

# CHAPTER 17

## University Leadership and Governance

*Chorh Chuan Tan*

**I**n a world faced with profound challenges and opportunities, and driven by rapid disruptive change, universities can play important transformative roles. This paper argues that to be able to do so successfully a key requirement is for universities to have a high degree of autonomy, tied to adequate and diversified funding, competition for resources and clear lines of accountability to stakeholders.

### **A WORLD OF BIG CHALLENGES, OPPORTUNITIES AND CHANGE**

The major global challenges the world faces are familiar to most, ranging from climate change and environmental sustainability, to population pressures and demographic shifts, to income inequality and profound socio-political changes. (U.S. National Academy of Sciences, 2015)

The university landscape too has been impacted and transformed by powerful global drivers, particularly globalization, intense competition across all sectors, the quickening pace of technological innovation and fundamental changes in demographics and societies.

These drivers have contributed to the re-shaping of the higher education sector in a number of key dimensions: (1) massification (i.e., the broadening of access to tertiary education to increasing numbers of students per birth cohort); (2) the proliferation of new, higher educational models, including private-sector providers, a much wider range of trans-national educational partnerships and new modes of learning, including on-line or blended learning; (3) greater

scrutiny and benchmarking of output and impact against a global field; and (4) dramatic increases in international student mobility.

Universities are also increasingly called upon to fulfil expanded roles by building R&D strengths and translating these efficiently to drive economic growth and competitiveness, promote entrepreneurship and address major societal issues and challenges.

## UNIVERSITIES: BALANCING TENSIONS, MAKING CHOICES, BECOMING MORE NIMBLE

The implications for universities are great and growing. As universities seek to redesign their education, position their research, enhance their impact and strengthen their differentiation, they would need to become better and better at making good choices, balancing tensions and responding nimbly to a fluid external and internal environment. The following paragraphs outline some of the changing contexts within which universities operate.

Massification is one of the most powerful trends that is fundamentally changing the higher education landscape. Across the developed and developing world, nations are greatly expanding access and encouraging larger numbers of students to take up tertiary qualifications. Universal access, as defined by a Gross Enrolment Rate (GER) of 50% or higher (Varghese & Martin, 2013), already applies across much of the OECD, and in parts of Asia, such as Korea and Japan.

In the year 2000, 2.38% of the world's population aged 15 to 79, or an estimated 99.5 million, pursued higher education studies. This percentage reached 3.38% in 2009, and is projected to reach 8.68% or 520 million students worldwide by 2035. A large proportion of this growth will come from Asia. In 2002, higher education enrolment in East Asia and the Pacific surpassed North America and Western Europe. By 2035, East Asia and Pacific will comprise 40% of total enrolment, with South and West Asia making up another 24% (Calderon, 2012). To illustrate, by 2020, the number of tertiary educated adults in China is projected to be equal to the total working population of the U.S. — 195 million people (OECD, 2012).

In many developed countries, the expansion of higher education, as well as slower economic growth and greater expenditures in the health and social sectors, has resulted in an increasingly resource-constrained environment for universities (European University Association, 2011). In the U.S., high tuition fees and burgeoning student debt have become major political and social issues (Bowen, 2012).

In less developed nations, the traditional structure of state-supported universities is often unable to upscale and upgrade quickly enough to support the

large and anticipated influx of students. Consequently, the private tertiary education sector has grown quickly and, in some countries, has become the predominant means of access to higher education. For example, Indonesia has 83 public, but over 3,000 private higher-education institutions, accounting for more than 80% of the total market. In India, more than 50% of higher education is delivered through the private sector (Asian Development Bank, 2011).

Technology has also had a strong impact on higher education. In particular, technology offers the prospect, still largely unrealized, of enabling further massification of education with high quality and without incurring the very substantial financial outlay associated with increasing and maintaining costly higher education institutions (Christensen *et al.*, 2013).

There continues to be a positive correlation between a better-educated workforce with higher employment rates and higher wages. For example, the OECD reports, “relative earnings of tertiary-educated adults are over 1.5 times that of adults with upper secondary education, while individuals without an upper secondary education earn 25% less, on average, than their peers who have attained that level of education.” (OECD, 2013). The report adds that, in particular, well-qualified young workers will be able to enter a “high-skills, high-wage” occupation stream, which will not only raise their living standards, but over time, strengthen their competitive position. Demand is expected to remain particularly high for graduates of STEM disciplines — Science, Technology, Engineering and Mathematics (Chang, 2014).

On the other hand, however, rising graduate unemployment and under-employment are a major and growing problem in both developed as well as rapidly emerging economies such as China (Qi, 2012). Substantial mismatches between the skills possessed by graduates and the needs and demands of employers have also been reported, suggesting that many universities have not kept pace with the deep changes in the nature of work. (McKinsey Global Institute, 2012)

For universities, all these shifts pose very substantial challenges while opening up interesting opportunities. These include new institutional positioning, differentiation and strategies to attract the best students who today have a much wider range of choices; to maintain high educational quality and standards for a much larger student body; and to reduce skills mismatches and prepare graduates who are well equipped for the jobs market which itself is changing very rapidly and profoundly.

In an intensely competitive and resource-constrained environment, universities also have to place a stronger focus on growing (or maintaining) and diversifying their resource base.

At the same time, universities need to balance more and more complex tensions and choices across a wider range of areas: education and research; basic research and the demands for more immediate applied research; a broad

university agenda versus a more focused approach; and the relative prioritization of short-term versus long-term issues and challenges.

## INSTITUTIONAL AUTONOMY MATTERS

Several studies support the view that greater institutional autonomy is associated, under certain conditions, with stronger university performance based on indicators such as global rankings and output.

In the European Union, greater institutional autonomy is considered a key strategy for its higher education institutions to restructure and position themselves to compete and thrive in a changing environment. In its Scorecard II report (Eastermann, Nokkala & Steinel, 2011), the European University Association observed that autonomy is not a goal in itself, it is a vital precondition for the success of Europe's universities.

The Scorecard Report identifies autonomy along four key dimensions:

- academic autonomy (deciding on degree supply, curriculum and methods of teaching, deciding on areas, scope, aims and methods of research);
- financial autonomy (acquiring and allocating funding, deciding on tuition fees, accumulating surplus);
- organizational autonomy (setting university structures and statutes, making contracts, electing decision-making bodies and persons);
- staffing autonomy (responsibility for recruitment, salaries and promotions). (Eastermann, Nokkala & Steinel, 2011, p. 9)

The Scorecard states that autonomy is not an objective measure, but a reflection of perceptions and indications along these four key parameters.

Interestingly, the United Kingdom ranks within the top grouping on all four clusters, which correlates with the overall sense that universities in the U.K. generally enjoy higher levels of autonomy than those on the continent.

While stressing that Europe's higher education sector needs to move away from over-regulation and micro-management of universities, the EUA has emphasized that autonomy must be balanced with accountability, and that increased autonomy does not equate to an absence of regulation.

In the Salamanca Declaration of 2001, and again in the Graz Declaration of 2003, the EUA declared that: "Universities accept accountability and will assume the responsibility of implementing reform in close cooperation with students and stakeholders, improving institutional quality and strategic management capacity." (Eastermann, Nokkala & Steinel, 2011)

In a separate study, Aghion *et al.* (2009) generated several measures of autonomy, governance and competition for research funding, and reported

that university autonomy and competition were positively correlated with university research output, both among European countries and among U.S. public universities. They also found that when state universities received a positive funding shock, they produced more patents if they are more autonomous and face more competition from private research universities. The data support their hypothesis that universities that are more autonomous and need to compete more for resources are also more productive. In their words, “these hypotheses — autonomy and competition — are intertwined both in practice and logically. There is little point and possibly some danger in giving universities great autonomy if they are not in an environment disciplined by competition for research funding, faculty and students. There is little point in promoting competition among universities if they do not have sufficient autonomy to respond with more productive, inventive or efficient programs”.

For Asia, the higher education landscape is very diverse, and differs markedly across different countries. More developed and mature economies, such as Japan and South Korea, have very well regarded educational systems and highly-ranked universities at a global level. Rapidly industrializing economies, such as Indonesia and Malaysia, are seeking to rapidly improve the scale and quality of their tertiary sector. Emerging economies such as Vietnam and Mongolia grapple with broadening access while raising quality, within constrained financial and manpower resources. Overall, autonomy for higher education institutions is part of a broader and more comprehensive higher education reform agenda being undertaken across Asia, with differing speeds and approaches.

In a World Bank paper comparing East Asian universities which have ranked well in the Shanghai Jiao Tong University’s Academic Ranking of World Universities (ARWU), four countries were highlighted as having strong performance, after factoring their total population and annual citations per population: Singapore, South Korea, Japan and China (in order of ranking) (Fiszbein & Ringold, 2012). The paper further noted that to achieve optimal results, institutional governance should not be considered in isolation from system-wide governance. National objectives, policies and regulatory robustness are also key components to drive and support continued development. University autonomy in and of itself is “not sufficient for good governance”.

## THE APPROACH IN SINGAPORE

Over the past two decades, the Singapore government has progressively given the publicly funded universities more autonomy while maintaining a strong level of funding support.

In 2006, the government corporatized the National University of Singapore and the Nanyang Technological University as not-for-profit companies limited by guarantee. The key goal was to allow greater autonomy for the universities

so that they could be more nimble and competitive to achieve excellence in education and research (Ministry of Education, Singapore, 2005).

Corporatization encompassed wide-ranging and fundamental changes involving organizational autonomy, financial arrangements and the evolution of the Ministry of Education's role in supervising and monitoring the higher education sector.

Of particular importance was the establishment of the University's Board of Trustees as the principal governing body. The relationship between the university and Ministry of Education was formalized through the Policy Agreement defined by the Ministry to which the universities must abide, and a Performance Agreement initiated by the university and agreed to by the Ministry, which sets out the goals, strategies and key thrusts and programs of the university over a five-year period, together with the indicators by which progress and performance would be tracked.

Corporatization was closely tied to an enhanced accountability and Quality Assurance Framework which included annual reviews by the Ministry and an in-depth evaluation of the university every five years.

I believe that this far-sighted and bold move by the Singapore government has been a major enabling factor in the continuing strong progress of Singapore's autonomous, publicly funded universities at both the local and global levels.

The next section outlines some of the most important implications and consequences of this corporatization initiative as exemplified by the experience of the National University of Singapore.

## **CORPORATIZATION: — THE EXPERIENCE OF THE NATIONAL UNIVERSITY OF SINGAPORE**

Corporatization has impacted virtually all aspects of NUS but for the purposes of this discussion, I will highlight three areas which I feel have been of greatest significance.

Firstly, corporatization provided a powerful impetus for NUS to think fundamentally, boldly and long-term about its strategic positioning and goals. Corporatization also gave NUS the means by which these goals could be quickly and effectively translated into thrusts, programs and actions, as well as the nimbleness to adapt to changing circumstances.

Following corporatization, NUS established a new strategic planning cycle and integrated it closely with its resource allocation framework (covering funding, human resources and space). A much more robust and comprehensive monitoring system was also developed to track progress and underpin accountability. Corporatization also encouraged and enabled the much

longer-term planning necessary for transformative change, while allowing nimbleness to adapt and respond quickly in the shorter-term.

In mapping our goals and strategies, a major consideration was the incorporation of national interests, objectives and concerns into NUS plans and programs. We considered this to be an essential role of a national university and part of the university's accountability to its stakeholders.

This does not imply a narrow mapping of NUS programs to articulated national goals. For example, NUS felt that it would far better serve the local community by being a global university centred in Asia, rather than an inwardly facing institution. Also, we believe it is important for the university to have within its portfolio of initiatives a good number which may be unconnected to shorter-term local interests. This is because the university needs to think independently about the future and how it can create value in the longer term.

Secondly, corporatization resulted in the substantial enhancement of professional and administrative capabilities and the creation of new competencies, necessary for competitiveness in the global higher education sector.

Nearly all functions in NUS were enhanced or revamped in the run-up to, and as a result of, corporatization. For example, the traditional Bursar's function was fundamentally upgraded into new resource planning and financial services capabilities, that today encompass all funds budgeting, long-term financial planning, a long-range capital plan that extends 15 to 20 years, efficient treasury functions, and so on. The campus infrastructure group was very substantially strengthened to enable high quality physical planning and construction, facilities renewal, integration of environmental sustainability measures over a multi-year time frame. New capabilities that had to be built included a development office to raise substantial philanthropic support and an investment office capable of providing good returns on NUS endowment investments.

Very importantly, corporatization further extended NUS human resource flexibility and responsiveness to effectively nurture, retain and attract talented faculty, staff and students in a vastly more competitive landscape.

Finally, corporatization is engendering a much stronger sense of collective ownership and participation amongst faculty, staff and students. It is important to note that when we speak of autonomy, there is a question of where the "centre of gravity" of autonomy should best lie. One key consideration in this regard is the balance between centralization and decentralization within the university. In the case of NUS, our goal is to create a system and structure which enable individual faculty and staff initiative, and which encourage Schools to be dynamic, while preserving the ability to work together well towards collectively defined goals. This is not a simple task and requires continual attention. Overall, however, while this is difficult to measure, my own sense is that corporatization has contributed in a major and exciting way, to the growing dynamism and "can-do spirit" within the NUS community.



## REFERENCES

- Aghion, P., Dewatripont, M., Hoxby, C., Mas-Colell, A. & Sapir, A. (2009). "The Governance And Performance Of Universities: Evidence From Europe And the US". *Economic Policy* 25 (61): 7-59 <http://www.nber.org/papers/w14851> (Accessed: 14 Jul 2014).
- Asian Development Bank (2011). *Higher Education Across Asia: An Overview of Issues and Strategies* | Asian Development Bank. [ONLINE] Available at: <http://www.adb.org/publications/higher-education-across-asia-overview-issues-and-strategies>. [Accessed 14 July 2015].
- Bowen, William G. (2012). "The 'Cost Disease' In Higher Education: Is Technology The Answer?" *The Tanner Lectures*, Stanford University. <http://ithaka.org/sites/default/files/files/ITHAKA-TheCostDiseaseinHigherEducation.pdf> (Accessed: 14 Jul 2014).
- Calderon, Angel (2012). *High Education in 2035 — The Ongoing Massification*, Available at: [http://www.academia.edu/2612867/High\\_Education\\_in\\_2035\\_The\\_Ongoing\\_Massification](http://www.academia.edu/2612867/High_Education_in_2035_The_Ongoing_Massification) (Accessed: 14 Jul 2014).
- Chang, Li (2014). "International Student Mobility Trends 2014: The Upward Momentum Of STEM Fields". *World Education News And Reviews*. <http://wenr.wes.org/2014/03/international-student-mobility-trends-2014-the-upward-momentum-of-stem-fields/>.
- Christensen, G., Steinmetz, A., Alcorn, B., Bennett, A., Woods, D. & Emanuel, E. J. (2013). *The MOOC Phenomenon: Who Takes Massive Open Online Courses And Why?*, Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2350964](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2350964) (Accessed: 14 Jul 2014).
- Eastermann, T., Nokkala, T. & Steinel, M. (2011). *University Autonomy In Europe II — The Scorecard*. European University Association, Brussels. <http://www.eua.be/university-autonomy-in-europe>.
- European University Association (2011). *Impact Of The Economic Crisis On European Universities*, Available at: [http://www.eua.be/News/11-01-07/Impact\\_of\\_the\\_economic\\_crisis\\_on\\_European\\_higher\\_education\\_EUA\\_publishes\\_latest\\_update\\_ahead\\_of\\_major\\_new\\_report.aspx](http://www.eua.be/News/11-01-07/Impact_of_the_economic_crisis_on_European_higher_education_EUA_publishes_latest_update_ahead_of_major_new_report.aspx) (Accessed: 14 Jul 2014).
- Fiszbein, Ariel & Ringol, Dena (2012). *Benchmarking The Governance Of Tertiary Education Systems*. World Bank Group, Washington, D.C. <http://documents.worldbank.org/curated/en/2012/01/24022077/benchmarking-governance-tertiary-education-systems> (Accessed: 14 Jul 2014).
- McKinsey Global Institute (2012). *The World At Work: Jobs, Pay, And Skills For 3.5 Billion People*. Available at: [http://www.mckinsey.com/insights/employment\\_and\\_growth/the\\_world\\_at\\_work](http://www.mckinsey.com/insights/employment_and_growth/the_world_at_work). (Accessed: 14 Jul 2014).
- Ministry of Education (2005). *Autonomous Universities — Towards Peaks Of Excellence*, Ministry of Education, Singapore. <http://www.moe.gov.sg/media/press/2005/UAGF%20Preliminary%20Report.pdf>
- OECD (2012). "How Is the Global Talent Pool Changing?" *Education Indicators in Focus*, (5), [Online]. Available at: [http://www.oecd-ilibrary.org/education/how-is-the-global-talent-pool-changing\\_5k97krns40d4-en](http://www.oecd-ilibrary.org/education/how-is-the-global-talent-pool-changing_5k97krns40d4-en) (Accessed: 14 July 2015).



- 
- OECD (2013). *Education at a glance 2013: OECD indicators*. OECD, Paris. <http://www.oecd.org/edu/eag2013%20%28eng%29--FINAL%2020%20June%202013.pdf> (Accessed: 14 Jul 2014).
- Qi, Wang (2012). "570,000 Graduates Unemployed, And Why So?". Sina.Com. <http://english.sina.com/china/2012/0611/475714.html>
- U.S. National Academy of Sciences (2015). *Global Challenges*, Available at: [http://sites.nationalacademies.org/international/international\\_052200](http://sites.nationalacademies.org/international/international_052200) (Accessed: 14 Jul 2014).
- Varghese, N.V. & Martin, Michaela (2013). *Governance Reforms And University Autonomy In Asia*. Available at: [http://publications.iiep.unesco.org/Governance-reforms-and-university-autonomy-Asia?filter\\_name=varghese](http://publications.iiep.unesco.org/Governance-reforms-and-university-autonomy-Asia?filter_name=varghese) (Accessed: 14 Jul 2014).