs because the surplus will revert to the NUC. The analysis of the first accounts of NUCs has indicated all national universities except two universities have made some surpluses in operational level. Also it is noteworthy the pattern of generating surpluses differs between the universities having hospitals and those having no hospital; although both types show the similar rate of change in net surplus, the group holding hospitals in average has increased the revenues and saved the costs, by contrast, the not holding group has decreased the revenues and the costs through rightsizing. The findings might indicate the positive impact on financial management in national universities, while it is too early to evaluate the impact on academic works including governance. The expected results on financial management are partly explained by the specific national culture as Abegglen (2004) indicates. He mentioned that in this decade Japanese enterprises radically changed in financial management, in contrast the least changing field was personnel or human resource management. Actually in the public sector, organization and financial management reforms have advanced, however, civil service reform still is under discussion in the government.

While the future of corporatization is uncertain, we can show four scenarios. First is downsizing the national university system through decreasing grants from the government. Second is segmentation of national universities in order to balancing financial support with international competitiveness in teaching and research. Third is privatizing national universities, and finally is promoting the national university system as the corporatization has intended to. Any way, market mechanism coupled with managerialism would accelerate one of the four stories towards the soft control which focuses on performance and flexibility rather than equity and fairness.

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