

A Tale of Two Cities: Comparing Higher Education Policies and Reforms in Hong Kong and Singapore

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Abstract

In recent years, a number of higher education policy changes and reforms have been proposed and implemented by the governmental authorities in Hong Kong and Singapore. Policy changes and reforms mainly focus on the aspects of finance, provision, regulation and ownership of higher education institutions in the two societies. Quality assurance, performance indicators, managerial efficiency, value for money, marketability and public accountability have become the core values for introducing higher education reforms in the two city-states. With the rise of a more utilitarian and service-oriented view of public institutions, including universities and other higher education institutions, the core principles of public sector reform also apply to the current reforms of higher education. Managerialism, economic rationalism, academic capitalism have emerged as the three core concepts of public management in relation to the higher education sector. Comparing the higher education policies and reforms in Hong Kong and Singapore, it is argued that the means and outcomes of various policy changes and reforms differ significantly from each other. In addition, the relationships between the state or government and universities have been changed significantly in terms of governance and financial matters. This article will shed some lights on the impacts of the recent higher education reforms on universities and the academic profession in the two cities and the ways that the future development of the university sector is affected by those reforms and policy changes.

Keywords: University reform, Public sector reform, Managerialism, Economic rationalism, Academic capitalism

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Introduction

A wind of change is blowing in the university sector of Hong Kong and Singapore. University reforms in the two city-states have caused unprecedented changes and transformation of the sector over the past few years. The reforms can be perceived as a response to the latest public sector reforms in tandem with the dominance of managerialism because university education is commonly perceived as a public service in the two city-states. The implication of the university reforms can be revealed from a paradigm shift from the ethos of collegiality to the ideologies of economic rationalism, academic capitalism and corporate managerialism.

The principal goal of this article is to compare and evaluate the policies adopted by the two governments to reform the university sector. There are three sections. The article commences by presenting the concepts of economic rationalism, academic capitalism and corporate managerialism. It then turns to a comparison between the university education reforms in Hong Kong and Singapore. The penultimate section discusses and comments on the impact of the reforms on the academic profession. The last sections conclude the discussion.

The Conceptual Framework of University Reforms

Ronald Barnett (1997) argues that the university is *dead* because people have lost clear sense of the purpose of university in the modern age (p. 1). Whereas knowledge is no longer the only end of university education, universities do not possess a monopoly of the

legitimacy to produce new frameworks of understanding (Barnett, 2000a: 120). The world of academic work is shaped by the notion of performativity or performative competencies, the emergence of internal markets in the university sector and the rise of new public management. These trends have inevitably undermined the autonomy and freedom enjoyed by universities and academics. On the one hand, universities are "attenuated" in an age of supercomplexity, when the concepts of unpredictability, challengeability, contestability and fragility prevail (Barnett, 2000b: 14, 63). On the other, there are heightened perceptions of uncertainty among academics during the transition from elite to mass systems with changing expectation of stakeholders like government, academics, employers and students (Welch, 1998: 1; Kogan, Moses and El-Khawas, 1994: 14-16).

The latest development of university education is placed in a new discourse, in which accountability, cost-effectiveness, good management, performance indicators, quality assurance, relevance, strategic planning and value for money (Coaldrake and Stedman, 1999: 3). The implementation of the university reforms has been significantly affected by the promotion of neoliberal and the New Right's approaches in tandem with the growing influence of transnational institutions such as the World Bank and the Organization for Economic Cooperation and Development. These institutions have put emphasis on making universities to be more responsive to market forces, more efficient in resource allocation and utilization, and more effective in terms of institutional management and governance. A higher degree of autonomy is in exchange for greater responsibility and accountability with the launch of more rigorous quality assurance and performance assessment mechanisms. The development of university education is to be shaped by the dominance of the three ideologies, namely economic rationalism, academic capitalism and corporate managerialism.

Economic Rationalism

The rhetoric of economic rationalism has been treated as a driving force of the public sector reforms in Australia since the 1970s. Economic rationalism indicates the government administration's intention to eliminate waste and inefficiency, to save public money, to streamline the public sector, and to make the public sector "lean and mean" as similar to private enterprises (Pusey, 1991: 3). Public service institutions, including schools and universities, are in the process of restructuring with adherence to the logic of economy and efficiency in response to more stringent allocation of public resources. Marketization and commodification of education accompanying performance indicators to measure the quality of pedagogy, curriculum and institutional management in the name of accountability. "Doing more with less" has become the maxim in the discourse of efficiency and productivity (Welch, 1996: 1-11).

The core value of economic rationalism is comprised of three elements. First of all, there is a preoccupation with economic policy and economic objectives in public policymaking. Second, public policy is seen in the light of neo-classical and market liberal ethos. Following the logic of free market theory, governments formulate public policy in the direction of *laissez-faire* minimalist state. Finally, with regard to education as a kind of public service, more emphasis has been put on managerial efficiency in order to create more effective machinery and restructure the role of the state / government with respect to public service sector services. Two typical strategies of economic rationalism, which consists of the privatization and commercialization of public services and the simulation of markets within the public sector by means of competitive bidding for funding dedicated to teaching and research activities, productivity incentives and corporate management structures in higher education (Marginson, 1993: 56-57).

The logic of economic rationalism is originated from the philosophy of the New Right, free market liberalism and public choice theory. The growth of government would lead to socialism and totalitarianism because of too much state intervention in society. Markets instead of electoral democracy nor public administration are praised for their ability to coordinate individual choices in a productive result. Advocates for free market liberalism insist that the social order is individualist in nature. Individuals are linked to each other by private economic relations through the system of market exchange and contractual agreement. State interference is deemed to be of the greatest threat to individuals in free market. The free market liberals commit to the de-politicization and elimination of the role of politics. Public choice theory assumes that political decision-making is similar to private economic decision-making that is undergone by individuals for minimizing private cost. In fact, government services are produced at the expense of consumers and taxpayers' benefit in the condition of "distorted" economic rationality because it is easier for the collaboration between politicians and civil streamlining. Free market liberals advocate private and market production of public services in place of the provision by government. Competitive provision by private enterprises, user charge and the devolution of public services would alleviate pressure on government because any dissatisfaction in relation to end products or service outcomes is directed to providers in the market instead of political leaders and public administrators (Marginson, 1993: 57-63).

In short, commodification, competitiveness and marketization are advocated as the core value of neoliberal ideology (Morrow and Torres, 2000: 37-40). These strategies form the core of economic rationalism to reduce the role of the state / government and leave room for market activities and private interests and to create markets, or quasi markets, within the public sector, which can be reflected by internal exchange and pricing between different institutions, competitive bidding for funds, productivity incentives, and corporate executive structures (Marginson, 1993: 57; see also Pusey, 1991; Le Grand and Bartlett, 1993; Whitty, 1997). Neoliberals see the world as a supermarket, in which choice and competitive are conceived as essential driving forces for enhancing efficiency and responsiveness of education institutions (Apple, 2000: 60-62). Schools and universities alike are affected by the cult of efficiency with the goals of cutting costs, vocationalizing curricular and imposing an ethos of business style principles in efficiency movements (Callahan, 1962; Welch, 1998b: 157).

Academic Capitalism

Globalization is destabilizing patterns of university professorial work and creating new structures, incentives and rewards for academics. Slaughter and Leslie (1997) admit that professors have become more involved in the market. Moving towards the market with the receding flow of public money allocated to university education as a global trend, universities and their faculty have to compete for external resources from market-related applied research funds, service contracts, industry-government-university nexus, spin-off companies or arms-length corporations, endowment funds and student tuition fees. Academic capitalism represents "institutional and professional market or market-like efforts to secure external money." Academics, at least in publicly funded universities, are employed by the public sector but they are actually performing the role of capitalists who strike for extra resources for their working institutions. In this sense, academics are simultaneously state-subsidized entrepreneurs (pp. 8-9).

What Slaughter and Leslie argue is that financial constraints facing universities are resulted from a decline of government funds, which has led to keen competition for new research funds. Raising tuition fees, expanding sales of more differentiated education services, restraining the growth of the number of teaching staff and laying off those who cannot meet the bottom line of performance indicators to control labour costs, and operating spin-off

companies are the viable ways for universities to shed away resource dependence upon government as a predominant resource provider so as to assure a greater degree of autonomy and independence (Slaughter and Leslie, 1997: 69).

Whilst universities have to become more flexible, responsive and open in order to cope with managed competition under governmental pressures, entrepreneurial activities have been encouraged with the rise of internal markets (Becher and Kogan, 1992: 184; McInnis, 1995: 38-39). The emergence of entrepreneurial or enterprise university is a part of global trends of higher education development (Clark, 1998; Marginson and Considine, 2000). Closer university-business partnership is a natural result in this context. There is greater faculty responsibility for accessing external sources of funding. At the same time, a managerialist ethos has been cultivated in the realm of institutional governance, leadership and planning (Currie and Subotzky, 2000: 128). Emphasis has been placed on university governance and leadership in the context of so-called enterprise university. Executive power has a greater freedom to act and manage according to principles of good practice. Collegial and democratic forms of governance have been replaced by structures that operationalize executive power and create selective mechanisms for participation, consultation and internal market research. Whereas there is an enhanced flexibility of personnel and resources and communication means, there is a decline in the role of academic disciplines and the collegial culture in governance. In fact, devolution is a means to centralize executive power in the hands of middle management, including faculty deans and department heads, who are now entitled with increased line management responsibility and granted budgetary autonomy within the framework of institutional plans, and performance measures and targets (Marginson and Considine, 2000: 7-11).

Corporate Managerialism

Corporate managerialism is also known as managerialism or new public management (Hughes, 1998: 52). The role of managers in public service institutions is emphasized. Managers have to perform a vital role to make government work efficiently by "doing more with less," "focusing on outcomes and results," and "managing change better." The general culture of public service management is to put emphasis on economy, efficiency and effectiveness, known by its acronym as "3Es" (Yeatman, 1987: 339-346; Rhodes, 1991: 1). Alternatively, managerialism is standing for a rational, output-oriented, plan-based and management-led view of organization reform. It is a culture that places its emphasis on proper measurement of organizational performance, formulation of corporate mission statements, goals and planning process and accountability in public organizations. Managerialism is thus defined as cost-answerability with economic efficiency audit (Sinclair, 1989: 383).

The rise of corporate managerialism is related to the reinventing of government in most developed countries like the United States (Osborne and Gaebler, 1992). The idea is interpreted as a managerial revolution in public services (Hood, 1991; Lane, 2000; Pollitt and Bouckaert, 2000). New public management and new governance presuppose that the state / government gives up a certain extent of direct control over its organization and makes managers to manage. Service production and delivery in the public sector is run in accordance with a market-like context for ensuring increased efficiency and cost-effectiveness. Corporate managerialism and new public management emphasizes less input control and more performance evaluation (Pierre and Peters, 2000: 64-65).

Managerialism, as Apple (2001) suggests, involves three strategic transformations in relation to the changing role of the state and the redefinition of the boundaries between public and private in the realm of education. First of all, public assets and schools have been privatized or given to corporations to run. Second, there are keen competitions between public

institutions and private ones. The public institutions tend to mirror the corporate sector for their organizational structures and managerial procedures. Finally, public responsibilities of education have been shifted from the state to the market, community and informal sectors based on the argument that the state cannot afford to monopolize the finance and provision of educational services in the process of massification. The restructuring of the role of the state / government gives rise to more autonomous managerial and professional middle class to direct decisions on education policy with the importation of business models and tighter systems of accountability (pp. 29-30).

Reforming University Education in Hong Kong and Singapore

Massification of University Education

In Hong Kong, the expansion of university education was originated in the late 1970s when the government intended to keep the growth of enrollment rate at three per cent annually (Hong Kong Government, 1978: 16). The impact of slow and small-scale expansion of the university sector had not been conspicuous until the late 1980s when there was a mere six per cent of the relevant age cohort (between 17 and 20) enrolled in local universities. In 1989, the government decided to increase the number of first-year first-degree places to 15,000 and the enrollment rate of local universities, polytechnics and post-secondary colleges by the academic year 1994-95 (UGC, 1996: 28).

The number of higher education institutions funded by the University Grants Committee, which represents the government to allocate more than 90 per cent of the public funds devoted to the higher education sector, has increased from five to eight between 1990 and 1996 (Census and Statistics Department, 2000: 240). These institutions are the University of Hong Kong (HKU), the Chinese University of Hong Kong, the Hong Kong University of Science and Technology (HKUST), the Hong Kong Polytechnic University (PolyU), City University of Hong Kong (CityU), Hong Kong Baptist University (HKBU), Lingnan University (LU) and the Hong Kong Institute of Education (HKIEd). Whereas HKU, CUHK and HKUST were originally established as universities, the others except HKIEd have been upgraded and granted the university status between 1995 and 1999 (*Hong Kong 2000*: 166-168).

In 2000, the Chief Executive Tung Chee-Hwa announced in his fourth policy address that the enrollment of tertiary education should be increased to 60 per cent, which is translated into an increase from 28,000 to 55,000 places within ten years (Tung, 2000). Different from the previous tidal wave of expansion in the early 1990s, the focus is placed on sub-degree or associate degree level. According to the education reform proposal by the Education Commission (EC) in 2000, the development of community colleges is encouraged to provide secondary school-leavers with an alternative route to higher education and to provide them a second opportunity to acquire skills and qualifications in order to enhance their employability (EC, 2000: 126-127). Some universities like HKU, PolyU, CityU and HKBU have offered associate degree courses since 2000. The qualification of associate degree has been recently recognized by the government as equivalent to that of higher diploma. It is anticipated that the number of first-year associate degree places will be increased from 6,570 in 2001 to 30,600 in 2010. The total public expenditure on subsidizing associate degrees will be raised by eight-fold from HK\$200 million to HK\$1.6 billion in the next ten years (*Ta Kung Pao*, 31 May 2001; *Mingpao Daily*, 31 May 2001).

On the contrary, in Singapore, the enrollment rate of higher education is higher than that in Hong Kong. Between 1980 and 2000, the entry ratio of the university sector as a percentage of primary one cohort was increased from 5 per cent to 21 per cent. For the polytechnic sector, its enrollment rate was increased from 5 per cent to 38 per cent over the same period of time. The higher education sector is comprised of both universities and polytechnics, the

total enrollment rate was raised from 10 per cent to 59 per cent from 1980 to 2000 (Singapore Department of Statistics, 2001a: 62). Like Hong Kong, there has been an increase in the number of university over the past two decades. There are three universities, namely, the National University of Singapore (NUS), Nanyang technological University (NTU) and the Singapore Management University (SMU). What is different from the higher education system of Hong Kong is that there are four polytechnics, including Singapore Polytechnic, Temasek Polytechnic, Ngee Ann Polytechnic and Nanyang Polytechnic, to provide specialized technical training courses. By the year 2000, the higher education sector as a whole occupies more than 30 per cent of public expenditure on education, which accounts for S\$1.4 billion, and S\$949 million devoted to university education and S\$485 million for the polytechnic sector (Singapore Department of Statistics, 2001b: 249).

The Singapore government is studying the possibility of setting up a fourth university following the recommendation made by the International Academic Advisory Panel (IAAP) in January 2001 (MOE, 2001a). The proposed fourth university should be differentiated in mission and structure from the three existing universities. It should develop its own niche, and be a teaching-focused university with a technological bias that carries out applied research in engineering, info-communications technology, and applied science. Moreover, that university should have built up strong links with industry (MOE, 2001b).

Predominance of Quality Assurance Movement

With the process of massification, there has been the launch and development of a quality assurance system for university education in Hong Kong since the early 1990s. There are three kinds of quality review exercises, including the Research Assessment Exercise (RAE), the Teaching and Learning Quality Process Review (TLQPR), and the Management Review (MR). These exercises are managed by the UGC, which has responsibility to monitor and advise on academic activities. There is widespread concern from the government, legislators and community about the ways that public expenditure devoted to the higher education sector is spent. The UGC holds a view that it is necessary to introduce a performance-oriented funding methodology to replace outdated methods of resource allocation according to the quantity of students.

The RAE was the first quality review exercise focusing on both the quantity and quality of research output by the academic profession. Modelling after the UK research assessment exercise of 1992, the aim was to rate cost centers or departments and hence institutions, not individual staff members (French, Massy and Young, 2001: 35). Assessment results would be considered to determine the allocation of research funding for the next triennium. There have been three rounds of the RAE in 1993, 1996 and 1999. Originally, the UGC planned to carry out the exercise every three years. Its frequency has been reduced to once every six years because of harsh criticisms among academics for keeping them to prepare the RAE at the expense of teaching quality. As a result, the original schedule of the exercise in 2002 has been recently postponed to the year 2005.

Nigel French, a former Secretary-General of the UGC, admitted that RAE has put strong emphasis on research in terms of articles published in international peer-reviewed journals, but not so much on those in less well-known, region and even local publications. In fact, the exercise has other problems like the lack of transparency over criteria for research output assessment, the failure to recognize the outputs of applied research and the relationship between the exercise and real funding allocation is not clarified (French, Massy, Ko and Siu, 1999: 6-9). The Carnegie Foundation of the United States conducted an international survey about academic work in the early 1990s, it revealed that academics working in Hong Kong were most likely to feel the pressure of publishing more at the expense of the quality of teaching. While there were about 40 per cent of respondents in Australia, Germany, the

United Kingdom and the United States admitted that there was much pressure to publish, the same percentage in Hong Kong exceeded 50 per cent and the highest among countries surveyed (Boyer, Altbach and Whitelaw, 1994: Figure 18).

Not surprisingly, the RAE has altered the role of research in the academic community. A "publish or perish" syndrome has emerged. Cheng Kai-ming, a Pro-Vice-Chancellor of HKU, provided an authentic description of the current changes facing the community of university education in Hong Kong because of the launch of the RAE:

"Immediately after the RAE exercise...the few who have been productive in publications are prompted to produce more. Those who are working on doctorates are prompted, either by self-motivation or by their department heads, to obtain the degree earlier. Those who are less productive, who are not able to produce or who are not prepared to produce, now face high pressure. In some institutions, there have been attempts to "weed out" these last categories by, for example, offering early retirement... 'Publish or perish,' a syndrome which was thought to be American, now prevails in Hong Kong's community of higher education." (Cheng, 1996: 92)

The statement demonstrates a paradigm shift among academics in Hong Kong with regard to academic research, which is rarely self-motivated but more instrumental to fulfill the requirements of the RAE under the external scrutiny.

Following the RAE, the UGC launched the TLQPR with a focus on teaching and learning processes and activities among universities in 1996. The principal goal of the review is to assist institutions in their efforts to improve teaching and learning quality. In addition, the review is to enable the UGC and universities to discharge their obligation to maintain accountability for quality (Massy and French, 2001: 33-34). The first round of the TLQPR was conducted between 1995 and 1997 among the UGC-funded institutions except the HKIEd. The review covered four main aspects of teaching and learning processes: curriculum design, implementation quality, outcomes assessment and resource provision. Through that round of the review, a number of good practices were identified. They include teaching-orientation sessions and assistance for new staff, internal systems of teaching and learning audits, institutional, faculty, and departmental teaching awards, mandatory student course-evaluation questionnaires, and heavier weighting of teaching performance in staff performance reviews with teaching as a required element of staff review (Massy and French, 2001: 36).

The implementation of the TLQPR has aroused universities to put more emphasis on their teaching and learning quality. Albeit the current condition that there is no direct link between review results and resource allocation, Alice Lam, the UGC Chairman, has warned that poor teaching performance would be punished by a cutback of funding whilst improved teaching performance would be awarded with additional grants (*Singtao Daily*, 9 April 2000). The UGC will conduct the second round of the TLQPR in late 2001 with two major considerations. The first is whether external assessments should be conducted on the effectiveness of learning and teaching, especially the standards of graduates. The second is the way that universities could strengthen their self-accrediting mechanisms (EC, 2000: 123-124).

Nevertheless, the TLQPR is not without criticisms among the academic profession. The review has been criticized by academics as unnecessary and bureaucratic. Some of them question the effectiveness of the exercise to produce significant improvement of students' learning process. Because it takes two years to take the review, universities are required to submit documents to the UGC on their teaching quality improvement and assurance processes in addition to site visits by specially-formed panels. The review would only

increase departments' paperwork without improving teaching quality. What is important is to give teachers time and encouragement and to provide programs to improve students' learning. While the TLQPR could eliminate bad teaching but it did not produce good teachers (*South China Morning Post, Education Post*, 25 June 2001).

The final category of quality review is the Management Review, which was firstly conducted in 1998 and 1999. The MR is a review exercise that aims to evaluate the effectiveness of university management and governance. The aims and objectives of the review exercise are to assist the institutions in enhancing the quality of their management processes, to discharge the UGC's accountability for ensuring that devolved funds and resources are managed appropriately, and to focus attention on and enhance effectiveness of institutions' internal resource allocation, planning and financial processes (UGC, 2000: 5-6). The launch of the MR is closely related to financial pressure facing the university sector. Universities have to adopt appropriate and effective means to manage devolved funds when unit costs of university education would be cut by 10 per cent in the triennium of 1998-2001 (French, 1999: 4). Six areas of management practices of universities are taken into consideration: first, the development of strategic plan; second, resource allocation; third, the implementation of plans; fourth, roles, responsibilities and training; fifth, service delivery; and finally, management information and systems (UGC, 2000: 10). The UGC attempts to establish certain principles of good management practice in relation to the notions of effectiveness and efficient use of resources for university governance.

Adhering to the objective of increased value for money, top-slicing and resource funding formulae have been commonly used in universities. Henceforth, universities become more entrepreneurial with the development of new strategic initiatives, reward performance and performance-related objectives. In addition, clear accountabilities have been ensured with a clear management structure concomitant with "the managerial responsibilities, reporting lines and means of accountability well-defined and accepted by all concerned." As a consequence, performance appraisal processes targeting on individual academic staff are conceived as a good practice to enhance responsibilities and accountability. Service-oriented and customer-oriented competition has been encouraged as customers expect better service for their money spent (UGC, 2000: 13-15).

The MR is not immune from criticisms. An exemplary case is that the UGC recommended HKU to replace elected faculty deans with direct appointment by the Vice-Chancellor. Appointed deans would ensure accountability to the university's central administration. Furthermore, they will be able to improve communications between management committee and faculty staff, thus giving deans more power and authority in the management (UGC, 1999: 8-9). Such a change was condemned as a departure from democratic rule towards authoritarianism in the university (*Singtao Daily*, 1 June 1999; *Mingpao Daily*, 2 June 1999). The MR has been perceived as a means for the UGC to intervene in university management matters in the name of promoting rational and effective use of limited financial resources.

On the contrary, in Singapore, quality assurance is not centrally governed by the government but managed by the individual higher education institutions. The improvement of quality and academic standards is a central goal of universities to achieve a competitive edge in the global market. In the process of massification, universities have become huge, complex and costly "enterprises" to deal with demands of teaching, research and public services. Quality assurance is seen as a means to ensure that universities are well managed in response to pressure for accountability and efficiency in a country that is dominated by the market philosophy. Management concepts, theories and practices in the private sector have been adopted by the universities in Singapore. The purpose of quality assurance and audit is to make sure that the quality of teaching and research can be improved and resources can be distributed more rationally (Gopinathan and Morriss, 1997: 154).

Quality assurance and enhancement is partly achieved by the recruitment of talented and outstanding local and foreign academic staff. The quality of university education is reinforced by four main strategies, including a stringent tenure policy, rewards for good teaching and research performance with incentives and recognition, favourable staff-student ratio accompanied by a well-equipped teaching and research facilities, and the provision of staff training to upgrade skills and performance (Selvaratnam, 1994: 5).

In order to assure the quality of teaching and learning processes, both NUS and NTU have long used a system of external examiners, who are mostly senior academics from well-established universities, to review examination papers and student projects in respective departments. There are also boards of examiners to clarify the rigour and fairness of the system of assessment. Some faculties offering professional degrees like engineering, architecture and medicine also invite overseas professional institutions to assess their programs for accreditation on a regular basis.

Apart from obtaining feedback from students on academic staff members' teaching performance, on some occasions experienced and senior staff observe lectures by junior colleges. The practice of peer review is aimed to provide lecturers with constructive feedback and therefore ensure quality teaching in the university. Incentives like teaching excellence awards and cash prizes are available for rewarding outstanding teaching performance in the universities. Alumni and employers from both public and private sectors are regularly consulted through the mechanism of advisory boards for the review of curriculum in order to cope with changing demands.

For research, proposals exceeding a certain amount of funding are subject to evaluation by external reviewers. Principal investigators of research projects have to submit regular project appraisals for evaluation. A number of key indicators, including the number of patents filed, research papers, and even the impact of research findings, are taken into consideration in calculating the quality of the research output. Projects with poor performance will be cut back and terminated. In fact, quality assurance of research output largely depends on research publications. Publications in top international and regional refereed journals are considered as the main criterion for evaluating academic staff members' research performance. Other indexes for measuring the quality of research are based on the impact of journals as well as the citation of published papers. These indexes can be easily measured and compared in relation to different institutions. However, it is questionable whether they can be totally relied on the quality of research within the university.

In the area of staff management, the performance of each academic staff member is reviewed and evaluated annually. Each staff member's contributions in the three areas of teaching, research and service are taken into consideration. Department heads also interview individual academic staff in the process of annual performance appraisal. Quality assurance covers also the processes of staff recruitment and promotion. When recruiting new academic staff, comments are sought from external referees where feasible. Potential candidates are invited to present seminars and hold discussion with department staff. There are interviews by recruitment teams of the respective documents. As for staff promotion, departments have set up peer review committees to examine and recommend staff for promotion. External assessments are used for senior promotions and in some instances tenure considerations (Interview with Andrew Nee, 4 December 1999).

Like NUS, NTU has adopted an appraisal system on academic staff members in terms of teaching, research and administration so as to find out their strengths and limitations. Another measure to ensure the quality of academic work is to refine the criteria and procedures for recruiting, retaining and rewarding staff in the university. With regard to academic staff, the university imposes academic audit with an aim to assess the overall

quality of teaching and research, and to identify ineffective or deficient areas for prompt remedial action. There are several principles of the academic audit adopted by deans of schools in the university. First of all, the audit should be at the macro level. Second, the purpose of the audit is developmental, striving to improve quality, and not judgmental. Third, the audit should be broad-based, examining both quantitative and qualitative aspects. Finally, the procedures of the audit should be acceptable to the majority of academic staff (Gopinathan and Morriss, 1994: 154). The performance of academic staff is assessed by objective and transparent performance evaluation criteria in order to foster a culture of excellence within the institution. Staff remuneration is made to be based not only on seniority but also on academic staff members' educational achievements and accumulated knowledge and expertise.

As NTU aims to instill a corporate culture of excellence, to nurture capable and committed leaders in academia and administration, and to inculcate a consultative and responsive management style, a decentralized system of decision-making and autonomous fund management is proposed in the university's strategic plan. On the one hand, schools are allowed greater autonomy in terms of operation and funding in order to maximize the use of resources and avoid unnecessary wastage. On the other, the university intends to streamline its support offices so as to make their basic support services more accessible. In line with the re-engineering of the university as an educational enterprise and the promotion of an innovative and entrepreneurial spirit, there are five responses of NTU in the realm of institutional management and administration: 1) to institute an innovative and systemic management style, 2) to appraise the quality of teaching and research periodically, 3) to institute more open appraisal systems in order to motivate staff, 4) to groom able and committed leaders that ensure continuity of management, and 5) to motivate staff to excel and put in place commensurate rewards.

An emphasis on quality service, performance indicators and benchmarking is closely related to the Public Service 21 (PS21) Movement, which apply to all public service institutions, including the two public universities in Singapore. The PS21 Movement was launched in 1995 by the government with an aim to pursue total organizational excellence in public service, to foster a culture of innovation and enterprise, and to cultivate a spirit of openness, responsiveness and involvement (PS21 Office, 2001). Adopting the PS21 quality service standards for academic staff and support staff to achieve work excellence, NUS set up an Office of Quality Management (OQM) in 1999 to ensure quality measures in teaching, research and services. The OQM is responsible not only for the quality framework for institutional self-assessment in the aforementioned areas, but also for setting guidelines for external benchmarking, performance assessment, and teaching and learning evaluation. The mission of the office is to enable NUS to become the intellectual and entrepreneurial pulse of Singapore. Three thrusts of quality assurance, quality assessment and quality audit are developed to cope with the university's strategic development (Interview with K. C. Tan, 10 March 2001). Various procedures and incentives are designed and introduced to encourage quality and motive good performance within the institution.

NUS has recently adopted the four main initiatives of the PS21 Movement, including ExCEL, quality service, organizational review and staff well-being. ExCEL is aimed at fostering positive attitudes towards change and continuous improvement by encouraging staff to provide innovative suggestions and setting up work improvement teams. Quality service is promoted as a value to meet the needs of the public and internal customers, including teaching staff and students. Organization structure and procedures are reviewed and examined in order to achieve greater effectiveness and efficiency. Finally, policies and programs are provided for staff welfare and general well-being, such as health care, recreation and social development (Interview with Andrew Nee, 4 December 1999).

Likewise, NTU also takes part in the PS21 Public Sector Work Improvement Teams activities and the university won a number of awards in 1998 and 1999 (NTU, 1999, 2000).

Strengthened responsiveness to the public sector reform initiative is expected when the principles of the PS21 Movement dominate the quality assurance frameworks in the universities as they do in other public service institutions. With the promotion of the spirit of technopreneurship and entrepreneurship in both public and private sectors, the universities have looked to business models for help with their management and operation. In order to find a position in the new knowledge-based economy, the universities need to strengthen the focus on technopreneurship in their teaching and research activities and engage in entrepreneurship-related activities like running spin-off companies and participating in business-related competitions (Tan, 2000). Moreover, the universities are looking at business models in their drive for organizational excellence. For instance, NUS has taken part in the Singapore Quality Award Model for Business Excellence, which puts its emphasis on customer-driven quality, leadership and quality culture, continuous improvement and innovation and public responsibility. The university needs to carry out quality assessment exercises to measure its organizational performance in accordance with a world-class business excellence model. Such exercises provide the university with a better understanding of the strengths and weaknesses of its organization as compared with other institutions in the industrial and business sectors. When the organization can show sustained improvement and a high level performance relative to appropriate benchmarks, it qualifies as a member of the Singapore Quality Award. Several items are taken into consideration as main criteria for granting the award: leadership and quality culture, the use of information and analysis, strategic planning, human resource development and management, management of process quality, quality and operational results, and customer focus and satisfaction (Interview with Andrew Nee, 2 August 2000).

Diversification of Financial Resources

With an alert to the rising cost of financing the process of massification of the university sector, government has recognized the need to diversify sources of financial assistance devoted to the university sector. In the meantime universities are urged to search for alternative sources of university funds in order to avoid over-reliance on government funding. Grants from governments and tuition fees are the two dominant sources of income for the publicly-funded universities in Hong Kong and Singapore. Because university education is not made available to everyone in the society, it is deemed not necessary for government to spend a huge sum of tax revenue to subsidize a minority of eligible students to study in universities at a high cost. According to the user-pay and cost-recovery principles, tuition fees have been levied from students to recover 18 per cent and 25 per cent of the yearly operation cost of universities in Hong Kong and Singapore respectively (UGC, 1996: 133; Interview with Eden Liew, 8 March 2001). The role of the state / government to finance university education in the two city-states is inevitably dominant regardless the two governments are pushing universities to be more innovative and entrepreneurial through the generation of non-government sources of income for long-term development.

Massification has brought a sharp increase in the amount of recurrent grants for government subvented universities in Hong Kong since the early 1990s. In the academic year 1990/91, the recurrent grants devoted to the UGC-funded institutions was about HK\$3.5 billion. The amount was increased to HK\$7.7 billion in 1994/95. Afterwards, the recurrent grants continued to grow and eventually exceeded HK\$10 billion by 1996/97. In 1999/2000, more than HK\$12 billion recurrent grants were allocated to the UGC-funded institutions, or about 26 per cent of total public expenditure on education. The recurrent grants has dropped to HK\$11.4 billion from its climax at HK\$12.6 billion in 1998/99, representing a 9.5 per cent

reduction (UGC, 2001a: 2). With more than HK\$10 billion of recurrent grants for the university sector, there is widespread concern among stakeholders about the ways that public money can be spent wisely and smartly.

The growth of university grants has been halted when the government determined to have a 10 per cent cutback of recurrent grants for the UGC-funded institutions in the triennium 1998-2001. Moreover, a further 5 per cent deduction of university grants is expected in the triennium 2001-2004. Such a period of financial retrenchment is conceived as a response by the government to readjust the imbalance of resource allocation between university and school education. The government also needs to cope with growing competitions among different public service institutions for limited resources amidst the time of economic downturn and budgetary deficit. In the face of financial stringency, universities have to become more prudent in spending public money and to avoid resource wastage. At the same time, they have to search for other sources of income apart from government grants, such as social donations, corporate and industrial sponsorships, spin-off companies' profits, and tuition fees from market-oriented programs at sub-degree, undergraduate and postgraduate levels.

More recently, the UGC has made a rare appeal to the private sector to donate money to the university sector, which is still heavily funded by the government. The Hong Kong Jockey Club was praised as the largest supporter of university education in Hong Kong because of its substantial contributions over the past 50 years. Since the 1950s, the jockey club has donated more than HK\$5.1 billion to the sector for funding major infrastructure projects, campus facilities and scholarship schemes. The largest single donation made by the club is its contribution of about HK\$2 billion for the construction of the HKUST campus in the 1980s (UGC, 2001b). The UGC intends to use the jockey club's example to encourage more people to share the task of donating to higher education. It is an international trend that many top universities particularly in the United States relying on endowment funds donated by private individuals instead of government grants as the main source of income. Nevertheless, it is expected to be more difficult to create a culture of social donation in Hong Kong unless the government can demonstrate the general public that it is worth giving to universities (*South China Morning Post, Education Post*, 6 June 2001).

Apart from relying on government grants, universities are now earning extra financial resources from their spin-off companies and market-oriented courses and programs. For example, CityU has become the first higher education institution in Hong Kong to make its spin-off company a listed company. TeleEye Holdings Limited, of which CityU is a founding shareholder, has commenced its trading on the Growth Enterprise Market of the Hong Kong Stock Exchange since May 2001. Other universities such as HKUST and PolyU also express their interests to follow CityU's footsteps to make their spin-off companies to be listed in the local stock market. HKUST has set up an investment fund for the university to develop enterprises specifically for research and development. There are 25 companies established under the fund, around seven or eight of them will have opportunity to become listed companies within two-year time (*Singtao Daily*, 17 August 2001).

In Singapore, the government attempts to diversify sources of university funding through the creation of endowment funds. Such a move is aimed at making universities less dependent on government grants and alleviating the pressure on increasing tuition fees. The launch of the Universities Endowment Fund by the government in 1991 is one of the most important administrative innovations in the development of Singapore's university education (Gopinathan and Morriss, 1997: 152). The fund was founded with a base of S\$500 million provided by the government. NUS and NTU had to raise S\$250 million on their own to net another S\$250 million in matching funds from the government and then making a total of S\$1 billion within a five-year period (*The Straits Times*, 8 May 1991). As the first step

towards reduced reliance on government funding and greater involvement of alumni and the community in university education, the fund was used to support special and innovative projects related to scientific and technological advances. Moreover, the fund formalized the long-established tradition of private and corporate donations to the universities (Gopinathan and Morriss, 1997: 152-153).

The two universities had drawn from a common Universities Endowment Fund until December 1996, when it was dissolved to create separate fund-raising programs in the individual universities. In March 1997, Deputy Prime Minister Tony Tan announced that the government would give S\$2 for every dollar raised by the two universities for their own endowment funds on top of the previous dollar-for-dollar pledge. In return, the government would give S\$3 to every dollar raised. In other words, if individual university managed to raise S\$50 million, its endowment fund would receive a total sum of S\$200 million over five years from 1997 to 2001 (*The Straits Times*, 19 March 1997; NTU, 1998).

Taking NTU as an example, the university launched its fund-raising campaign in 1997. From 1997 to 1998, the university received S\$25 million for its fund-raising campaign with the support by private and government-linked corporations, foundations, individuals and the government, which provided S\$75 million matching grant for the endowment fund. Therefore, the total sum of NTU Fund would be raised to S\$100 million in 1997/98 (NTU, 1998: 4). The university's endowment fund and fund-raising campaign are modeled after universities in the United States as their endowment funds depend on contributions from corporations, foundations and alumni. The university uses its donations for the pursuit of academic excellence and research purposes. Meanwhile, the university provides opportunities for naming professorships, buildings and other campus facilities including lecture theatres, halls of residence and research centers in appreciation of the generous contributions of benefactors to the endowment funds. A number of professorships have been established in NTU over the past few years like United Overseas Bank Professorship in Banking, Wee Kim Wee Professorship in Communication Studies, Tan Kah Kee Professorship, Canon Visiting Professorship, and Shaw Foundation Professorship in Media Technology. The Singapore Totalisator's Board was the single largest donator as it contributed S\$8 million, which represents as much as 30 per cent of the total donations pledged to NTU in 1997-98 (NTU, 1998).

Both universities have witnessed an increase in the amount of their endowment funds in recent years. For NUS, its endowment fund was increased from S\$699 million to S\$721 million between 1998 and 2000 (NUS, 2000). As for NTU, its endowment fund was increased from S\$359 million to S\$451 million between 1997 and 2000 (NTU, 1999, 2000). As NTU has achieved its target of raising S\$500 million for its endowment fund, the university launched the "NTU 21st Century Fund" in June 2001 to raise another S\$100 million in the coming ten years. The government will provide a matching grant of S\$100 million to the endowment fund (Nathan, 2001). Like NUS and NTU, SMU has also established its own endowment fund with a deed grant of S\$50 million from the government, which also pledges to give S\$3 for every dollar of donation. The target for the endowment fund is to raise S\$250 million over the next five years. In the year 2000/2001, the endowment fund accumulated S\$87 million with the amount of about S\$9 million donation.

It is noteworthy that the motive for the government to set up endowment funds is not to shed its responsibility on financing university education. As statistics shows, the amount of government's recurrent expenditure on universities has increased over years. The government allocated S\$310 million as universities' recurrent expenditure in 1987 and the amount was increased to S\$442 million in 1992, when it was a year after the launch of the University Endowment Fund. The recurrent expenditure was subsequently increased to S\$606 million in 1996 and S\$949 million in 2000 (Singapore Department of Statistics,

2001b: 249). In fact, the endowment fund practice provides universities an opportunity to seek for non-governmental sources of income before the problem of financial stringency and resource shortage occurs.

Apart from endowment fund, the setting up of spin-off companies provides an alternative for universities to earn extra financial resources for research in Singapore. Both NUS and NTU have set up a number of enterprises in relation to research and development. There were 10 companies under the umbrella of NUS. The latest ones include Aromatrix Private Limited and BioMedical Research and Support Services Private Limited to commercialize their research findings and technologies for the development of biotechnology in Singapore. In NTU, there are more than 10 spin-off companies specializing in e-commerce, information technology, electronics and manufacturing processes managed by the NTU Ventures Private Limited to undertake research and development and to provide consultancy services to industry and business (*Singapore 2000*: 219-221). Moreover, the universities can earn their income from providing research and consultancy services to governmental institutions, such as the Ministry of Defense and the National Science and Technology Board.

Emergence of Private University

The development of private university is completely new for both Hong Kong and Singapore, where universities are dominantly funded by the state / government. In Hong Kong, the urge for developing private university was triggered by a comprehensive review of the education system by the EC in 2000. To allow the private sector to provide university education, this will create a new channel for the wider community to contribute non-governmental resources and efforts to the university sector. The development of private university is deemed necessary to enable Hong Kong to catch up with other developed countries such as the United States, Japan and South Korea, where the proportion of private universities account for between 33 per cent and 74 per cent of the total number of universities.

The EC suggested that the development of private university education should be encouraged on the basis that a well-established quality assurance system is in place to assure academic standards. It is a response to widespread concerns over a potential decline of university students' quality and academic standards due to an increase in the quantity of universities. The commission proposed the government to encourage existing private post-secondary colleges and other education bodies with potentials to upgrade to universities. The Shue Yan College, which is in the process of accreditation for some of its proposed degree programs conducted by the Hong Kong Council for Academic Accreditation (HKCAA), will probably become the first private university in Hong Kong.

The development of private university is to diversify the university sector. Private universities can have more flexibility in their operations than the public ones, which are subject to grants and funding condition governed by the UGC on behalf of the government. It is believed that private universities can alleviate the pressure on government finances because they are eager to allocate resources more effectively and efficiently in the face of limited resources coming from social donations and tuition fees. Students, who are acting more like customers, can have more choices for their undergraduate education. Private universities do not have to develop as comprehensive universities and compete with the existing public universities. They can specialize in certain disciplines and concentrate their efforts to develop areas of excellence and their niche markets.

However, there are three major problems facing private universities in the future. The first is whether the demand for university places through private establishments can maintain the survival of private universities. In Hong Kong, the competition for market share in the higher education sector is not only with publicly-funded universities but also renowned universities

overseas. The second is how the quality of private universities can be assured. This problem lies in whether the UGC should take up the responsibility to monitor the quality assurance mechanisms in both public and private universities simultaneously. While it is more difficult to monitor the quality of teaching and research in private universities in theory, the government will have to negotiate with these establishments to work out a system of quality control. Finally, tuition fees charged by private universities should be competitive with public ones. Following the practice of public universities to charge tuition fees to recover 18 per cent of the total operational cost, private universities will have to search for other income sources, such as social donations and corporate sponsorships, to maintain its survival and long-term development without financial support from the government. Otherwise, such institutions may suffer from difficulties in recruiting academic staff and maintaining the overall quality of teaching and research.

Meanwhile, the government also considers the viability to privatize some public universities with an aim to alleviate the financial burden on higher education shouldered by the government. HKU and CUHK are considered as the most suitable to be privatized because of their relatively strong alumni networks and social connections with the corporate sectors. It is estimated that the government will have to spend about HK\$360 billion to privatize the UGC-funded institutions. CUHK and HKUST have demanded HK\$75 billion and HK\$66 billion respectively for privatization. Therefore, it is estimated that the total cost of privatizing HKU, CUHK and HKUST is over HK\$100 billion (*Mingpao Daily*, 31 October 2001). To be privatized, universities can have a higher degree of flexibility and freedom to manage and allocate financial resources in exchange for lesser reliance on government grants.

As for Singapore, the setting up of a private university, SMU, is a breakthrough for the university education development. SMU is partnered between the privately-run Singapore Institute of Management and the Wharton School of Business of the Pennsylvania University in the United States on the basis of a five-year joint agreement. The collaboration aims to build a world-class university for nurturing creative entrepreneurs and business leaders. SMU differs from NUS and NTU in the way that it is run as a private university with responsibility for developing and establishing the Wharton curriculum and its own recruitment and promotion procedures even though it is still funded by the government. Moreover, the university is empowered to confer its own degrees recognized by the government. It is believed that such a flexibility will facilitate SMU to become a world-class university that can be compared with the best universities in the United States and Europe (SMU, 2001).

SMU commenced with the School of Business with its first intake of 300 students in 2000. A new School of Accountancy has been opened in 2001 with an intake of 100 students. The university will also start its third school, the School of Economics and Social Sciences, offering subjects including Economics, Sociology, Political Science and Psychology, in 2002 with a first intake of 50 students (Teo, 2001). Providing a different type of broad-based business and management education, the establishment of SMU is to bring diversity and healthy competition amongst the three business schools. The development of private university is also expected to promote the development of forward-looking, innovative initiatives in teaching and research and to stimulate the three business schools to develop their own unique characteristics and niches. NUS continues to perform its role as a comprehensive university and NTU a specialist institution in engineering and business disciplines. On the other hand, SMU concentrates its efforts to serve the business and service sectors of the local economy.

Although the government insists that SMU is a "private" university, the concept of "private" is problematic because the government provides the university financial grants and physical infrastructure such as land and campus buildings. Tuition fees are regulated by the

government that they are identical to the two public universities so as to maintain the competitiveness of SMU in terms of student enrollments. Instead of seeing SMU as a true "private" university, perhaps it is more appropriate to categorize it as a "privately-run publicly-funded" university.

The creation of SMU as a "private" university had aroused discussions and debates on the possibility of having the two public universities to be privatized. Treated as statutory boards of the government, NUS and NTU have a certain degree of operational autonomy in financial and personnel matters. While the Ministry of Education (MOE) sets the overall level of public funding and spending on development projects, the two universities are granted freedom for their internal resource allocation. Nevertheless, the government rejected that there has been any plan to privatize the two public universities (MOE, 2000a). The launch of SMU has provided the government an opportunity to try out a different governance framework and also allow the three universities to compare their governance experiences and share best practices in the three universities (Teo, 2000).

Review of University Governance

It is noteworthy that the university governance and funding system in Singapore was reviewed between 1999 and 2000, whereas the UGC in Hong Kong has just launched a comprehensive review of the future development of tertiary education since May 2001. The review of university governance and funding system was aimed to ensure that the three areas of talent management, organizational processes and resource allocation are consistent with the mission and objectives of the university sector. A comparison of the university governance and funding systems between Canada, Hong Kong, the United Kingdom and the United States was conducted in September 1999 by an *ad hoc* review committee commissioned by Deputy Prime Minister Tony Tan, who is in charge of the current higher education reforms in Singapore. The review discovered that top public universities in the four selected places are endowed with a significant level of autonomy in the discourse of accountability. Flexible and market-sensitive appraisal and remuneration systems are prerequisites to enhance the quality of university administrators and academics in order to compete with world-class universities around the world (MOE, 2000b).

In July 2000, the government officially accepted the recommendations on reforming the university governance and funding system suggested by the review committee. Greater autonomous power in financial and personnel matters will be granted to the two public universities. In this case, the system of accountability is improved to ensure that public funds are properly directed towards the achievement of desired outcomes and used in an efficient and effective way. The review covered the three areas of governance principles and structures, funding policies and mechanisms, and staff management and remuneration.

In the area of governance, the MOE continues to have responsibility for framing the policy parameters for university education. In the meantime, the two public universities are to be given greater operational autonomy within a more systematic accountability framework. Internal quality reviews will become institutionalized and external reviews commissioned by the ministry are to be carried out by three years to validate the universities' internal quality reviews. Only from 2003 will the results of those reviews be used to assess the amounts of money to be allocated to the universities. Performing the role of both chief academic officer (CAO) and chief executive officer (CEO) of the universities, university heads are empowered to set up the strategic framework for their own universities.

In the area of finance, NUS and NTU are to be given more flexibility in financial management through the adoption of block grants and the use of a three-year recurrent budget planning cycle. Faculties and departments will be given one-line block budgets, which are allocated in

accordance with their specific needs, merits, and most importantly, success of meeting performance indicators. Such a practice does not only strengthen the role of faculty dean to carry out their management responsibilities in financial matters, but it also aims to support and motivate faculties, departments and academic staff members to prioritize academic activities and achieve their desired outcomes which are consistent with the needs of national and economic development. Research funding for competitive bidding will be increased in order to support the growth of research quality. Furthermore, the universities have been asked not to rely solely on the government for public funding but to diversify their sources of income.

Finally, in the area of staff remuneration and management, a new remuneration system, which consists of a basic salary and other variable components reflecting differences in performance, responsibilities and market value, will be introduced. NUS and NTU shed their civil-service salary structures and pay according to performance and market factors. This new remuneration scheme is consistent with market-driven and performance-based principles. For basic pay, there will be no automatic annual increments, which will be converted to performance-based increases. Moreover, a more rigorous system of performance assessment and evaluation will be instituted. The criteria for making decisions on rewards and recognition, including annual merit increments, promotions and the granting of tenure will be made more stringent according to expectations for staff members set up by the individual universities. More attention is to be paid on staff development in the aspects of leadership development and managerial training (MOE, 2000c; *The Straits Times*, 5 July 2000).

The Impacts of University Education Reforms

The impacts of the reforms on the university sector in Hong Kong and Singapore can be analyzed from three aspects: the managerialization and entrepreneurialization of universities, "centralized decentralization" as a new form of university governance, and the changing relationships between the state / government and universities.

Managerialization and Entrepreneurialization

With an emphasis on strengthening the executive core and management in universities for financial and personnel issues, the current university reforms, to a certain extent, promote the managerialization or bureaucratization of academic work. It is affected by the rhetoric of cost-effectiveness and efficiency with the adoption of business management approaches. Bureaucratic tendencies are emerging in universities with strengthened senior and middle management (Currie, 1998: 24). The managerial class in universities is now responsible for allocating financial resources by top-slicing and one-line budget approaches and taking in charge of quality reviews and staff appraisals. Faculty deans and department heads now have more discretionary powers to make decision with regard to financial and personnel matters. Academics have to deal with increasing paperwork in relation to quality review exercises and performance appraisals. Whereas the role of academic leaders and university managers has been strengthened, academics have to confront the "politics" of their universities when managerial powers can be abused for personal interests.

The adoption of corporate style of management among universities is at the expense of traditional ideal of collegiality among academics. Kogan (1999) suggests that strengthened university administration and management would bring about the bureaucratization of academia (p. 267). Academics now have to spend more time on developing procedures and rules for fulfilling the principle of accountability with the use of quality reviews and financial audits (Henkel, 2000: 63). The managerialization of universities gives rise to the fact that everyone is held responsible for his or her achievement and outcome in terms of teaching,

research and service. Rules and regulations are institutionalized to ensure that academics are working in line with goals of transforming their universities as world-class higher education institutions. Some academics even admit that managerialism is a fact for the academic profession. In other words, management by result and performance is now a norm for universities in most places, including Hong Kong and Singapore.

Borrowing principles and practices of corporate enterprises in the business sector, universities are profoundly affected by the rise of corporate managerialism and entrepreneurialism. Universities have to explore alternative sources of income by "jumping into the sea" to run spin-off companies and provide profit-making consultancy, teaching and research services. However, universities are not and cannot be business firms nor governmental departments. Personalized forms of leadership in the forms of dictator, tyrant and authoritarian figure do not endure in universities and "entrepreneurial" universities, in which the important concepts of university collegiality and autonomy should be reinvented.

The idea of entrepreneurialism should be interpreted as collegial entrepreneurialism. A collegial spirit should be rebuilt within departments, faculties and universities. Therefore, joint participation of faculty and administrators in a strengthened steering core is vital for revitalizing the idea of collegiality to promote a collective sense for making choices and decision around a sense of joint effort. At the same time, universities need autonomy on top of developing entrepreneurial leadership in order to put autonomy in effective use. What universities are looking for is not passive autonomy but active autonomy on top of demands for dealing with enforced accountability. The core value of entrepreneurial culture is built around self-reliance and collective awareness of forward-looking character of universities to reinvent active autonomy. Rather than treating it as a management posture that serves ventures in science and technology, entrepreneurshship is built on new foundations for collegiality and autonomy as well as sustainable achievement across the fields of research, teaching, and student learning. At the end, such an entrepreneurial university will eventually become an organizational version of civic society that mediating between the state and market instead of being dominated by either. Building a successful entrepreneurial university with a strong identity, it is based on a foundation for renewed trust between individual universities and society at large (Clark, 2001: 18-23).

Centralized Decentralization

With specific reference to the latest review of the university governance and funding system in Singapore, it is not difficult to discover an emergent trend of "centralized decentralization" to reform the university sector. Superficially, the government intends to move away from its direct interventionist control model to a more remote supervisory steering model to enhance both the efficiency and effectiveness of the university sector. Decentralization, however, is not simply about shifting power and authority but also carries with it greater responsibility for achieving desired outcomes and highest value for public money dedicated to the sector. For Singapore, decentralization cannot be seen as a move by the government to reduce its responsibilities for university education because of the problem of financial stringency. The government has always funded university education well, has a large budget surplus and sees adequate funding as crucial to the quality of education. The change is better understood as a means to empower more centralized and strengthened university administration and management in order to ensure that the development of university education is in line with the pursuit of excellence and world-class status with both internal and external quality audit exercises.

While granting individual universities greater autonomy in relation to governance, finance and human resource management matters, the notions of public accountability, responsibility and responsiveness have been strongly emphasized by the state / government

with the aim of assuring both the cost-effectiveness and managerial efficiency of the publicly-funded universities. A shift from centralization towards decentralization means the universities are faced with less restriction on how to achieve their mission and objectives. However, the decision-making power devolved from the government is now more likely to be centralized by the top management of departments, faculties and universities.

Given the emphasis on accountability and academic standards, responsibility for ensuring their achievement cannot be diffused throughout a big and complex organization. There must be strategic control from top down. Moreover, the functions of universities are no longer determined by the academic profession's discretion but are correlated to the goals of national, social and economic development in Singapore. In this sense, what the universities are facing is a trend of centralization. The case of Singapore, therefore, demonstrates the combination of both centralization and decentralization strategies simultaneously for reforming and restructuring the university sector. It is argued that the present situation in Singapore can best be understood by utilizing the concept of "centralized decentralization," by which the devolution of financial and human resource control is matched by the centralization of policy and decision-making power and strategic command in the hands of the top university management with the state authority continuing to steer university education from a distance.

Although more autonomy can be devolved to decentralized faculties and departments within a centralized university framework, such a "centralized decentralization" strategy is needed to avoid the loss of control, authoritative communication and managerial scrutiny (Watkins, 1993: 10). In order to ensure that faculties and departments are run consistently with the overall policies and strategies deemed appropriate by top management, systems of performance indicators and quality assessment are put in place to ensure a greater degree of accountability and responsiveness to centralized control.

Centralized decentralization as a strategy for reforming university education has three implications. First, it brings about changes in the role of the state / government in university education as it becomes a service purchaser instead of a provider as in the past. Second, decentralization does not necessarily mean a spreading of decision-making and managerial powers among academics. In fact, these powers become even more centralized as within the university. Finally, there is a reorientation of universities from their traditional role as cultural and academic institutions to being more corporate enterprise-like public service institutions. Universities are thus no longer immune from the competition for resources, achievement and reputation in the regional and global marketplace for higher education.

Change of the State-University Relationships

University reforms in Hong Kong and Singapore are similar in the sense that the state / government intends to make universities improving internal efficiency, internal management systems and quality assurance measures, and fulfilling market demands and requirements. Both governments are concerned about the capability of universities to improve productivity, efficiency and accountability as those in Europe and the United States. Marketization and market forces provide incentives for universities to improve the quality of education and research and to improve academic productivity. Concomitant with the growing importance of the notion of "entrepreneurial" university, new forms of governance and management have aroused widespread concerns among the academic profession. As service providers of the knowledge-based economy in the age of globalization, post-modern universities have to envisage changing relationships with the state / government. Promoted university autonomy is in exchange for greater accountability, stricter systems of performance-based finance and salary systems, and the use of market mechanisms in university education (Mora, 2001: 105-109).

In the past, the state / government could manage the finance, provision and regulation of university education as it was an elite system with very limited number of students and universities. In the context of massification, the scale of university education has inexorably become much larger that it is questionable whether the state / government alone could be simultaneously provider, financier and regulator of university education. There is a common phenomenon that most governments found it difficult to afford a mass higher education system. How the quality of education can be maintained in the process of massification is now an overwhelming concern. With the diversification of universities to cater for demands from niches, it is even more difficult for the state / government to perform the role as the sole provider of university education. The role of the state / government has been shifting towards service purchaser and facilitator.

Changing relationships between the state and universities can be examined in terms of finance, provision and regulation. From the financial perspectives, both governments in Hong Kong and Singapore intend to diversify sources of funding to make universities less dependent on the state / government as the sole source of income. Universities have to compete for research funds in accordance with performance. They are forced to explore other sources of funding from non-governmental sectors, such as tuition fees from students and social donations in the community. The establishment of the university endowment funds in Singapore is a landmark initiative invented by the government to diversify sources of university funding and to develop a culture of making donations to universities in the society.

In terms of provision, although the two governments remain as a dominant financier of university education, they have retreated from being the sole provider in the sector. This observation can be revealed from the recent development of private university, which leaves more room for the private sector to run university education. Even within the public university sector, the state / government intends to devolve and decentralize more powers and authorities to the institutional leadership and management to take in charge of internal resource allocation. The move towards performance-based salary structure, block grants and one-line budgets denote a changing role of the state / government of being more likely a purchaser of university education. Education quality is now translated into quantifiable and measurable performance indicators, which are used by the state / government to make appropriate decisions for making purchase in the sector.

As for regulation, the state / government is moving towards the direction of being a facilitator rather than a regulator because it has to create more favourable environment for universities become gain competitive advantage in the global marketplace. In Singapore, the government is going to create an internal market for university education by making both NUS and NTU to form collaborations with top universities to improve their teaching and research standards. Meanwhile, the government also works to attract top universities in the United States, Europe and Japan to set up their off-shore campuses in Singapore to compete with local universities.

The state / government is skewed to steer universities from a distance based on the principle that more autonomy for greater accountability. This implies strong university leadership and management to take the responsibility of budgetary allocation and personnel matters. University leadership has to be more conscious about the principles of cost-effectiveness and efficient management. Academics are more like academic capitalists or subsidized entrepreneurs to explore alternatives sources of funding through marketizing their research knowledge in both the commercial and industrial sectors. Students are occasionally perceived as customers as they are subsidized by the state to select their institutions and programs for their studies. To a certain extent, university education has been

"marketized" and relationships between universities and other stakeholders, such as government, students and employers can be translated into producers and consumers.

The role of the state / government in the university sector does not disappear however. Not only the state / government but also the market, community and private sector are participating in finance, provision and regulation of universities. It is also necessary to take into consideration about the ownership issue in relation to changing relationships between the state / government and universities. As the state / government continues to grasp the ownership of publicly-funded universities, which are dominating the realm of university education in the twin cities, it is argued that the role of the state / government in current university reforms remains predominant for some time unless both governments decide to privatize all public universities into private institutions.

Conclusion

University reforms are in response to the policy context of massification, which brings about tremendous financial burdens for the state / government to afford the increasing cost of university education and also widespread fears about the decline of university education quality due to the expanded size of student population in the sector. Quality assurance, private university, and governance review have become the most important themes for reforming the university sector in Hong Kong and Singapore. The three ideologies of economic rationalism, academic capitalism and corporate managerialism continue to affect the shape and direction of implementing reforms of university education in coming years when most of reform measures and policy changes are closely related to the slogans of efficiency, effectiveness and economy as those prevail in public sector reforms or known as new public management. Therefore, university reforms should be understood from the perspective of public sector reforms because the university sector has been seen as a component of public service rather than purely cultural and academic service in society. While universities are expected to become more entrepreneurial in nature with the rise of managerial stratum, both the concepts of collegiality and autonomy have to be redefined and reinvented, but not to be sacrificed, to cope with changing perceptions and demands for universities to be more non-traditional and flexible to create, transmit and apply new knowledge. While centralized decentralization has become a more obvious policy trend to enhance the cost-effectiveness and efficiency of universities, the role of the state / government has experienced unprecedented transformation and changed to become more like purchaser and facilitator for the university sector. In a deeper sense, reforming universities should be better understood as a move to restructure the relationships between universities, the state / government, and society. The tale of two cities does not end here but this paper tends to serve as a starting point for us to grasp more knowledge about the latest university reforms and their impacts on stakeholders of university education in Hong Kong and Singapore.

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