Chapter 1 The Political Economy of Higher Education Governance in Asia: Challenges, Trends and Trajectories



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Introduction

At a conference on 'University Cooperation and Asian Development' (UCAD) sponsored by the Asia Foundation at the University of Hong Kong in 1966, some twentynine university delegates from around Asia, Australia and the USA, and representatives from leading organisations such as the Rockefeller Foundation, United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the Ford Foundation, pondered the merits and practicalities of inter-university cooperation, with the links between regionalisation, internationalisation and the development of Asia's higher education sector an implicit rationale of the conference (Nelson 2013, p. 242). As Nelson noted, the conference was telling on a number of fronts. Of the twentynine academic participants, for example, twenty-three held advanced degrees from American universities while the other six held advanced degrees from either Cambridge or Oxford; only one delegate held a doctoral degree from an Asian university (University of Tokyo), underscoring the continuing dominance of Anglo-American leadership in the sector (ibid). On another front, several delegates noted the strange paradox of economic modernisation in some Asian states but the absence of more robust growth in the academic scope of universities. One of the delegates from Japan, for example, lamented the narrow 'focus on technology in Japanese universities' to the detriment of growth in the social sciences and humanities, creating sectoral and institutional imbalances atypical of their Western counterparts (cited in ibid., pp. 244–245). Some noted the need for more material assistance not just in terms of resources but in developing the institutional and governance contexts that would

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K. H. Mok Lingnan University, Hong Kong, China enable the rapid evolution of Asian universities and their competitive international positioning, while still others identified the need for indigenisation—that is, rather than studying abroad, programmes should be provided by Western institutions for students *in Asia* so that they received more 'pertinent and applicable' training relevant to the local conditions they would encounter upon graduation. Above all, the overriding theme for delegates to the conference was how to harness cooperative regional and international arrangements in order to leverage resources, know-how, institutional knowledge and capacities that would allow Asian universities to catch up with their Western counterparts.

As this chapter will argue, the context, themes and purpose of the 1966 UCAD conference retain contemporary significance. Despite the emergence of several leading, highly ranked Asian universities, Asia continues to be a region largely comprised of what we term 'failed education states'; that is, despite narratives that celebrate Asia's economic transformation and modernisation, or which point to Asia's increasing centrality in the global economic system, this is not necessarily reflected in its higher education systems. In this chapter, we adopt a contrarian perspective, not to rebuke the economic realities of a fast-transitioning region so much as to question the assumed causality between economic growth and Asia's impending leadership in higher education. We thus situate our analysis in a Polanyian theoretical framework to counter what we argue are superficial and analytically ill-informed assumptions about the developmental trajectories of Asia's higher education systems, highlighting instead the sociopolitical and institutional contexts that variously constrain and shape outcomes in Asia's higher education sectors. Successful higher education systems, we argue, are rarely if ever the outcome of singular policy instruments, and still less of top-down resource strategies (add resources and stir). Rather, they represent a myriad of governance systems, policy instruments, institutional endowments and sector-specific academic cultures situated amid complex state-society relations. Indeed, insofar as issues of governance, state-society relations and the relationship between the state and university determine outcomes for sector performance, the institutional autonomy of universities, academic freedom and thus the prospects for research innovation and leadership, our analysis highlights continuing and substantial hurdles for the successful development of higher education systems in Asia. In particular, we draw attention to a preponderance of governance deficits—albeit unevenly experienced in the region—which manifest as various forms of illiberalism and often combined with patrimonial social relations and centralised administrative traditions. Taken together with non-secular state practices, censorship, political intervention and persistent practices of non-merit-based promotion, these diminish the prospects for systemic or institutional innovation and pose serious barriers to sector development, irrespective of the trajectory of economic growth and potential increases in resource availability.

Further, we argue, a broad survey of Asia's evolving higher education landscape reveals not only great unevenness, as might naturally be expected, but also sectoral bifurcation, particularly in terms of developmental trends in STEM (science, technology, engineering and math) compared to the social sciences and humanities. This bifurcation is most obvious in terms of quality, highlighting the importance of

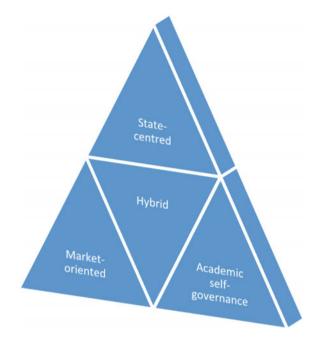


Fig. 1 Higher education governance typologies

political, social and institutional contexts as important determinants impacting the evolution and trajectories of Asia's higher education systems and institutions.

To demonstrate our argument we survey several higher education systems across Asia, grouped by region (Southeast and Northeast Asia) and analysed in relation to a series of qualitative institutional, political and social contexts: firstly, what we term higher education governance indicators such as merit-based recruitment, promotion and remuneration, censorship, institutional and academic autonomy (among others); and secondly, quantitative performance-based indicators such as bibliometric and research performance, reputational and esteem rankings. We draw upon the comparative conceptual framework developed by Dobbins et al. (2011) that sees governance of higher education (HE) as interrelated processes of control, coordination and the allocation of autonomy between three levels—the state, professoriate and university management—and broadly reflected in three typologies of governance: (a) state-centred; (b) market-oriented; and (c) academic self-governance (Dobbins et al. 2011). We use these as a broad analytical rubric through which to understand patterns of HE governance in Asia (see Fig. 1 and Table 1).

While our analysis is far from comprehensive, given its geographic scope and the limitations of space, our primary concern is to highlight a more complex and arguably more compelling set of contextual circumstances that shed light on those forces shaping the performance of higher education systems and institutions in Asia in order to offer a more nuanced analysis of HE developmental trajectories.

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Table 1 Higher careation governmence typologies	ypotogics		
	State-centred model	Market-oriented model	Academic self-governance model
Institutional structures of the university			
Dominant decision-making actors	State	State/university management	Community of Scholars/Professional chairs
Organisational structure	State agency	Enterprise	(Corporatist) state–university partnership
Dominant management approach	Bureaucratic	Entrepreneurial	Collegial, federation of chairs
Primary mission of the university	Satisfying state socio-economic objectives	Provision of services to 'academic consumers' and satisfying market demands	Academic freedom and long-term commitment to the production of knowledge
Patterns of control and quality evaluation	ис		
Who controls/evaluates?	Ministry	(State or quasi-governmental) accreditation/evaluation bodies	Self-evaluation by university. Academic peer review (within broad regulatory framework set by the state)
What is controlled?	Academic processes	Quality of academic products	Quality of research output, publications
When does evaluation take place?	Ex ante	Ex post	Not systematised; university dependent
Focus of quality evaluation	National/state objectives	Local, regional, global economic demands; efficiency, flexibility	Meeting scientific/research objectives
Relations to the state and society			(1

(continued)

Table 1 (continued)

Table 1 (continued)			
	State-centred model	Market-oriented model	Academic self-governance model
State control instruments	Manpower planning system design	Incentives for competition, quality improvements	Financial, legal framework
Orientation and utility of teaching and research	State defined	Market demands	Scientific/intellectual advancement
Economic and employer stakeholders			
Function	Control	Marketing	Limited (potentially: external defenders of the institution)
Appointed by	State	University management	Academia
Funding			
Main funding base	State budget (university budget integral part of state budget)	Competitive and diversified (tuition, donations, research grants, private entities, state)	State budget (with own university budget)
State funding approach	Itemised (low budgetary discretion for universities)	Lump sum (high budgetary discretion for university management)	Mixed-type (high budgetary discretion for university)
Allocation within university	Input-based → Output-based (objectives defined by the state)	Output-based (objectives defined by university)	Input-based (objectives negotiated by the state and universities)
Strategic investments	State defined	Multifaceted (undertaken by university management, faculties, via spin-off companies, technologies, centres)	Occasional, chair-based (occasionally undertaken by chairs and departments, university managers)
Personnel autonomy			
Recruitment of high-level academic staff	Appointed by state	Elected by faculty/ university management	Elected by professoriate
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	State-centred model	Market-oriented model	Academic self-governance model
Recruitment of high-ranking administrative staff	Appointed by state	Elected by university management	Elected by professoriate
University autonomy to dismiss high-ranking academics	No. State competence; frequent tenure (dismissal for ideological non-compliance in authoritarian/ non-democratic or patrimonial sociopolitical contexts)	Yes (for lack of productivity, poor outcomes; limited tenure privileges)	No. Frequent tenure (dismissal only for severe misconduct)
Professional background of rectors/ deans	Public administration	Management	Scholar/ chair holder
Participation of academic staff in administrative management	Limited	Moderate	High
Substantive autonomy			
Setting academic profiles/curriculum design	State/academia	University management/academia	Academia
Setting strategic goals	State	University management/academia	Academia
Determining the research profile	State/academia	University management/academia	Academia
Setting accession conditions, size of institution and core specialisations	State	University management/academia	Academia

Source Adapted from Dobbins et al. (2011)

The False Logic of Economism: Economic Growth and Higher Education

At the time of the UCAD conference in 1966, Asia's lagging higher education systems reflected several intertwining historical legacies: the North–South (centre–periphery) divide and the international division of labour which had advantaged the West as the hub of scientific knowledge and academic standing; the Cold War politics of the era and Western aid which often 'migrated' Asian talent to study (and work) in the West through philanthropic and soft-power scholarships; Asia's uneven economic development and under-investment in the sector which depressed sector expansion, participation, career and research options; and Asia's traditionally bureaucratised, hierarchical and seniority-based governance cultures which tended to obfuscate innovation or sector reform.

Fifty years hence and the world has changed—and, apparently, dramatically so. The ills that beset Asia's higher education sector would appear to have dissipated—if not absolutely then significantly. The international division of academic labour that accompanied the Cold War and which saw Asian powers such as China and Vietnam (among others) locked within the Soviet sphere of influence and linguistically insulated from English-language scientific communication has largely abated (Altbach 2016b, pp. 3, 8-9). More broadly, the centre-periphery relationship that defined Anglo-American and Asian academic spaces has frayed, with the emergence of successful universities and research centres and with educational attainment in various Asian states deepening in terms of rates of participation and quality measures. The predominantly insular nature of Asian HE systems has also been impacted (albeit unevenly) by international trends associated with competitive global and regional rankings, an increasing emphasis on teaching quality, research productivity and graduate learning outcomes. Indeed, to the extent that research on HE in Asia has a common undergirding rationale, this is overwhelmingly themed around issues associated with expansion, massification, growing investment and excellence in research—and even the emerging possibility of global research leadership (Kim 2016; Kitamura et al. 2014; Neubauer 2012).

The reasons for such optimism are not hard to discern. Asia's new-found wealth has transformed the region. In 1980, roughly 20% of global economic activity was accounted for by Asia, compared to 32% by Europe. By 2012–13, these positions had been inverted (Swanson 2015). And while the USA remains the single largest economy in the world, accounting for approximately 24% of global GDP, by 2029 China is expected to surpass the USA to become the world's largest economy—although its GDP per capita is expected to remain at approximately 35% of that of the USA (Willige 2016). Asia's economic dynamism, in other words, is likely to be structurally transformative, not just to the constellation and distribution of global economic power, the locus of production, manufacturing and assembly, but also to knowledge production and research, potentially displacing the West's leadership in higher education or at least posing significant competition to it. Popular narratives thus hold that the rise of Asia has reached the 'scales of global knowledge' (Lehmann

2017), with many of Asia's universities, if not already at 'the top of the class', then destined to be so (Levin 2010). Forecasts suggest that Asia will be the 'next higher education superpower' (Bhandari and Lefebure 2015; Cummings 2010; Marginson 2011b) with countries such as China poised to dominate global research leadership with as many as forty-two world-class universities by 2050 (Asian Correspondent 2017; Grove 2017).

Ashley, Polanyi and the Dangers of Linear Forecasting

The optimism inherent in such prognostications is clearly informed by what we might term an *economic essentialism* in which economic growth is implicitly correlated with various forms of institutional modernisation and deepening institutional capacities, but also with a techno-scientific rationality in which the interests of the economy discipline or at least supplant politics and discrete institutional types to form more or less similar systems of sociopolitical management and functional institutional outcomes. The logic of economism, in other words, tends to set aside politics, political context, the specificity of social relations or of discrete institutional forms. As Richard Ashley observes, the logic of economism exaggerates 'the economic sphere's importance in the determination of social and political relations' and correspondingly underestimates 'the autonomy and integrity of the political sphere' (Ashley 1983, p. 463). For Ashley, there are three implicit modes of economism:

variable economism, where political outcomes are said to be attributable wholly or predominantly to economic causes, logical economism, where ... political life is interpretable only insofar as it can be comprehended within the framework of economic logic, and historical economism, involving a double limiting of state practice ... [in the] ... reproduction of an economistic social order. (ibid.)

Ashley explored the fallacy of the logic of economism in the case of international relations and US triumphalism in the post-Cold War period, when various liberal theorists argued that the establishment of a free market multilateral world order would act as a fulcrum disciplining more economies to rule-based governance—dominated by the USA—and captured in Francis Fukuyama's 'end of history' thesis in which the economic rationality of globalisation was sublimating politics and nation states (Fukuyama 1992; see also Keohane 2002; Keohane and Nye 1977).

Ashley's analysis, of course, is a novel restatement of Karl Polanyi's rejection of economic determinism. In his study of the origins of free market capitalism and its seemingly insurmountable domination of the European order, Polanyi eloquently highlights the contingent nature of what he termed the 'great transformation' and the historically specific series of sociopolitical processes which had embedded market-based orders within certain political contexts (Polanyi 1957). There was, in other words, no determination of social and/or political relations by the market, but only ever of exchange relations by political and social accommodations—the stuff of history and political contestation.

Both Ashley's and Polanyi's insights bear repeating, especially since so many of the social 'sciences' embrace the logic of economism as the main epistemological lens by which to understand the forces propelling change, probable historical destinations and the character and composition of social and institutional orders that will 'naturally' follow. The popular embrace by social, political and economic commentators of linear economic forecasting, for example, in which contemporary economic growth data are extrapolated to project the future ranking of economies or the structural composition of the global economy, misses entirely the central place of politics, social orders and institutional contexts in mediating historical outcomes. The World Bank's infamous forecast in 1961, for example, that Burma (Myanmar), Ceylon (Sri Lanka) and the Philippines were the 'most likely candidates in Asia to follow Japan into sustained economic growth', in part reflecting their economic performance, consistently superior GDP per capita income compared to other Asian states and robust export sectors, bore no relation to subsequent trajectories. Rather than 'taking off' in the Rostowian sense, each of these states became 'developmental disasters', descending to the brink of failed states and into dire poverty—where they remain to this day (Coclanis 2013; Rostow 1971). Similarly, Jim O'Neill's celebrated forecast in 2001, based on ten years of economic growth data, that Brazil, Russia, India, China and South Africa (the BRICS) would dominate and transform the global order by 2050, seems likely to be proven wrong (O'Neill 2001). By 2015, for example, O'Neill was forced to revise the idiom to the 'IC' (India and China) economies, noting that Russia, Brazil and South Africa had faulted as emerging economic powerhouses due to various political factors (O'Neill 2015).1

The point, of course, is that the logic of economism provides scant evidence of any natural causality between economic growth and institutional or systemic outcomes, while linear economic forecasting highlights the dangers of assuming that historical, political or social outcomes are 'attributable wholly or predominantly to economic causes' (Ashley 1983, p. 463). Put another way, it is not economic growth which kickstarts forms of institutional modernisation or innovation, but transformations within sociopolitical institutional contexts that facilitate the emergence of specific modes of productive economic activity. There is thus ample precedence to reject, or at least be sceptical of, analytical frameworks that posit a natural causality between economic growth and Asia's projected performance in higher education and research. Indeed, we suggest this is a less than useful prism by which to understand the political, social and institutional forces mediating change in higher education in Asia and the substantial barriers to reform and innovation that persist.

¹The BRICS formed into a loose international coalition (initially without South Africa) in a summit in 2008; it collaborated to create the BRICS Development Bank in 2014, driven and substantially resourced by China, and now referred to as the New Development Bank, headquartered in Shanghai. Much like its namesake idiom, however, with domestic political and economic disruptions in Russia, Brazil and South Africa, the international significance of the forum relative to other multilateral groups has diminished (see Abdenur and Folly 2015).

The Political Economy of Higher Education Governance: Southeast Asia

Popular depictions of a 'rising Asia' or an 'Asian century' are replete with what Lee calls 'conceptual ambiguity' since they give 'the illusion of political and perhaps even ideological cohesion' (Lee 2016, p. 9). As a geographic and economic moniker, 'rising Asia' thus requires serious and sustained contextualisation in order for the vast diversities of wealth, development, politics and state-society relations to be fully understood. Indeed, outside of Japan, Taiwan, South Korea, the city state of Singapore and Hong Kong SAR (China), few other geographic entities in Asia have transitioned into a high-income economy—defined by the World Bank as economies with a GNI per capita greater than US\$12,475 (World Bank 2016).² In economic terms, the 'Asian Century' has thus been geographically discrete, mostly confined to Northeast Asia and most recently to wealth creation in China (predominantly Eastern China). Southeast Asia, by contrast, has remained mired in widespread poverty and underdevelopment, especially in Indochina (Cambodia, US\$1140; Laos, US\$2150; Vietnam US\$2060; and Myanmar US\$1190), with countries such as Indonesia (US\$3400) and the Philippines (US\$3580) performing somewhat better but clearly outpaced by levels of economic development in Malaysia (US\$9860) and Singapore (US\$51,880).³

Indonesia: Systemic Failures and Enduring Obstacles

Perhaps not surprisingly, apart from Singapore and Malaysia, higher education systems in Southeast Asia thus continue to suffer resource challenges, are not competitive in terms of attracting international talent due to low levels of remuneration, and generally struggle in terms of quality (Heyward and Sopantini 2013). In Indonesia, Southeast Asia's largest economy and the world's fourth most populous nation, for example, the sector has consistently performed poorly despite repeated policy attempts since the mid-1990s to increase 'quality, responsiveness, and accountability of its universities' and efforts to have several Indonesian universities ranked within the top 500 globally within a decade (Negara and Benveniste 2014; Rakhmani 2018; see also Rosser, this volume). The establishment of a national-level task force, political announcements supporting sector reform and changes to the constitution in 2002 requiring the government to commit 20% of its total budget to education have generally failed to produce net positive outcomes (Logli 2016; World Bank 2013). Currently, not a single university in Indonesia is ranked in the top 500 World University Rankings, with the country's three most esteemed universities (University of Indonesia, Bandung Institute of Technology and Universitas Gadjah Mada) ranked

²The only other examples are Brunei Darussalam (US\$32,860) whose wealth is singularly attributable to resource extraction (oil) and Macau, SAR, China (US\$65,130) which derives 88% of its entire GDP from 'gambling services'.

³GNI per capita, Atlas method, current US\$; see World Bank (2017).

Country	Number of HEIs in top 801–1000	Number of HEIs in top 601–800	Number of HEIs in top 401–600	Number of HEIs in top 201–400	Number of HEIs in top 101–200	Number of HEIs in top 51–100	Number of HEIs in top 1–50
Cambodia							
Indonesia	3						
Laos							
Malaysia	1	5	1	1			
Myanmar							
Philippines		1					
Singapore						1	1
Thailand	5	3	1				
Vietnam							
Total	9	9	2	1		1	1

Table 2 The world university rankings: Southeast Asia 2018

Source Times Higher Education World University Rankings 2018. https://www.timeshighereducation.com/world-university-rankings/2018/world-ranking#!/page/0/length/25/sort_by/scores_citations/sort_order/asc/cols/scores

between 801 and 1000 (see Table 2) (OECD/ADB 2015; Times Higher Education 2018, p. 205). Despite legal requirements, spending on higher education remains low by regional and international standards (0.3% of GDP as of 2009), adversely impacting investment in research and development (0.09% of GDP as of 2012) (Logli 2016). While spending on higher education as a proportion of the central government budget has increased from 0.92% in 2007 to 2.76% as of 2011, compared to neighbouring Malaysia or Singapore the sector continues to be under-resourced (OECD/ADB 2015, pp. 197–198, 207).

With low levels of investment, Indonesia struggles to produce sufficient academic labour to populate the sector or allow for rapid expansion. The number of domestically trained PhDs in 2013, for example, was a mere 1765 from a population base of 261 million. As the World Bank notes, this contrasts poorly with countries such as Brazil which, with a much smaller population, annually train some 10,000 new PhDs. (Negara and Benveniste 2014, p. 35). As a consequence, only 10% of academic labour in Indonesia's public universities hold a Ph.D., a third have a Bachelor's degree, with

⁴We recognise that university rankings are not the ultimate measure of excellence or achievements in teaching and research. Rather, they capture a broad cross section of performance metrics in research, teaching, internationalisation and other related esteem measures. We use only the Times Higher Education World Universities Rankings (THE WUR) data; we believe this is the most objective of all the available university rankings indices insofar as it does not use surveys based predominantly on reputational perceptions but metrics drawn from five areas weighted as follows: teaching (30% of the total score), research (30%), citations (30%), international outlook (7.5%) and industry income (2.5%). See https://www.timeshighereducation.com/world-university-rankings/methodology-world-university-rankings-2018. (See also Hazelkorn 2017; Marope et al. 2013; Pratt 2013; Pusser and Marginson 2013).

the remaining holding diplomas or other post-secondary qualifications (Negara and Benveniste 2014, p. 35; OECD/ADB 2015, p. 214). Such low rates of advanced doctoral training have obvious implications for research quality and productivity, with the country producing on average just 1000 papers a year between 1996 and 2011, increasing to 11,765 articles in 2016 (see Table 3)⁵ (Yasih and Mudhoffir 2017). But while there is evidence of an upward trend in the overall number of research outputs, research productivity continues to lag substantially behind neighbouring countries. According to the Global Innovation Index, for instance, Indonesia is 'grouped between "under performers" (Venezuela and Algeria) and "learners" (Malaysia and Thailand)' (Global Innovation Index as quoted in Moeliodihardjo 2014, p. 3; see also OECD/ADB 2015). Relatedly, the level of international research collaboration has also been declining, with the percentage of papers that are internationally co-authored falling from approximately 81% in 2003 to 57% in 2011 (UNESCO 2014, p. 84).⁶ Perhaps more importantly, the impact of the research produced is one of the lowest in Southeast Asia. According to bibliometric measures produced by SCImago, for example, the 11,765 published articles received just 4604 citations, lower than the absolute number of citations for published outputs in Vietnam (4970) and Thailand (11,331) (Pelupessy 2017). This is also confirmed by the OECD, which notes that a large proportion of the scientific research produced in Indonesia falls below the world average in terms of relative citation impact (OECD 2013a, p. 166).

These realities contrast sharply with Indonesia's otherwise robust recent economic performance, with increasing domestic private consumption and annual GDP growth rates hovering above 5% since 2004 (World Bank 2018). Indeed, the economic narratives surrounding Indonesia are invariably of ever-deepening success; 'the largest economy in ASEAN (Association of Southeast Asian Nations)', one of the 'best economies in the G20' and 'predicted to become the world's fourth-largest economy by 2050' (de Haan 2017, p. 2; Legowo-Zipperer 2017; Oberman et al. 2012). Clearly, the causes of underperformance in Indonesia's higher education system are not related to declining national economic capacity. Rather, they relate to the political, institutional and social contexts that govern the sector. Several of these are readily apparent; in particular, the governance legacies set in place as a result of Suharto's New Order, political contestation vis-à-vis public and private interests, as well as interventions by multilateral organisations to encourage private sector participation in higher education provision (Robison 1986; Robison et al. 2005).

⁵The World Bank estimates that research productivity per academic staff is roughly around 0.4 research outputs per year, well below international standards (Negara and Benveniste 2014, p. 36). ⁶The extremely low base of research output is also noted by the OECD in the organisation's country background report, which highlighted that 'an increase in research output and research papers in recognised international journals written by Indonesian researchers', in part reflected 'co-operation with foreign researchers', and grew 'from 578 research papers in 2000 to 1142 papers in 2008'—significant growth to be sure but still lagging behind equivalent-sized economies (OECD/ADB 2015, p. 202).

⁷Indonesia performs least well relative to other countries in Asia in terms of citations per document. In 2016, for example, citations per document were 1.26 (Pelupesssy, 2017).

 Table 3
 Research output rankings, Asia 2016

Rank	Country	Documents	Citable documents
1	China	483595	472441
2	India	148832	137824
3	Japan	126294	116692
4	South Korea	81099	77727
5	Taiwan	36902	35003
6	Malaysia	29739	28585
7	Singapore	20985	19167
8	Hong Kong	17632	16183
9	Thailand	14608	13678
10	Indonesia	12185	11765
11	Vietnam	5768	5508
12	Philippines	3021	2790
13	Macao	1268	1199
14	Brunei Darussalam	519	456
15	Cambodia	387	368
16	Myanmar	306	286
17	Laos	267	253
18	North Korea	40	40
19	Timor-Leste	28	25

Source SCImago Journal & Country Rank (Scopus, Elsevier B.V): https://www.scimagojr.com/countryrank.php?year=2016®ion=Asiatic%20Region

Indonesia's Governance Legacies

One of the obvious barriers to sector reform insofar as public universities are concerned remains the stifling level of centralised control over all facets of university activities exercised by the Ministry of Education and Culture (MoEC) and the Director General of Higher Education (DGHE). The MoEC, for example, determines the budget allocations to each public university and issues budgets which are based on permitted line-item expenditures and overseen by the DGHE and the state auditor. As Negara and Benveniste note, public higher education institutions (HEIs) have 'very little financial autonomy' with government funding for public and private HEIs 'rigidly pre-allocated into an annual line-item budget' with HEIs 'not permitted to make adjustments to these budgets', which, because of their short-term nature, 'makes funding long-term programmes much more difficult (regardless of the programmes' performance)' (Negara and Benveniste 2014, p. 45). This allows the MoEC to stipulate university activities and performance indicators and thereby align specific institutional goals and objectives with those of the MoEC. Further, the MoEC regulates the programme offerings of HEIs, their duration and degree requirements,

with HEIs required to seek MoEC approval for the development, implementation and discontinuation of all degree programmes (ibid., p. 44; see also Nizam and Nurdin 2014). The only academic autonomy HEIs enjoy relates to the determination of student admissions/rejections, although even here there are limitations: the MoEC stipulates admission requirements and standards and, under more recent policies, has mandated student admissions on the basis of locality and socio-economic underprivilege, with at least 50% of students required to be admitted via the 'National Admissions Scheme' (also centrally administered) (Negara and Benveniste 2014, p. 44; OECD/ADB 2015, pp. 191–194).

Similar rigidities can also be observed in relation to staffing at public HEIs. Both administrative and teaching staff are considered civil servants, such that hiring and firing is handled by the State Civil Service Agency (BKN). This provides for little institutional say in hiring processes, targeting specialist niche areas for development, or developing research/expert clusters subject to merit-based recruitment practices. Rather, as Negara and Benveniste note, 'newly recruited teachers are granted lifetime tenure after a maximum of two years ... and face long, bureaucratic processes if they wish to move' from one institution to another, while promotions 'generally occur automatically after employees have fulfilled specific administrative requirements', with university administrators lacking authority 'to adjust salaries and incentives in response to employees' performance' (Negara and Benveniste 2014, p. 43). Promotion is exclusively on the basis of attaining administrative appointments (with no doctorate required), with advancement all the way up to full professor resting in the hands of the Minister of Education and Culture and often attained on the basis of patrimonialism or seniority (Rakhmani and Siregar 2016, p. 22).

In 2009, a new law (Law 9) establishing greater HEI autonomy was proclaimed, with the Director General of Human Resources (DGHR) establishing what were termed 'Public Service Agencies' (Badan Layanan Umum, or BLU) which granted to twenty-one institutions increased levels of financial autonomy and greater discretion in budget management. In reality, however, these institutions were still required to comply 'with the regulations of all governmental officers, including on financial management under the MoF and on personnel management under the State Civil Service Agency' (BKN) (Moeliodihardjo 2014; OECD/ADB 2015, p. 212). As Logli notes, national regulations were not adapted to BH guidelines and input from the government was still necessary on numerous matters which, in essence, did not translate into any practical increase in institutional autonomy (Logli 2016, p. 565).

The 2009 law was subsequently challenged on constitutional grounds and repealed, with a new law passed in 2012 which again sought to confer greater levels of institutional autonomy as well as enhance sector development. The 2012 law established three categories of public universities:

- 1. Autonomous public universities (PTN-BH)
- Public universities with a large degree of financial management flexibility (PTN-BLII)
- 3. Public universities operating as government implementing units (PTN).

To date, only seven public HEIs qualify as autonomous public universities (PTN-BH) with the vast majority falling into the second and third categories. While PTN-BH universities notionally have autonomous self-governance, operationalised through a Board of Trustees (or Senate) with the Rector appointing Deans and other senior university officers who are subject to the usual institutional reporting, transparency and accountability requirements, in practice such governance mechanisms are impaired. As Rakhmani and Siregar (2016) observe, 'attempts to push for professionalisation of the work environment under state universities are ultimately impeded by the very status of academics as civil servants or government employees'; a classification which prevents the legacies of a highly centralised bureaucratic system being easily disposed of (Rakhmani 2018; Rakhmani and Siregar 2016, pp. 22–23; see also Rosser, this volume). Rather, despite announcements and DGHR directives. the reforms promised by the 2012 law are not being experienced within universities, where 'autonomy' has mainly translated into the enrolment of a greater number of self-financed students in order to bolster the financial position of PTN-BH institutions but with little material impact on research cultures, research productivity or systems of recruitment, promotion and performance management.

Added to these realities are persistent practices of patrimonialism and corruption. Under the New Order regime, public HEIs:

were part of the larger 'franchise' structure that characterised the regime, the key feature of which was the purchase of government positions in exchange for access to the rents they could generate. The government's strict control over senior HEI appointments, restrictions on academic freedom, and widespread corruption within the civil service combined to create a context in which senior management positions at public HEIs were sold to the highest bidder ... [with academic staff] ... compelled to show loyalty towards the state and be subservient to HEI management. (Rosser, this volume)

Promotion thus came through administrative appointments, access to rents and salary supplementation through servicing the needs of the state or gaining lucrative government contracts. More generally, the 'New Order bureaucracy prioritised the production of technocratic forms of knowledge that could contribute to or legitimise its developmentalist policies', in essence disciplining academic inquiry especially on issues considered sensitive (Yasih and Mudhoffir 2017). In the post-New Order era, these practices did not simply stop. They remain, albeit fractured in the context of the new political environment. Even for PTN-BH institutions, for example, the Minister of Education retains significant influence over senior university appointments (with a 35% vote); systems of patronage persist, in part reflecting ingrained social norms in Indonesia and which continue to manifest in university contexts. As Rakhmani and Siregar note, 'research contracts in universities have tended to be "controlled by research godfathers" within a research patronage system'—what they describe as a

⁸The universities classified as Autonomous Public Universities (PTN-BH) include: University of Indonesia, Bogor Agricultural University, Institute of Technology Bandung, Gadjah Mada University, University of North Sumatra, Indonesia Educational University and Airlangga University. Four other public universities are also in the process of acquiring autonomous public university status: Padjadjaran University, Diponegoro University, Nopember Institute of Technology and Hasanuddin University (Moeliodihardjo 2014, p. 4).

societal structure of 'embedded clientelism'. Similarly, the dominance of 'applied approaches in social research' reflects legacies of formal and informal censorship often at the university level, where a 'culture of critical thinking is practically non-existent' and where a culture of critical peer review 'has yet to take hold post-*Reformasi* after a three-decade long period of being deprived of a role in influencing [government] policies' (Rakhmani and Siregar 2016, pp. 26, 58; see also McCarthy and Ibrahim 2010; Welch 2017).

The embedded patrimonialism at the heart of Indonesia's political system represents the most deep-seated obstacle to the future success of its higher education sector. The ninety-eight public HEIs (of which fifty-five are universities), 9 while carrying a level of domestic prestige and academic authority in terms of their reputation, are dwarfed by the preponderance of private HEIs, which total 3353 (not including fifty-two private Islamic universities) (Moeliodihardjo 2014, p. 1; OECD/ADB 2015, p. 187). Marketisation agendas championed by multilateral agencies like the World Bank and Asian Development Bank since the 1990s have sought to establish a regulatory environment conducive to the expansion and operation of private HEIs, seen in part as a means of catering to the rising demand for higher education which cannot be met by the state due to fiscal constraints (ADB 2012a). While this policy approach has encouraged an enormous expansion in private HEIs, it has also fostered the emergence of a sizable and politically influential set of corporate actors, many of whom are associated with elite families and able to exert political pressure to protect their interests. Sector reforms or restructuring that may disadvantage the interests of private HEIs or bolster the autonomy and reputation of public HEIs are thus politically difficult to engineer and often met with outright resistance.

Challenges and Trends in Higher Education in Southeast Asia

In highlighting the structural challenges Indonesia faces in terms of reforming and developing its HE sector, we are not suggesting it is an outlier or fundamentally backward relative to regional neighbours. Indeed, Indonesia exemplifies the types of challenges and conflicting sectional interests that are equally endemic in Cambodia, Myanmar, Laos, Vietnam and the Philippines. Rather, it is Singapore who is the outlier (see measures of Singapore's research performance and impact in OECD 2013c). As Table 2 makes clear, in terms of university rankings there is no equivalent in Southeast Asia to Singapore's performance—an achievement even more remarkable given its size compared to neighbouring states. Equally, there is also an enormous gulf in the research performance between Singapore and other Southeast Asian countries, where research outputs are disproportionally low relative to their population base despite robust and sustained levels of economic growth (especially in Indonesia, Vietnam and the Philippines).

⁹HEIs consist of universities, institutes of technical education, colleges, polytechnics and academies.

In the Philippines, for example, while the HE sector has expanded significantly in terms of participation, increasing from 27.5% in 2005 to 35.7% in 2014, with the number of students in the sector almost doubling from 2.2 million to 4.1 million between 1999 and 2015/16, academic and institutional quality continues to be poor. As the Philippine National Development Plan notes, while the HE sector is larger than many of its ASEAN neighbours and while the Philippines has ten times as many HEIs as Indonesia, its performance has been lacklustre. It produces fewer researchers (81 per million of the population) compared to Indonesia (205) and Vietnam (115), with knowledge production and research quality performing poorly with only twentyeight out of the 777 journals in which Philippine academics were published (3.6%) being listed under Thomson Reuters, Scopus or both (Macha et al. 2018). Similar to many of its neighbours, the insufficient production of qualified academic labour has severe implications for university research capacity and research-led teaching, with only 12.62% of university instructors holding a doctoral degree (see Table 3) (see Ouimbo and Sulabo 2013). Indeed, despite the size of the HE sector, only one institution (University of the Philippines) ranks in the THE WUR (ranking in the 601-800 bracket in 2018; see Table 2).

These outcomes largely reflect the composition of the HE sector which is dominated by 1170 private HEIs compared to 233 public universities and colleges, with academic labour in private HEIs incentivised to concentrate on student recruitment and teaching and address the for-profit dynamics of their institutional environments to the detriment of academic research. Indeed, the dominance of private HEIs, mostly owned by politically influential elite families and corporate interests, means that reform is fraught with political difficulties, rendering the sector largely unresponsive to issues of quality enhancement or the needs of the economy (British Council 2018; Macha et al. 2018; McCoy 2009, p. xxvi).

The disconnect between economic growth and performance in HE is also demonstrated in Vietnam and Malaysia, both of which have enjoyed remarkable economic transformations. The introduction of Đổi Mới in Vietnam in 1986, for example, marked the start of a period of rapid economic growth, with the country's economy expanding by 3303% between 1990 and 2016—the second fastest in the world, behind China (Trines 2017). The impact on the HE sector has been obvious, with the gross enrolment rate rising from 10.59 to 28.84% between 1999 and 2017, while the number of HEIs has mushroomed to 445 accompanied by improvements in the qualifications profile of academic labour and research productivity (especially in the natural and applied sciences). Yet, despite these achievements the sector performs poorly by international standards and continues to suffer from what Anh and Hayden label the seven impediments to progress: (1) governance, in which public universities do not enjoy autonomy in relation to strategic, financial, programmatic, curricular, enrolment and operational decisions; (2) an inefficient and ineffective government funding design for HEIs; (3) poor research performance compared to neighbouring states such as Thailand and Malaysia, with the gap continuing to widen between 2001 and 2017; (4) poor-quality postgraduate education with knock-on implications for the future quality of academic labour and the labour needs of the economy; (5) uneven quality standards with relatively ineffectual policy mechanisms to address this; (6) the persistence of seniority over merit-based promotion systems for academic labour; and (7) often obtuse and confusing policy governance of the sector (Anh and Hayden 2017, pp. 79–84). In relative terms, Vietnam is ranked behind Thailand, itself a poor performer in HE, research, citations and impact. SCImago, for example, judges just four institutions in Vietnam to be producing 'new knowledge that has a technological impact, compared to 14 universities in Thailand'—in part a reflection of the fact that only 20% of university instructors hold a Ph.D. (Anh and Hayden 2017, p. 81; Sheridan 2010, p. 19). The OECD also notes the relatively poor performance of much of the research produced in Vietnam in terms of its impact ranking, with only three areas (clinical medicine, earth and environmental sciences and biomedical sciences) performing above the world average—an outcome largely reflecting the rise in co-authorship and international research collaboration especially with researchers from Japan, the USA and France (OECD 2013d, p. 291).

While Vietnam has attempted to leapfrog institutional and academic labour quality issues by allowing foreign private HEIs¹⁰ to operate in the country and act as informal standard setters, in reality Vietnam suffers from an uncoordinated, fractured higher education system split between public universities (of varying size and quality), senior colleges, technical and military academies and private domestic and foreign universities, overlaid by a complex series of laws and regulations governing the sector. Indeed, the rapid growth of HE has led to what Trines (2017) describes as the 'mushrooming of low quality private providers' with Vietnam suffering 'a lack of high-quality universities, inadequate foreign language training, bureaucratic obstacles, and curricula that do not prepare students for entry into the labour force' (Hoàng Minh Đỗ 2014, p. 60).

Equally, Malaysia, Southeast Asia's second most developed economy after Singapore, continues to punch below its weight in terms of its performance in higher education. As recently as 2008–9, for example, Malaysia produced fewer than 4000 PhDs, with only 36% of academic labour at public universities holding Ph.D. qualifications (Zhengqi 2016, p. 127). Not surprisingly, the country's HEIs generally rank poorly by international standards, with only one of the country's twenty public universities (University of Malaya) placed in the top 400 (THE WUR 2018; see Table 2), and with the OECD observing as recently as 2016 that 'Malaysian institutions have yet to achieve a competitive position internationally' (OECD 2016a, p. 196). This is also reflected in terms of research quality and impact (see Table 3). As the OECD further notes, 'publications in all scientific disciplines in Malaysia are ranked below the World average in terms of relative citation impact', with research in clinical medicine and information communication technologies in particular scoring badly (OECD 2013b, p. 197). Indeed, for many students the fifty-three private universities or six foreign university branch campuses that operate in the country are perceived as providing better options in terms of quality and employment outcomes—a point underscored by the fact that Malaysia exports nearly as many students (approximately 90,000) who pursue foreign degree programmes as it attracts international students

¹⁰Most notably RMIT University Vietnam (the Vietnamese branch of the Australian research university the Royal Melbourne Institute of Technology) and the British University, Vietnam.

(130,000), predominantly from China, Iran, Indonesia, Nigeria and Yemen (Jusoh 2017; StudyMalaysia 2015). Hampered by pervasive centralised government intervention over appointments and promotions, informal censorship particularly of academic criticism of the government, and by discriminatory race policies which favour the Bumiputera (especially in university leadership roles), the quality of Malaysia's public HEIs has tended to remain impaired (Jarvis 2017; OECD 2016a, pp. 195–197).

HE Governance and Academic Labour in Southeast Asia

An obvious commonality among most of Southeast Asia's HE systems is the persistence of state-centred governance models (Dobbins et al. 2011). Cambodia, Vietnam, Laos and Myanmar clearly fall into this category, while Indonesia, Thailand, the Philippines and Malaysia remain predominantly state-centred but with some hybridity in terms of limited institutional autonomy usually associated with market orientation—the latter used as a policy instrument to increase university responsiveness to labour market/national economic needs, curriculum innovation and better graduate training. Singapore remains an obvious outlier, with elements of all models present but more obviously situated in a market-oriented model of governance with strong government oversight. Outside of Singapore, the dominance of the state over the professoriate and university management continues to be a hallmark of the region, with little latitude for institutions to set specific goals, decide on academic specialisms or commit to the long-term development of specialised research capacities.

While Dobbins et al.'s (2011) typology does much to capture the systems of public administration and management that continue to dominate in Southeast Asia's HE systems, what it cannot do, of course, is explain why this state-centred form persists in the face of international norms that tend towards more sector independence and state oversight from a distance, i.e. models in which the relative discretion of university management has come to play a greater role over time. Part of this may be explained by historical path dependencies and colonial administrative legacies that morphed into the apparatus of newly independent states. An emphasis on state-building, modernisation and economic development was coterminous with the development of deeper administrative capacities, more extensive state coordination of key areas of the economy, centralised national planning and thus the use of 'command and control' public administrative practices (Altbach 1998, Chaps. 2 and 3; Carroll and Jarvis 2017b). These legacies implicitly distorted the power of the state over university management and the professoriate, creating longer-term tensions and inefficiencies within HE systems which were typically managed through ad hoc but largely ineffectual policy responses. These included accommodating demands for greater participation by allowing the expansion of private HEIs (Thailand, Indonesia, Philippines, Vietnam) but without addressing access and equity issues, and in some instances by granting greater nominal resource autonomy to public HEIs by expanding self-financed student enrolments (Indonesia, Thailand, among others) to offset inadequate state fiscal transfers.

However, another part of the explanation resides in the politics of state capture and domestic contestation over interests and the control of resources. The political legitimacy of various ruling coalitions and elites in Southeast Asia has historically been problematic, creating natural synergies between centralised systems of administrative/state control and their utility to ruling coalitions in terms of the management of dissent. Indeed, if anything, such synergies have only strengthened over time, especially in a context of deepening political illiberalism. In Laos and Vietnam the long dominance of single-party socialist rule, in Cambodia the continuous rule of Hun Sen and the Cambodian People's party since 1985, in Thailand the reinstatement of military rule in May 2014 and in the Philippines the rise to power of Rodrigo Duterte in June 2016, all mark a deepening pattern of illiberalism, creating politically vexed environments in which academic labour and universities are forced to operate. The suspension of the constitution in Thailand, in particular, has witnessed the ongoing curbing of open academic discourse, the shutdown of various academic proceedings, the detention of students and academics and the introduction of approval requirements from the military junta in order to hold research seminars and conferences (Lamubol 2015). In Indonesia too, the rise of religious groups, political criticism of university activities and the sizable corporate power represented by private universities have played a part in the censorship or banning by the authorities of various academic gatherings, the screening of controversial documentary films or seminars on sensitive topics. In the Philippines, the use of extrajudicial killings and forced disappearances has been accompanied by a crackdown on human rights advocates, political critics and press freedom, with many academics self-censoring in order to avoid being targeted by the authorities (Human Rights Watch 2018; Wiratraman 2016).

The development of academic labour in the region is thus often constrained both directly when it is at odds with prevailing political orthodoxies and indirectly in terms of the pressures to self-censor, particularly since meagre academic salaries are often supplemented through accessing lucrative government research contracts predominantly derived through patronage and clientelism. Similar constraints operate at the institutional level in the majority of states in Southeast Asia, where universities are typically not autonomous entities that coexist with the state but rather function as extensions of the state, carrying out state-directed research agendas that create strong institutional pressures to monitor heterodox academic practices.

Insofar as Western models of the university invoke notions of academic independence from the state as essential to critical intellectual inquiry, knowledge production and the emergence of successful HE systems, the political realities that operate in the majority of states in Southeast Asia underscore the continued state dominance of the sector and the sublimation of university management and academic labour to the interests of ruling coalitions (Carroll and Jarvis 2017a). Assumptions that higher education in Southeast Asia will thus naturally progress in line with deepening economic growth are thus misplaced. Rather, the majority of states in Southeast Asia continue to suffer from governance deficits that adversely affect the potential for HEIs to emerge as regionally or internationally competitive (see Table 4).

 Table 4
 Higher education governance indicators Southeast Asia: public universities

Country Included Expending Notice based From Increment and consciously contained and autonomy: autonomy: autonomy: autonomy: autonomy: autonomy: accelerate and consciously contained and contain)								
Care Care	Country	Merit-based recruitment and promotion	Formal or informal censorship: curriculum, curriculum, academic expression	Institutional autonomy: programme offerings, ecreditation, programme management, student admissions, graduation requirements	Institutional autonomy: budget, professorial remuneration	Institutional autonomy: academic recruitment, promotion and retention	Research productivity requirements as condition of employ- ment/promotion	Professorial autonomy: research and teaching	Earned PhD required for appointment to academic posts (ranks of assistant professor and above or equivalent)	Employment designation of the professoriate in practice
O	Singapore	D	Θ	D	D	D	D	D	D	University employee
+ +	Malaysia	Θ	Θ	Θ	+	+	Θ	>	>	Government/civil servant
	Indonesia	↑	Θ	⊕ → Varies between classification of public HEIs by government	⊕ Yaries between classification of public HEIs by government	1	*	⊕ ★	*	Government/civil
	Philippines	D	⊕ 	Θ	Θ	D	⊕ ∑	>	\(\)	University employee
* * * * * * * * * * * * * * * * * * *	Thailand	Θ	Θ	Θ	Θ	(i) (ii) (iii) (ii	(i)	D	>	University employee but with government oversight
mmar ©	Cambodia	Θ	Θ	+	+	+	+	+	+	Government/civil servant
* * * * * * * * * * * * * * * * * * *	Laos	Θ	Θ	+	+	+	†	†	†	Government/civil servant
⊕↑⊕↑⊕	Myanmar	Θ	Θ	+	+	+	+	+	+	Government/civil servant
	Vietnam	Θ	Θ	+	+	⊕ ↑	⊕ 	+	Θ	Government/civil servant/①

Key: $\overrightarrow{\Omega} = \text{Yes}$; $\rightarrow = \text{No}$; $\oplus = \text{mixture}$ Source Interviews conducted by the authors; ADB (2012b)

The Political Economy of Higher Education Governance: Northeast Asia

Relative to its Southeast Asian neighbour, Northeast Asia has enjoyed greater depths of economic progress, hosting the region's first 'miracle economy' (Japan, GNI per capita US\$38,000) and three of the four 'Asian Tiger' economies (Hong Kong, GNI US\$42,940; South Korea, US\$27,600; and Taiwan, US\$26,212), along with the now second-largest economy in the world, China (US\$8250) (Carrol and Jarvis 2017c; Statistical Bureau 2018; World Bank 2017). Apart from China, the region's economic development commenced earlier than that of Southeast Asia, with several economies (Japan, South Korea, Taiwan and Hong Kong) achieving high-income status by the 1970s–1980s. These achievements are clearly identifiable in terms of the emergence of quality HEIs as measured by the THE WUR (see Table 5), especially in the case of Hong Kong relative to its size, but also Japan and South Korea. China, Japan, South Korea and Taiwan now collectively dominate the research landscape in Asia as measured in terms of the number of published research outputs, occupying four of the top five spots (see Table 3).

No doubt these achievements are significant, especially given the late development of China and the low base from which its HEIs are emerging. However, these rankings also reveal levels of performance in HE that are not commensurate with the magnitude of economic transformation the region has enjoyed. South Korea, the ninth-largest economy in the world, for example, manages to place only two of its universities in the top 100 (Seoul National University, ranked 74, and Korea Advanced Institute of Science and Technology, ranked 95; THE WUR 2018) while at the same time holding the distinction of having the highest ratio of 24–34-year-olds with tertiary education of any of the thirty-six OECD member states (Hultberg and Calonge 2017; Hultberg 2017). As Parry notes:

Korea occupies rather extreme positions in relation to OECD averages: it has the highest education costs borne by households and one of the lowest government spending rates in the sector; it has the third-highest tuition fees and the second-lowest level of government investment in scholarships, loans and grants; it has the highest transition rates from secondary to tertiary education and the lowest happiness rates for students. (Parry 2013)

Much of this is attributable to the obsessive emphasis placed on higher education in terms of status and social mobility but often expressed in terms of credentialism as opposed to actual achievements in skills attainment, graduate quality and employability, creating a disconnect between rates of participation, graduate placement and the labour needs of the economy. It has also contributed to a mushrooming of private HEIs (approximately 180 compared to forty-three publicly funded universities), with a disproportionate focus on teaching as opposed to research producing 'too many institutions of uneven quality' (Fischer 2016; Sharma 2014). Perhaps most obviously, however, it has also created a disconnect between domestic perceptions of quality and the achievements of various Korean HEIs internationally. Korea's 'SKY institutions' (Seoul National University, Korea University and Yonsei University), for example, enjoy absolute domestic esteem and are popularly held as tickets to successful grad-

 Table 5
 THE world university rankings: Northeast Asia 2018

	•)							
Country	Number of HEIs 801–1000	Number of HEIs 601–800	Number of HEIs 501–600	Number of HEIs 401–500	Number of HEIs 301–400	Number of HEIs 201–300	Number of HEIs 101–200	Number of HEIs 51–100	Number of HEIs 1–50
China	16								2
Hong Kong SAR				1			2	1	2
Japan	42	18	2	3	2	3		1	1
Macau SAR					1				
South Korea	4	7	4	2	2	3	2	2	
Taiwan	12	7	3	2	1		1		
Total	74	54	19	12	7	9	10	4	5

Source Times Higher Education World University Rankings 2018. https://www.timeshighereducation.com/world-university-rankings/2018/world-ranking#1/

page/0/length/25/sort_by/scores_citations/sort_order/asc/cols/scores

uate placement in the country's premier private and public institutions while ranking only modestly internationally (Korea University and Yonsei University rank in the 201–250 bracket; THE WUR 2018).

Japan displays similar patterns of variation between domestic perceptions of esteem versus international rankings of its HEIs. With approximately 775 universities, of which almost 80% are private, Japan has only two universities in the top 100 (University of Tokyo, ranked 46, and Kyoto University, ranked 74; THE WUR 2018), with HIEs like Osaka, Tohoku (both ranked 201–250) and Nagoya (301–350) celebrated domestically but ranked only modestly internationally (THE WUR 2018). Indeed, Waseda University, a top-ranked private institution domestically and highly sought after in terms of perceived graduate prestige and employment opportunities, ranks only 601–800 on the THE WUR, 2018. As the OECD observes, the number of Japanese universities of 'global stature, the level of publications in top journals and the international mobility of researchers rank low compared to the OECD median' (OECD 2016b, p. 2).

The declining fortunes of Japanese universities in international league tables coupled with continuing low rates of internationalisation were the main drivers prompting Prime Minister Shinzo Abe to establish the 'council on resuscitation of education' and the 'Top University Programme' (TUP) in 2014. While primarily designed to place 'at least 10 universities among the global top 100 within a decade', TUP also set a series of performance goals to increase the number of (a) foreign and Japanese faculty with PhDs earned from overseas universities; (b) linkages between Japanese and international researchers; (c) Japanese students studying abroad; and (d) the ratio of international students in the domestic student population (MEXT 2017; Sawa 2017). The programme, however, is limited to thirteen 'Type A' universities ('universities that are conducting world-level education and research and have the potential to be ranked among the world's top 100 universities') and twenty-four 'Type B' universities (universities with the potential to foster 'innovative educational partnerships with foreign universities') of the eighty-seven national universities in Japan (MEXT 2017; Sawa 2017). Indeed, given the stalling international performance of Japan's HE sector the ambitions of TUP are modest and underscore the deep structural rigidities within the sector. 11 Several of the stated objectives, for example, target the seniority system of promotion and lifetime employment practices that continue to prevail, with the proposed introduction of a tenure track system and performance- and merit-based remuneration, as well as introducing a course numbering system (to allow students to differentiate been course levels) and increasing the number of courses subject to student evaluation—targets that are now standard across various HE systems elsewhere (MEXT 2017; Sawa 2017; see also Yamamoto and Futao 2014).

TUP thus needs to be seen in the context of reforms introduced in 2004 that were meant to be pivotal to the future of Japan's national universities. These involved the

¹¹ Jean-Pierre Lehmann blames the declining fortunes of Japanese universities in international league tables a consequence of poor and declining levels of internationalisation, noting that 'Japan, a very open country during the 1960s and 1970s, has become inward-looking' and that Japanese 'universities share an important part of the blame' (Lehmann 2017).

corporatisation of the eighty-seven national universities with the intention of providing greater university autonomy, de-classifying academics as civil servants and ending lifetime employment practices, transferring accountability to university presidents and governing boards, and providing the governing space for universities to identify areas of excellence in order to compete internationally (OECD 2009, p. 17). The fact that TUP reiterates many of the same policy goals as the 2004 reforms highlights not only continuing structural rigidities but also continuing policy failures. The 2004 reforms, for example, allowed the Ministry of Education, Culture, Sports, Science and Technology (MEXT) to retain significant control over HEIs in terms of caps on student enrolments, tuition fees and academic reorganisation at the programme or departmental level, leading the OECD to note that the reforms 'represent a necessary, but not sufficient, condition for the Japanese tertiary system to become internationally competitive' and that in international terms 'Japanese national institutions continue to exercise less strategic initiative with respect to hiring and setting wages, reallocating recourses, and exploiting investment opportunities than do comparable universities in the United States, United Kingdom, and the Netherlands' (OECD 2009, p. 19). State-centred approaches, in other words, continue to dominate the governance of HE in Japan, despite various reform efforts.

Historically, state-centred governance approaches have also predominated in Taiwan, especially under the Kuomintang (KMT) which, prior to the suspension of martial law in 1987 and the commencement of political reforms in the mid-1990s, maintained highly centralised state control over the sector and over academic labour (Mok 2014). Prior to democratisation, the HE sector was governed by a political fiat of 'divide and conquer' with resources distributed highly unevenly as a means of preventing the formation of political constituencies that might threaten the KMT, and rewarding those who supported it (Wang 2014, pp. 33–34). The number of universities, admissions and student quotas, the appointment of university presidents, the hiring and dismissal of faculty, curriculum design, departmental size, along with the affairs of faculty and students on campus were all controlled by the central authorities (Chou 2012; Lo 2014, p. 21).

Reform of the HE sector commenced in the mid-1990s, driven in part by the need to enhance sector performance in the face of growing regional and international competition; in part by a wish to remodel the sector after the end of authoritarian rule; and in part by the need to manage massification and issues of institutional quality. Between 1986 and 2000, for example, an increasingly influential middle class and demands for greater participation in HE saw the number of public and private colleges and universities expand from 28 to 127. In the post-2000 period, expansion of the sector continued, driven predominantly by the establishment of additional private HEIs, with the total number of HEIs expanding by 77% to 163 (approximately a third of which are public) in the last decade alone (Lo 2014, p. 22; Mok 2014). At the same time, amendments to the Universities Laws in 1994 and 2005 began the transformation of Taiwanese universities into more autonomous actors in terms of admissions, staffing, tuition policies, self-regulation in respect of crossinstitutional collaborative arrangements including inter-institutional qualifications, financial management, faculty remuneration and organisational structure—including

removing nationality restrictions for senior university appointments, albeit with the Ministry of Education (MoE) retaining representation on the selection panels for senior appointments (Chou 2012, p. 4; Mok 2014, p. 5).

Since the mid-1990s Taiwan's higher education sector has thus witnessed substantial reform, liberalisation, massification and corporatisation, setting in place more decentralised systems of governance and sector oversight. At the same time, the MoE also attempted to enhance institutional quality and international competitiveness. In 2006, for example, the government established key performance targets, which included having at least one university in the top 100 universities globally within a decade, as well as seeing fifteen departments/cross-university research centres reach the top of their field in Asia within five years (Chou 2014; Hou et al. 2012, p. 27). As demonstrated in Table 5, however, Taiwan's ambition regarding the global top 100 has not been realised: National Taiwan University is ranked 198 while the majority of Taiwan's HEIs fall into the 500–1000 bracket (Times Higher Education 2018). Indeed, rapid expansion of the sector has often come at the cost of institutional and programme quality or developing appropriate graduate skills able to meet the rapidly changing needs of Taiwan's economy (Kuo 2016). As a result, despite a strong performance in terms of participation rates with 70% of the population aged 18-22 enrolled in a HEI (the second-highest rate in the world behind South Korea), almost half of all youth end up working in blue-collar jobs unrelated to their programmes of study while unemployment rates for university graduates are 'higher than all other levels of education, including those without college degrees' (Chou 2014; see also Mok and Neubauer 2016).

Research Universities in Northeast Asia: Legacies, Hierarchies and Future Trajectories

Higher education in Northeast Asia, excluding China, represents a complex mixture of successes and ongoing challenges. Not revealed in any international league table, for example, is the long-standing and highly successful integration of the research and development (R&D) activities of universities into national economic planning under centralised, state-led development strategies. In early developmental phases this involved state—industry relationships, with universities treated primarily as extensions of the state, working for the state and with industry to develop technologies, human capital and the graduate skill sets necessary to help drive economic growth. An emphasis on early phase developmental needs thus manifested in a core focus on research areas such as engineering (chemical, electrical, mechanical) and basic science and technology, with these shaping the composition of universities in Northeast Asia (Japan, South Korea and Taiwan) and forging strategic state—university relationships that were both functional and economically productive.

Insofar as these motifs account for the research focus of Northeast Asian universities and for traditions of state-centred governance, they also underscore the con-

Table 6 Number of universities by range of active research areas, 2008–2011

	Range			Total
	Wide	Medium	Narrow	
China	13	22	155	190
Hong Kong SAR	2	3	2	7
Japan	7	10	85	102
ROK, South Korea	4	11	27	42
Malaysia	0	3	4	7
Singapore	1	1	1	3
Taiwan	2	7	25	34
Thailand	0	2	7	9
Total	29	59	306	394

Source UNESCO (2014, p. 73)

temporary challenges the region's HEIs face. As Table 6 highlights, the majority of HEIs in Northeast Asia continue to be narrow in terms of their range of research areas when compared to broadly based, comprehensive institutions offering a wide range of science, social science and humanities subjects. This has implications not only for their performance in international league tables, where the best-performing HEIs are overwhelmingly 'full blown' comprehensive institutions (Altbach and Salmi 2011; Marginson 2011a), but also their ability to contribute to the rapidly changing needs of the economy. Comprehensive research universities have become 'the central institutions' of the twenty-first-century knowledge economy—key institutional drivers of 'knowledge for competitive advantage and performance', productivity growth, the capture of high-end global value chains (GVC) and the training of creative talent that positions nation states competitively in the global economy (Altbach and Salmi 2011, p. 2; Hazelkorn 2011, p. 6; see also Mok and Hallinger 2013). More than simply responding to globalisation, leading research universities are the 'primary drivers of global flows in knowledge, communications, and people movement' and 'among the most internationalized and cosmopolitan of all human organizations' (Marginson 2011a, pp. 37–38). What historically might have been the comparative advantage of Northeast Asia's universities in terms of their specialist focus on a narrow range of research areas functional to the immediate needs of rapidly transitioning economies and state-led development agendas in the contemporary global economy appears increasingly to be a comparative disadvantage. The majority of Northeast Asian universities continue to be 'lop-sided', with the social sciences and the humanities underdeveloped; even in science, they tend to be comparatively narrow in subject range. Coupled with low rates of internationalisation, a professoriate composed predominantly of domestically trained PhDs and low rates of academic mobility, fostering institutional cultures of creativity, exploration and innovation conducive to global research leadership remains a key challenge.

Governments in the region are, of course, keenly aware of these challenges and responding with reform efforts to foster the innovation and creativity necessary for

their HEIs to become high-performing, world-class institutions (Shin 2018). The potential effectiveness of these policy agendas, however, have to be contextualised amid the academic cultures, social relations and institutional legacies that operate in the region. As Yang argues, an 'academic culture that is based on meritocratic values, free inquiry, and competition is largely absent in East Asia' (Yang 2016, p. 15). Seniority systems still operate widely in the region, with social hierarchies and deference to authority dominant social practices. Attempting to instil critical models of inquiry or construct institutional environments that celebrate heterodox academic practices and contrarian thought remains problematic; a characteristic that Yang suggests 'explains why achievements in science and technology are so much greater than in the social sciences and humanities' (Yang 2017, p. 29; see also Marginson 2015, p. 70; Tjeldvoll 2011, p. 225). Rather, academic cultures tend to be riven with traditions of rote learning and text-based exposition designed to impart knowledge as opposed to encouraging critique or creating new knowledge—traditions reinforced by low levels of academic mobility and internationalisation in terms of faculty composition. Further, as the OECD and World Bank observe, attempts to impart greater autonomy, flexibility and entrepreneurialism are often hampered by the persistence of centralised, hierarchical administrative practices with insufficient pools of administrative expertise able to exploit greater levels of official university autonomy and nurture more entrepreneurial activity (OECD 2009; World Bank 2012, Chap. 5).

While these obstacles are not insurmountable they highlight continuing impediments to international leadership in research and the performance of Northeast Asia's HEIs in global competitive rankings. Recent analysis by Hallinger (2014) of the performance of the region's scholars in terms of 'publication in internationally refereed journals', for example, 'failed to reveal competitive levels of [research] productivity', with Hallinger noting the continuing dominance relative to its size of Hong Kong, compared to immediate competitor states (Taiwan, Korea and Japan) (ibid.; see also Altbach and Postiglione 2012). Similarly, analyses by UNESCO of research performance in science and applied science subject areas in 438 Asian universities (see Table 7) show a relatively narrow spectrum of subjects (chemistry, environmental sciences and materials sciences) in which research performance is defined as 'world class' or 'internationally excellent', with UNESCO observing that 'overall, most research conducted in broad subject areas in Asian universities is in the "below average" performance bands' (UNESCO 2014, p. 72). If, as Mok argues, competition for world-class standing among HEIs in Northeast Asia is intensifying, then clearly it will take concerted and ongoing governance reforms, greater levels of investment and internationalisation, along with transformations in academic (research) cultures for these ambitions to be realised (Mok and Cheung 2011; Mok and Hallinger 2013; see also Altbach 2011; Postiglione and Arimoto 2015).

It may also be the case, however, that the locus of research in the region is increasingly shifting to non-university environments, thereby skewing the type of analyses presented above. Research by Zhengqi (2016) focusing on the 'triple helix paradigm' and the complex trilateral state—business—university relationships that operate in Northeast Asia (often the result of state-led development initiatives to help cap-

Table 7 Distribution of universities by research performance in board subject areas: selected Asian countries 2008–2011

(Country / Te	erritory			Subject	t Area			
China		•	Agricultur	e and Bi	ological	Sciences			
Hong Kong	s, SAR		Biochemis	try, Gen	etics an	d Molecul	ar Biolo	gy	
India	,,		Chemistry					23	
Japan			Computer						
	Korea (Sout	th Korea)	Earth and		Science	ec			
Malaysia	Korca (Sou	iii Korca)	Economics						
					SIIICSS 3	Ciclices			
Singapore			Engineerin	_					
Taiwan			Environme						
Thailand			Health Pro			rsing			
			Materials S						
			Mathemati	ics					
			Medicine						
			Multidiscij	plinary (Other Li	fe Science			
		Physics and Astronomy							
			,						
Band	1	2 3	Excellent Above Below Average						
Performance	World class	Excellent							
			Average						
Country		T							
China		11	65	190 7					
Hong Kong, SAR		4	6	'					
India			8	44					
Japan	1	5	30	108					
ROK (South	1	4	24						
Korea			2						
Malaysia	1	1 2	3			8			
Singapore Taiwan	1	4	29			35			
Thailand		4	6			9			
Total	3	31	174			446			
1 0131	J	31	1/4			440			

Source UNESCO (2014, pp. 70-73)

ture higher-order technologies within GVCs) reveals sites of research dynamism not necessarily reflected in conventional university rankings or assessments of the research capacities of universities. In South Korea and Taiwan, governmentsponsored research institutes and the location of high-tech industry within specialist clusters in science parks have enabled both countries to sustain their leadership and product innovation in electronic component manufacturing, computers and memory chips, among others (Chu 2016; Etzkowitz and Zhou 2009; Zhengqi 2016). South Korea, for example, invests a higher proportion of its GDP in R&D than does Germany, indicative of research-intensive activities being conducted in diverse institutional contexts (Jump 2013). That said, the sense in which a predominant focus on applied as opposed to pure research can sustain technological innovation in the longer term or translate into global research leadership is challenging. Universities still play a central role in training the skilled labour necessary to support R&D efforts whether configured through state (i.e. government research laboratories)-business relationships or other modalities, and in pure research and major scientific breakthroughs and economic innovations. The importance of pure research in capturing higherorder value-adding knowledge activities within GVCs, in other words, is only likely to deepen the importance of universities to the region's future (Carroll and Jarvis 2017b; Gereffi 2014, p. 20).

China: The Next Higher Education Superpower?

More than any other country in the region, China has attracted the lion's share of analysis about its potential global leadership in research. The reasons for this are obvious. Since 1996, China has tripled its spending on R&D as a proportion of GDP from 0.7% in 1998 to 2.2% in 2015 (Wilhelm 2013). At the same time, the overall size of China's economy has expanded rapidly, magnifying the material impact of resources available for R&D activities and reflected in the enormous growth in research outputs (Jump 2013; Postiglione 2015, p. 238). In 1990, for example, slightly more than 1% of research papers globally had Chinese authors. Between 2007 and 2011 this increased to 11% and in some fields such as materials science and chemistry to 20%, with China becoming the world's largest producer of science publications in 2016 producing 426,000 studies compared to 409,000 in the USA (Marginson 2015, p. 69; Tollefson 2018; Zha 2016; Zhang et al. 2016, p. 870). Top Chinese institutions such as Tsinghua and Shanghai Jiaotong now have higher rates of research outputs than the universities of Oxford and Cambridge, with the number of Clarivate-indexed journals doubling at all top Chinese universities between the four year periods 2006–09 and 2012–15 (Usher 2018). Similarly, citation rates for China's top universities are now higher than for equivalent universities in Japan, although they lag behind those of the National University of Singapore (Usher 2018, p. 26).

No less impressive has been the staggering growth in the sector. Just a few decades ago, participation in higher education was an elite privilege with only 5% of Chinese aged 18–20 enrolling in tertiary education. By 2000, the participation rate had increased to 10%, by 2002 to 15%, by 2009 to 22.4% and as of 2016 to 48.44%, with China graduating a record 8 million tertiary students in 2017 (or nearly ten times more than in 1997) and operating the world's largest HE system with enrolments of 37 million students spread across 2880 HEIs (Rhoads et al. 2014, p. 17; Stapleton 2017; UNESCO 2018; Xinying 2017).

Purely in terms of numbers, China's rise in higher education is impressive, not least because of the low base from which it has grown and the rapidity of that growth. The emphasis on massification, however, has not been without cost. Institutional and programme quality remains uneven with vast diversity across the HE sector. Curricular and pedagogical reforms have been slow, raising social concerns about graduate preparation for employment and forcing the central government to closely monitor the employment success rates of several million new graduates who enter the workforce each year (Altbach 2009, p. 208; Shi et al. 2016, p. 221). Chinese business leaders, in particular, lament the lack of creativity and innovating thinking displayed by graduates, concerned that the sector produces 'fewer independent thinkers than its competitors' and fails to train graduates able to support China's economic trans-

formation from a manufacturing hub to a 'designed in China' high-tech economy (Postiglione 2015, pp. 240–241; see also Feng 2017b).

Rapid expansion has also placed inordinate pressures on the sector, especially for academics who have experienced large increases in teaching loads, graduate supervision and advisory requirements along with a greater emphasis on research, but often without sufficient resources or administrative support (Rhoads et al. 2014, p. 17). Facilities too have been stretched, with overcrowding in classrooms and dormitories a common feature. And while the gross enrolment rate has expanded dramatically since the late 1990s, participation in HE remains geographically skewed, with higher rates of participation in Eastern compared to Western regions—a pattern also reflected in the distribution of the country's HEIs, intensifying social pressures around, equity and access (Shi et al. 2016).

Higher Education Policy in China: The Pursuit of World-Class Standing

To some degree, these issues have been exacerbated by the bifurcation of HE policy reform efforts, split between elite institutions on the one hand and the mass university sector on the other. A belief among the Chinese leadership in the early 1990s that the country lacked the type of universities typically identified as 'world-class' prompted a series of ongoing reform efforts that have segmented policy approaches to the sector. Project '211', for example, initiated by the Ministry of Education (MoE) in 1995, aimed to improve the research standards of existing high-level universities, enhance doctoral training and better position these universities relative to international competitors. By 2017, 116 universities met the criteria for designation as a Project 211 university, qualifying them for additional funding and special treatment within the Chinese HE system. This was soon followed in 1998 with the 'Project 985' initiative, designed to promote the reputation and research performance of Chinese higher education and focused on founding world-class universities by the twenty-first century. Originally focused on nine universities (known as the C9 League) including Fudan, Nanjing, Peking and Tsinghua, the number of Project 985 universities expanded to thirty-nine, providing substantial funding from national and local governments to support new infrastructure and internationalisation efforts, the appointment of leading international faculty and hold international conferences, among other activities (Mohrman 2008; Rhoads et al. 2014, pp. 24–25; THE WUR 2017). 12

Both Project 211 and 985 policy initiatives were subsumed by the Double First Class Project (DFCP) announced in 2015 and designed to develop a group of elite Chinese universities into world-class institutions by 2050. However, it took until September 2017 for Chinese authorities to announce the list of forty-three universities

¹²By one estimate, Project 985 universities enjoy 10 per cent of total national research expenditure while accounting for only 3 per cent of the nation's researchers, bestowing on them an extraordinary level of resources compared to a typical Chinese university (THE WUR 2017).

(which include the C9 and many of the universities previously listed under Projects 211 and 985) to be included in the programme, which grants further resources to support university activities along with more intensive oversight to monitor progress (Grove 2017). For DFCP-nominated universities, the resource windfalls have been significant. China's thirty richest elite universities, for example, each record annual expenditures in excess of US\$1 billion—a figure only surpassed by the USA and indicative of the massive ramping up of resources since 2009, when only five Chinese universities enjoyed annual expenditures of US\$1 billion or more (Zha 2016, p. 10).

Impressive as these numbers may be, however, they also conceal unique challenges. Central authorities have mandated that the country's elite universities must 'pursue world-class standing' while 'developing Chinese characteristics' (Zha 2016, p. 11). As Postiglione notes, while 'top-tier universities are coming to resemble their OECD counterparts', they find themselves caught between 'the goals of internationalisation and safeguarding national sovereignty', with the government encouraging 'Sino-foreign cooperation along with stern warnings of its dangers' (Postiglione 2015, p. 239). Jointly announced by the Central Party Committee and the State Council, the DFCP was broadly defined as a 'reform-based performance-related attempt to help universities optimise their disciplinary structures by strengthening the recruitment of talented scholars and scientists both within China and abroad', with an emphasis on building an 'innovation excellence culture' to 'enhance the level of scientific research and to create a new type of university think tank with socialist core values' (Peters and Besley 2018, p. 1). China's elite universities thus find themselves caught in a resource-performance trap: the party-state mandating a specific role for elite universities in the economic transformation of the country and supported by top-down resource policies, but at the same time providing them with a relatively narrow and increasingly rigid domestic political envelop in which they must operate and all the while being assessed against international performance criteria.

The results of this approach have thus far been mixed; they might even be labelled unsuccessful if measured in terms of the performance of elite Chinese universities on international league tables and by research impact/citations. As Altbach (2016a) argues, investment in the sector has been on a grand scale, creating 'significant research capacity and world-class infrastructure' at the top universities which may yield impressive results in the decades to come. Currently, however, only two institutions rank in the top 50 (Peking University and Tsinghua University) while five rank in the top 101–200, but with the majority of China's elite HEIs in the 501–1000 bracket (Times Higher Education 2018; see also Table 5). Further, measured by normalised citations and impact, the forty-two universities that comprise the DFCP collectively have lower citations compared to 'most universities in Europe and North America' with Tsinghua and Shanghai Jiaotong standing above the pack (Marginson 2015, p. 69; Usher 2018, p. 26). That is, while growth in resources has clearly boosted research volume it has not, as yet, led to a commensurate increase in research impact and citations across the DFCP universities. Resources alone, in other words, have not been sufficient to achieve the outcomes that senior Chinese policymakers had hoped for. More poignantly, the sense in which an 'add (still more) resources

and stir' strategy can be sustained or achieve the types of future performance outcomes desired is questionable. Recent analysis by Usher (2018) suggests that, since 2012, resources going into the elite universities have plateaued, with per student expenditures at Tsinghua falling by 3% between 2012 and 2016 and at Zhejiang University by 5% as a result of increasing student numbers and inflation. Similarly, further funding initiatives supporting China's elite universities, such as the one-off RMB480 million tranche of funds given to Sun Yat-sen University as part of the DFCP, while nominally impressive in fact represent only 8% of the institution's current annual budget—at best a 'one or two-year bump in funding' with no accrued resource impact going forward (Usher 2018, p. 25).

The top-down resource strategies applied to China's elite universities might thus be facing 'Liebig's Law' where any future growth in research quality, impact and performance only occurs at the rate permitted by the most limiting factor (Gorban et al. 2011). Clearly this is not resources but rather factors associated with sector and institutional governance, institutional and academic autonomy and the treatment of academic labour. Despite various reforms, there is little institutional autonomy at elite Chinese universities compared to their international counterparts. Even in areas of academic and subject organisation, for example, the Ministry of Education retains control. In order to gain funding and legitimacy, areas of study have to be defined in relation to established disciplines typically prescribed by central authorities, obviating interdisciplinary experimentation otherwise central to creative and innovative scholarship common in leading international universities. Tenure practices too are subject to central rule-bound procedures which mandate that only departments teaching undergraduate programmes are able to offer tenured appointments, with applicants vetted for their academic abilities but also their political suitability by party cadres who are embedded within each university department and within the senior leadership team of each university (Altbach 2016a, p. 12). Programme design and approvals are overseen by the Ministry of Education, while university-level administration remains, in essence, the preserve of the government and is interwoven by dense administrative practices along with central reporting requirements (Rhoads et al. 2014, p. 38). It is not uncommon, for example, for Chinese scholars to complain of reams of paperwork and layers of approvals necessary to carry out basic academic pursuits, commence a new research agenda or present a paper at an international conference. Even the submission of academic papers to international journals outside of China requires approval, vetting and consent before they can be dispatched, as does attending an international conference.

While the 1998 Law of Higher Education along with subsequent promulgations by the State Council and Ministry of Education (including the Outline of China's National Plan for Medium and Long-term Education Reform and Development 2010–2020) was meant to usher in greater levels of institutional and academic autonomy—in part to provide space for an 'innovation excellence culture' to emerge—in reality such objectives have always been at odds with the party-state whose administrative structures, modes of governance and interests have rested in commandand-control political authority (Rhoads et al. 2014, p. 39; Shi et al. 2016, p. 218). Since the elevation of Xi Jinping to the presidency in 2013, this has become even

more evident, with the reassertion of party ideology and a crackdown on dissent and ideological impurity. As Altbach and de Wit observe, when 'considered together, recent developments show significant change in the Chinese academic landscape of the past half century', with communist party supervision of universities, which has 'traditionally been a central part of academic governance', significantly strengthened in recent years (Altbach and de Wit 2018, p. 24). From the closing of virtual networks limiting the access of Chinese scholars to international information sources, through a hardening of the 'Great Wall of China' censorship system and a crackdown on academic criticism or contrarian thought, to the reassertion of required ideological education in universities, Beijing has sent a cold wind through the academic establishment—one that has hit the social sciences and humanities particularly hard (ibid., p. 25). Overt and passive monitoring of classroom activities, lectures, seminars and other academic work is routinely reported by Chinese academics, with a student party cadre at Peking University celebrating the fact that 'we have been continuously strengthening and increasing our ideological work'—phenomena also reported on campuses internationally where 'political discipline' of Chinese student comments has attracted recent attention (Corr 2017; Feng 2017a). 13

The reassertion of party ideology has also led various universities, including Renmin University, an elite DFCP university known for its social science and humanities programmes, to establish research institutes dedicated to 'Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era' and with Renmin announcing that it 'aims to ensure the theory enters class materials, classrooms and brains' (Hancock 2017b). Even the Chinese Academy of Social Sciences, the largest single funding body of social science and humanities research, now features Xi Jinping thought at the top of its list of approved topics and gives funding priority to those research agendas that propagate Xi Jinping's ideology (Hancock 2017b). Indeed, the encroachment of the party-state and its networks into research funding dynamics is highlighted by academics in elite universities who complain that 'too much of the research enterprise is controlled by administrators and governmental officials, who are sometimes one and the same, given that Chinese universities are run to a great extent by the government' (Rhoads et al. 2014, p. 38). The recent study by Rhoads et al. (2014), based on interviews with academics in Tsinghua, Peking and Renmin universities, reveals a combination of increasing pressures on academic labour for greater research productivity and demonstrated impact, set amid grievances that range from low academic salaries compared to international counterparts, a lack of transparency in research funding, an inability to pursue a full range of research and publishing options in terms of academic freedom, low rates of internationalisation, poor levels of funding to support international conference attendance, concerns about academic integrity and plagiarism, entrenched hierarchies typically based on seniority, party connections or Guanxi as opposed to academic merit, and low levels of collegiate participation in decision-making related to academic matters (see also Altbach and Postiglione 2012; Postigliones 2015, p. 237).

¹³Information also ascertained through interviews with Chinese scholars at elite universities (i.e. DFCP-designated universities).

Bifurcation and Tensions in China's Higher Education Sector

Beyond the elite university sector, China's higher education system suffers from a malaise of quality and capacity issues. Teaching and research quality operate at a much lower order than might be observed in elite universities, with the recurrent problem of graduate preparation for employment failing to meet the needs of the economy. 14 Resources are also in shorter supply, with overcrowded classrooms, dormitories and poor-quality student learning and library facilities frequently reported. Academic staff are generally less qualified and less well compensated compared to their counterparts in elite institutions; have fewer options in terms of research funding and support and display generally much lower levels of research productivity and international publications. Research and teaching quality assessments, while standard at elite institutions, are lax or often absent allowing 'mediocrity to flourish in the rest of the system' (Altbach 2016a, p. 12). And while elite institutions now typically experiment with innovative teaching pedagogies, non-elite institutions tend towards more traditional rote-based 'chalk and talk' pedagogies with implications for student learning outcomes (Postiglione 2015, p. 241). Compared to the elite sector, levels of internationalisation tend to be low with few if any international faculty; academic staff have usually obtained their postgraduate qualifications domestically, whereas the profiles of junior staff at elite institutions frequently reveal international qualifications.

Unlike many of its international counterparts, China's HE system is clearly bifurcated; elite institutions ride high at the top, resource rich and actively pursuing higher-order research with substantial levels of international publication placement, while in the rest of the system quality and standards vary widely and receive much 'less attention from the central government' (Altbach 2009, p. 208; see also Postiglione 2015, p. 241). Higher education in China thus reflects what Altbach describes as an unbalanced system; significant improvement at certain institutions 'but not necessarily for the system as a whole' with those at the bottom of the academic hierarchy creating 'serious problems' for the systemic quality transformation of the sector (Altbach 2016a, p. 12; Zha 2016, p. 11). Zha adds to the point, noting that the achievements of a few elite institutions are not a game-changer and do not produce a higher education sector with uniform quality standards able to support the types of economic transformation that China's policymakers desire (Zha 2016, p. 11).

China's dilemma is not unique to the region. Outside of Singapore and Hong Kong, there is little evidence that Asian states have been able to ensure quality across the entire HE system (Postiglione and Arimoto 2015, p. 152). What does distinguish China, however, is the huge range of institutional quality and the failure to even out overall standards—in part a consequence of Chinese policymakers' preoccupation with chasing world-class standing for the country's elite institutions. But even here, questions remain about research quality and integrity. For example,

¹⁴Average salaries for fresh graduates from non-elite universities in 2017, for example, were reported at 4000 yuan (US\$588) a month which is insufficient to meet living needs in most urban environments in China (Zuo, 2017).

in 2017, the Journal of Tumor Biology (Springer) retracted 107 Chinese-authored papers due to the review process having been 'deliberately compromised by fabricated peer review reports'. According to Retraction Watch, an NGO that tracks academic paper and patent retractions, 'China leads the world for articles retracted due to fake peer review', highlighting an escalation in recent years of academic scandals in medicine and biology in particular and culminating in 2016 when 81% of Chinese drug approvals were withdrawn after 'pharmaceutical companies were asked to check their clinical data'—a result attributed to the extreme pressure on academics in elite universities to 'publish or perish' (Hancock 2017a; Yang and Zhang 2017). When coupled with the reassertion of party ideology since 2013, the outlook for China's higher education sector is thus less positive than might be popularly imagined (Altbach 2016a). As Altbach and de Wit observe, 'China's investment of billions of dollars in the upgrading of its top universities to create "world-class" institutions may be, at least in part, put at risk', along with China's internationalisation efforts and its attempts to build joint-collaborative ventures with leading international universities through the establishment of branch campuses (Altbach and de Wit 2018, p. 25; Feng 2017a). Until impediments to academic freedom are addressed, academic salaries are boosted and an academic culture free of plagiarism emerges, China's much heralded 'climb to the top' is not likely to be realised (Altbach 2016a, p. 13).¹⁵

Conclusion

As we noted at the outset of this chapter, Asia's economic development is not disputed. There is ample evidence to map the growth of rapidly transforming economies, especially in Northeast Asia where China's economic modernisation over the last four decades has been spectacular. But as we also noted, the assumed positive correlation between economic modernisation and emerging leadership in higher education and global research is not automatic. Resources are obviously important but of themselves not sufficient to produce globally leading higher education systems. Zha's argument is instructive here, noting that the success of Western systems of higher education in global comparisons rests not on the performance of individual universities but most importantly on 'the strength of a normative model'. Indeed, it is the adoption of this model in an ever-larger number of countries in Asia and elsewhere that speaks to its utility, economically but also in terms of its contribution to social development and human betterment (Altbach 1998; Zha 2016). As Altbach observes: 'Every academic institution in contemporary Asia has its roots in one or more of the Western academic models. Patterns of institutional governance, the ethos of the academic profession, the rhythm of academic life, ideas about science, procedures for examination and

¹⁵These issues likely account for the fact that of all overseas-trained Chinese scholars, between 70 and 80% do not return home—a figure that Altbach and de Wit indicate has been holding steady (Altbach and de Wit 2018, p. 25).

assessment, in some cases the language of instruction, and a myriad of other elements are Western in origin' (Altbach 1998, p. 40). This gives rise to two overwhelming realities shaping Asian higher education: 'the foreign origin of the academic model and the challenges of indigenization' or, more poignantly, the degree to which processes of indigenisation in the context of social, political and institutional norms ultimately detract from this model and thus render its performance less than optimal (ibid., p. 37).

In much of Asia, such questions have not been posed explicitly or used as a means to explore critically the role of the university in society, or of the relationship between the university, the state and political authority. Indeed, such questions have mostly been brushed aside, reflecting the subsumption of the higher education system and academic labour (and of any notion of the Western normative model) within systems of political power—a feature particularly dominant in Southeast Asia with Singapore the obvious exception.¹⁶ While, as Zha and Altbach argue, the Western normative model has informed the idea of the university in Southeast Asia, it is clearly the case that 'indigenisation' has largely denuded the model of functional and performative utility, with universities ensconced as extensions of the state or as semi-autonomous state entities operating under the weight of 'command-and-control' administrative systems with negative implications for academic labour, institutional autonomy or decentralised academic decision-making. State-centred governance models thus continue to dominate, operating both as a means of governing (administering) the sector but also as a means of political incorporation in which any semblance of political heterodoxy that might challenge the state is controlled.

While these observations are less true of Northeast Asia, in part because of more diffuse traditions of academic organisation, they still fall largely under state-centred systems of governance, with Hong Kong and, more recently, Taiwan the obvious exceptions. Historically, Japan, South Korea and Taiwan have seen their HE systems incorporated as extensions of state policy and as semi-autonomous elements within the developmental state, while their recent histories have witnessed attempts (albeit uneven) to adopt models that provide greater levels of university autonomy as part of broader reform efforts to replicate the Western normative model and, concomitantly, to improve national performance in international university league tables. The outcomes of such reforms, as we have demonstrated in this chapter, however, remain problematic at this point in time. This is particularly true of Japan, where government efforts to encourage greater levels of institutional experimentation are often resisted at the institutional level, encapsulated within seniority systems and hierarchical social relations.

This leaves China as the obvious outlier, publicly embracing the Western normative model (at least for its elite HEIs) but with periodic reminders that this has to be indigenised with 'Chinese characteristics' in order to protect China's national sovereignty and the political power of the party-state. In this sense, China's experi-

¹⁶Although historically, of course, Singapore was notorious for disciplining academic labour and for controls on free speech, including deportation (through revoking employment visas) of foreign academic labour.

ment in seeking world-class standing for its elite institutions remains just that—an experiment—but a singularly unique one. For example, it represents a continuation of state-centred traditions of governance typical in Asia, but with the state playing a much larger role than just about any other jurisdiction in the region. As Marginson observes, this has advantages for driving world-class standing insofar as helps direct resources, sets targets and policy agendas; but, 'on the other hand the state may limit what can be achieved, in that it often inhibits peer judgements in research, or retards the flow of knowledge through society and the innovation spaces in the economy' (Marginson 2013, p. 28). It is also an experiment of limited proportions and non-systemic in nature, bifurcated between elite and non-elite institutions—the latter represented by some 2838 of the 2880 HEI currently in existence, which, by and large, remain untouched by this experimentation. At the same time, it is also an experiment to develop world-class institutions that are atypical of their Western counterparts, focused predominantly on science (STEM), without commensurate developments in the social sciences and humanities (which remain largely underdeveloped in China even among elite universities) and thus without the organic creativity of interdisciplinarity. Finally, it is an experiment predicated on top-down, directed research in STEM disciplines and aimed at harvesting science and technology for economic transformation—an instrumentalist project of the highest order.

All of this, of course, is at odds with the attributes of the Western normative model which broadly adjures to systems of knowledge inquiry that are generally researcher driven, typically uncoordinated, personalistic and even idiosyncratic—bottom-up systems of intellectual endeavour that rely on open, critical, often heterodox modalities of knowledge production. To be sure, such systems are guided, sometimes cajoled by governments and regulations designed to channel research into commercialisable pursuits or particular subject areas that address the labour needs of the economy, and sometimes disciplined by punitive measures designed to deter specific forms of academic endeavour. Ultimately, however, the enterprise of academic inquiry under the Western normative model remains largely uncoordinated, vicarious and typically subject to its own collegiate system of review and development beyond the pure instrumentalist interests of the state. Asia's experimentation with this model has proven uneven, especially in Southeast Asia—an unevenness that might well be repeated in China given recent political developments.

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