

Entrepreneurial Universities in ASEAN Nations: Insights from Policy Perspective

Roger Y. Chao, Jr.^{a,*}

^aIndependent Education Development Consultant

*Corresponding author: Email: ryilmchao@yahoo.com
Address: Hong Kong, China

Introduction

The combination of neo-liberalism and the massification of higher education combined with the diminished public funds for higher education contributed to the rise of academic capitalism and entrepreneurship across higher education systems and institutions across the world. In particular, the World Trade Organization's (WTO) General Agreement on Trade in Services (GATs) not only established education, including higher education, as a commodity subject to the rules of international trade, but it also contributed to the increasingly global perception of higher education as a private, rather than a public, good rationalizing that the benefits of higher education significantly accrue to the individual students rather than the public.

With the focus on human capital development and its contribution to economic development, higher education is increasingly located within the globally accepted knowledge-based economy discourse. Higher education systems worldwide have moved from elite systems to massification and even post-massification of higher education, especially in Western countries especially from the 1980s onwards (Mok 2013; Mok & Jiang 2016; Wu & Hawkins 2018). According to UNESCO UIS database (n.d.), the world higher education gross enrollment ratio significantly increased from 12.39 percent and 13.65 percent in 1980 and 1990s to 29.32 percent and 36.77 percent in 2010 and 2016 respectively.

Fiscal challenges, changes in funding mechanisms and the enhanced use of New Public Management in higher education, shifted funding of higher education to individual students and their families, supported the

growth of private higher education, and promulgated the privatization of public higher education institutions. Most governments are utilizing New Public Management, which increases public accountability and transparency in the utilization of public funds, including those for higher education. Furthermore, there is an increasing trend and focus on research with economic and social applications rather than fundamental research.

The above-mentioned trends and developments highlight the changing characteristic of higher education systems and institutions towards the scholarship of application, academic capitalism and entrepreneurship (Berman 2012; Fetters et al. 2010; Tang 2014; Wong 2011). These trends also hold in the Association of Southeast Asian Nations (ASEAN) region, which aside from being influenced by globalization and its discourses, are ongoing a complex regionalization process to establish an ASEAN Community. This article seeks to understand public policy-related factors that contributes to academic capitalism and the establishment or reconfiguration of ASEAN universities into entrepreneurial universities.

Entrepreneurial Universities

The concept of the entrepreneurial university denotes a major shift from its idealized 'ivory tower' model, where universities are free to undertake its activities (e.g. teaching and research) in pursuit (and dissemination) of knowledge for knowledge sake. According to Burton Clark (2001), an entrepreneurial university is a university which is able to survive and adapt in highly complex and uncertain conditions of the environment in which it operates. As such, the concept of an entrepreneurial university is inter-related with academic capitalism and the scholarship of application

and increasingly located within a strong market rationale promoted by increased neo-liberalization of the world order. Academic capitalism refers to how universities (particularly but not limited to public research universities) respond to neo-liberal tendencies to treat higher education policy as a subset of economic policy (Slaughter and Rhoades 2000). It refers to how universities and faculty deal with the market and exhibit market-like behaviors.

The scholarship of application, however, is focused on relevance of knowledge produced and disseminated in universities and its applicability and impact to society (Tang 2014). This can be seen in the increased focus and funding for Science, Technology, Engineering and Mathematics (STEM) related programs and research across higher education systems, which are perceived to produce the necessary innovation required to sustain economic development and enhance competitiveness of their respective countries. It can also be seen in the debates related to the relevance of the humanities and the social sciences to economic development and the public vs. private nature of higher education.

Overall, the entrepreneurial university should be seen in terms of its ability to adapt and survive within an increasingly market environment, and in terms of its contribution to solutions to societal issues in their teaching, research and extension functions.

ASEAN Higher Education

In spite of the increased regionalization of ASEAN (and East Asian) higher education, ASEAN higher education systems (possibly with the exception of Singapore) are facing similar challenges, including massification, diversification, fiscal challenges and a stronger focus on relevance of higher education. Singapore higher education tends to be highly funded and aligned with its national development goals. Furthermore, its limited population has seen its higher education sector opening up to foreign students which forms part of its strategy to attract and retain excellent students. Privatization of higher education (and public higher education), increased focus on STEM programs, increased marketization of higher education and

nationally directed research agendas focused on STEM and societal relevance are apparent across ASEAN higher education systems. Furthermore, the ASEAN regional integration project, including the establishment and ongoing consolidation of an ASEAN Community, reinforces and intensifies competition and strengthens the market rationale across different sectors, including higher education, in the ASEAN region.

In fact, Roger Chao (2016) shows that ASEAN higher education discourse has been changing from a simple to complex economic rationale, and eventually to incorporate higher education's role in ASEAN community building. This shift in ASEAN's higher education discourse has been dynamically influenced and constructed by global and regional discourses, national agendas, and influenced by regional and international organizations. Furthermore, it is influenced by their respective historical development, power asymmetries and power dynamics in a diverse ASEAN membership and complex and dynamic process of ASEAN integration.

In fact, ADB (2011) highlights that the socio-economic status of ASEAN countries influences the ASEAN higher education systems focus. Lower income countries (Cambodia, Lao PDR, Myanmar and Vietnam) tend to focus on policy reform and system expansion, increasing enrolment, and infrastructure development, while middle income countries (Indonesia, Malaysia, Philippines and Thailand) focus on quality improvement. High income countries (Brunei Darussalam, Singapore), on the other hand, tend to be more independent, focused on developing their global reputation and expanding global partnerships. In spite of the above-presented differences in focus of ASEAN member countries higher education systems, the scholarship of application and the development of entrepreneurial universities seem to cut across all ASEAN higher education systems.

Gross enrollment ratios (GER) of ASEAN Member countries higher education systems have been increasing over the past decades (table 1). Although the Philippines GER has dropped slightly over the past decades, this can be attributed to the country's fast population growth and socio-economic (and wealth

distribution) challenges. Massification of higher education has implications public provision of higher education in ASEAN member countries which can be seen in terms of the privatization of higher education (including public higher education).

Table 2 shows the development of private higher education enrollments in ASEAN member countries. In general, private higher education enrollments have been increasing with the notable exception of Brunei Darussalam. Cambodia and the Philippines reduction in private higher education enrollments should be seen as a consequence of socio-economic challenges that shifted enrollments to the public sector due to lower tuition. In the Philippines, recent policies and law that provides free tuition and allowances for students enrolled in the public higher education sector will further enhance reduction of private higher education enrollments. In Brunei Darussalam, the reduction in private higher education enrollments should be seen in terms of increased public higher education places with the establishment of the Universiti Islam Sultan Sharif Ali and the Kolei Universiti Perguruan Ugama Seri Begawan, both in 2007.

With the exception of Indonesia and Singapore, the number of private higher education institutions in ASEAN member countries has been increasing and represents between 50 percent and 97 percent of the total number of higher education institutions as of 2015-17 (see table 3). This shows government support for the growth of the private higher education sector to address the demand–supply gap in higher education provision not addressed by the public sector.

TABLE 1
GROSS ENROLLMENT RATIO OF ASEAN MEMBER
COUNTRIES (PERCENT)

Country	1985*	1995*	2001**	2016**
Brunei	n.a.	7	14	31
Darussalam				
Cambodia	n.a.	n.a.	2	13 ⁻¹
Indonesia	7	11	14	28
Lao PDR	n.a.	n.a.	3	17
Malaysia	6	11	n.a.	44
Myanmar	n.a.	6	11	16 ⁺¹
Philippines	38	30	30	35 ⁺¹
Singapore	12	34	n.a.	
Thailand	20	20	39	46 ⁻¹
Vietnam	n.a.	4	9	28

Note: n = +/- years from base year

Source: * Lee & Healy (2006, p. 4); ** UNESCO UIS database

TABLE 2
ENROLLMENT IN ASEAN PRIVATE EDUCATION

Country	2001	2016
Brunei Darussalam	31.41 ⁺⁵	11.04
Cambodia	71.68	65.89 ⁻¹
Indonesia	62.78	68.06
Lao PDR	25	29.24
Malaysia	37.63	48.11
Myanmar	n.a.	n.a.
Philippines	68.68	54.26 ⁺¹
Singapore	60.60 ⁺⁷	66.02 ⁻³
Thailand	18.85	17.13 ⁻¹
Vietnam	10.61	12.90

Note: n = +/- years from base year

Source: UNESCO UIS database

In spite of this shift in some ASEAN higher education systems, privatization of public higher education is increasingly prevalent brought about mostly by increasing fiscal challenges, a view of the private nature (and individual benefits) of higher education. Public funding for higher education in ASEAN member countries has generally been increasing (see table 4) with the exception of Malaysia

and Singapore which are compensated by the increased enrollments in their private higher education sectors (see table 2). Overall, a combination of massification of higher education and fiscal challenges has led to increased privatization of higher education.

These challenges led to the search of new modes of governance in ASEAN higher education utilizing decentralization, corporatization and privatization of higher education to address access, funding and quality issues in higher education (ADB 2012; Jamshidi, Arasteh, NavehEbrahim, Zeinabadi, and Rasmussen, 2012; Mok 2007). This is manifested by governments and individual higher education institutions having a more individualistic, competitive and entrepreneurial approach anchored on a new type of competitive contractual state settlement increasingly prominent in public management (Robertson and Dale 2000). In particular, it is seen in terms of the corporatization of public universities, public-private partnerships, implementation of student fees, and the promotion of private higher education (Songkhaeo and Yeong 2016). However, the diversity of ASEAN private higher education providers ranges from poor quality to elite HEIs; non-sectarian and sectarian; and even foreign branch campuses and higher education providers.

TABLE 3
DISTRIBUTION OF HIGHER EDUCATION IN
ASEAN COUNTRIES (AY 2015-17)

Country	Public		Private		Percent Private
	2010-2012	2015-2017	2010-2012	2015-2017	
Brunei Darussalam	4	6	-	6	50
Cambodia	38	54	46	72	57
Indonesia	83	81	2,818	2,431	97
Lao PDR	22	85	31	83	49
Malaysia	20	20	500	599	97
Myanmar	171	169	-	35*	17
Philippines	220	231	1,636	1,712	88
Singapore	5	9	47	30	77
Thailand	98	66	73	455	87
Vietnam	187	64	29	305	83

Note: *Myanmar does not have an officially recognized private higher education sector. This figure represents private training centers.

Source: British Council (2018, p. 9)

TABLE 4
HIGHER EDUCATION BUDGET IN ASEAN COUNTRIES
(PERCENT OF GDP)

Country	2000	2010	2016
Brunei Darussalam	n.a.	0.50	0.84
Cambodia	0.06 ⁻²	0.09	0.12 ⁻³
Indonesia	n.a.	0.45	0.57 ⁻¹
Lao PDR	0.19	0.28	0.41 ⁻²
Malaysia	1.91	1.71	1.13
Myanmar	n.a.	0.15 ⁺¹	0.24 ⁺¹
Philippines	0.45	n.a.	n.a.
Singapore	n.a.	1.09	1.03 ⁻³
Thailand	1.07	0.58	0.64 ⁻³
Vietnam	n.a.	0.74	0.85 ⁻³

Note: n = +/- years from base year

Source: UNESCO UIS Database

At the ASEAN level, the Framework Agreement on Enhancing ASEAN Economic Cooperation (1992), the ASEAN Framework Agreement on Services (1995), ASEAN Agreement on the Movement of Natural Persons (2012), and the various Mutual Recognition

Agreements (since 2005) have not only increased both competition and collaboration in ASEAN higher education, but increased the relevance of higher education to the global knowledge economy discourse. In spite of the recent focus on ASEAN Community building, Chao (2016), citing several ASEAN policy documents and the ASEAN 5-year Work Plan in Education, argued that ASEAN higher education agenda is still located within an economic rationale. Furthermore, ASEAN and its member countries see science, technology and innovation (STI) as powerful determinants and enablers of economic development and educational programs, and as a key factor in sustaining economic growth, enhancing community well-being and promoting ASEAN integration (ASEAN n.d.). This is further manifested by the existence of an ASEAN Plan of Action on Science, Technology and Innovation (2016-2020).

Research and development (R&D) expenditures in ASEAN member countries have been increasing (see table 5), while the ASEAN Gross Expenditure on Research and Development (GENR) increased from 1.78 percent to 2.1 percent in 2007 and 2013 respectively (UNESCO 2015 Science report, pp. 26-27). In particular, during the period 2000-2015, Malaysia, Thailand and Singapore R&D expenditures increased by 0.83 percent, 0.39 percent and 0.39 percent of GDP which are significantly above the world average increase (0.22 percent of GDP). As of 2014, Singapore, Malaysia and Thailand also have the most scientific publications among ASEAN member countries with 10,553, 9,998 and 6,343 respectively. However, all ASEAN member countries, aside from Brunei Darussalam which has no available data, have increased their scientific publications by 69 percent to 541 percent during the period 2005-2014 (see table 6). In fact, table 7 shows that the percentage of higher education enrollments of ASEAN member countries are significantly higher than higher education enrollments as a percentage of its population, which shows a focus on science related fields in their respective countries.

In spite of the above-mentioned ASEAN policies that influence higher education in their respective member countries, national higher education systems

are influenced by global higher education discourses, particularly the knowledge-based economy and higher education as a commodity and a private good promoted by the World Trade Organization's General Agreement on Trade in Services (Chao and Horta 2017). Furthermore, ASEAN policy making, which focus on consensus building, usually build on their member states national policies and directives, which already have a significant focus on economic relevance, and privatization of higher education.

TABLE 5
RESEARCH AND DEVELOPMENT EXPENDITURES IN
ASEAN COUNTRIES (PERCENT OF GDP)

Country	2000	2015	Difference
Brunei Darussalam	n.a.	n.a.	n.a.
Cambodia	n.a.	0.12	n.a.
Indonesia	0.07	0.08 ⁻²	+0.01
Lao PDR	n.a.	n.a.	n.a.
Malaysia	0.47	1.30	+ 0.83
Myanmar	0.11	n.a.	n.a.
Philippines	0.11 ⁺¹	0.14 ⁻²	+ 0.03
Singapore	1.82	2.20 ⁻¹	+ 0.38
Thailand	0.24	0.63	+ 0.39
Vietnam	0.19 ⁺¹¹	0.37 ⁻²	+ 0.18
World	2.06	2.28	+ 0.22

Note: n = +/- years from base year

Source: World Development Indicators (accessed 19 September 2018)

TABLE 6
SCIENTIFIC PUBLICATIONS IN
ASEAN MEMBER COUNTRIES

Country	2005	2014	Increase (%)
Brunei Darussalam	n.a.	n.a.	n.a.
Cambodia	54	206	281
Indonesia	554	1,476	166
Lao PDR	41	129	215
Malaysia	1,559	9,998	541
Myanmar	41	70	69
Philippines	486	913	88
Singapore	6,111	10,553	73
Thailand	2,503	6,343	153
Vietnam	570	2,298	303

Source: adapted from UNESCO (2015) UNESCO Science Report: Towards 2030, p. 704

TABLE 7
SCIENCE HIGHER EDUCATION ENROLLMENTS

Country	Year	HE Enrollment	Share of Total Population (%)	HE Enrollment (Scientific fields)	Share of Science HE Enrollments (%)
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.
Cambodia	2011	223,222	1.5	n.a.	n.a.
Indonesia	2012	6,233,984	2.5	433,473	8.1
Lao PDR	2013	137,092	2.0	6,804 ⁻¹	5.4 ⁻¹
Malaysia	2012	1,076,675	3.7	139,064	12.9
Myanmar	2012	634,306	1.2	148,461	23.4
Philippines	2009	2,625,385	2.9	n.a.	n.a.
Singapore	2013	255,348	4.7	36,069	14.1
Thailand	2013	2,405,109	3.6	205,897	8.2 ⁻²
Vietnam	2013	2,250,030	2.5	n.a.	n.a.

Source: adapted from UNESCO (2015) UNESCO Science Report: Towards 2030, p. 700

Entrepreneurial Universities in ASEAN Nations

The article has shown that massification and privatization of higher education are prevalent in ASEAN higher education systems. In general, higher education enrollment has been increasing at systemic level and at private higher education sectors in ASEAN member countries. Although ASEAN countries higher education budgets have increased, there is a general tendency to rely on the private sector to fill in the demand – supply gap in the provision of higher education services. Furthermore, changes in higher education governance in ASEAN higher education systems have increased corporatization and privatization of higher education. In spite of limited systems, such as the Philippines, recently undertaking free public higher education initiatives (Chao 2018a), places in its public higher education sector and funding are limited thus the role of the private higher education sector remains significant.

ASEAN higher education systems are also focused on promoting scientific fields. R&D expenditures across all ASEAN member countries have risen, its share of scientific field related higher education enrollments is significantly higher than higher education enrollments as a share of their respective population. Furthermore, during the period 2005-2014, scientific publications

have increased between 69 percent to 541 percent representing results in increased focus on scientific fields and the changing academic profession where the publish or perish principle is increasingly being adopted. In fact, engineering is the top field of publication in Malaysia and Singapore, while life sciences and geosciences are the top fields of publications in Southeast Asia (UNESCO 2015).

The scholarship of application and the development of entrepreneurial universities in ASEAN higher education systems are clearly shown in the above-mentioned developments. This is brought about by the common challenges in majority of higher education systems worldwide: massification of higher education, fiscal challenges, a shift in higher education governance, and the knowledge-based economy discourse, where higher education is seen as a key lever for economic development. The various ASEAN policies presented in this article also contributes to enhancing the scholarship of application. Although focused on enhancing ASEAN regional integration, these policies enhance competition and collaboration among ASEAN member countries, promoting and intensifying human resource development and the focus on key scientific fields.

Systemic level policies and directives, both at ASEAN and national levels, and the shifting higher

education governance focused on public accountability, new funding models in higher education, and an intensification of utility of higher education in supporting economic development drive increased compliance of ASEAN higher education institutions towards the scholarship of application and becoming entrepreneurial universities. Compliance applies mostly for publicly funded higher education institutions, and survival mostly for private higher education institutions, but it also applies to public institutions.

The increased focus on the scholarship of application and increasing the entrepreneurial nature of higher education institutions (both public and private) in ASEAN member countries adds to the ongoing debate on the public or private nature of higher education. The excessive focus on scientific related fields, as a consequence of the scholarship of application, tend to undermine the contribution of the social sciences and humanities, which is equally important in developing sustainable economies and societies. In fact, UNESCO (2015) also highlights that there is a shift from basic research to towards big science, and further adds that there is no social good that comes out of big data without citizen engagement.

There is a need to balance basic and applied research, and there is a need to enhance the importance and contribution of the social sciences and humanities in sustainable economic and social development not only in ASEAN member countries. As such, further research to answer how and what should be done to enhance and development both social sciences and humanities as a complementary element to the sciences is seriously needed. Lastly, a call to revisit higher education role beyond the scholarship of application, especially its contribution to the individual students, faculty and researchers, other higher education stakeholders and society, is increasingly becoming a necessity unless higher education should succumb to being an element of the scholarship of application. Higher education should be seen as a public good and its unbalanced focus on STEM need to be balanced with a renewed interest and support for the social sciences and humanities to effectively contribute to its societal development role (Chao 2018b).

References

- Asian Development Bank (ADB). 2011. *Higher Education across Asia*, Manila: Asian Development Bank.
- Asian Development Bank (ADB). 2012. *Private Higher Education across Asia: Expanding Access, Searching for Quality*. Manila: Asian Development Bank.
- Association of Southeast Asian Nations (ASEAN.) n.d.. Overview: ASEAN Ministerial Meeting on Science and Technology. In *Association of Southeast Asian Nations*. Available at: <https://asean.org/asean-economic-community/asean-ministerial-meeting-on-science-and-technology-ammst/overview/>
- Berman, Elizabeth Popp. 2012. *Creating the Market University: How Academic Science Became an Economic Engine*. Princeton, New Jersey: Princeton University Press.
- British Council. 2018. *The Shape of Global Higher Education: Understanding the ASEAN Region*. London: British Council.
- Chao, Roger Y. Jr. 2016. "Changing Higher Education Discourse in the Making of the ASEAN Region In *Global Regionalisms and Higher Education: Projects, Processes and Politics*, edited by Susan Robertson, Kris Olds, Roger Dale and QueAnh Dang, 124-142. Cheltenham & Northampton: Edward Elgar.
- Chao, Roger Y. Jr. 2018a. "A Shift towards Good Quality Higher Education for All". *University World News*, February 9, 2018. <http://www.universityworldnews.com/article.php?story=20180206100605251>
- Chao, Roger Y. Jr. 2018b. "Social Sciences and Humanities Vital for Change-Makers." *University World News*, November 16, 2018. Available at: <http://www.universityworldnews.com/article.php?story=20181106151855347>
- Clark, Burton. 2001. "The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement." *Higher Education Management*, 13 (2): 9-24.
- Fetters, Micheal L., Patricia Greene, and Mark P. Rice, eds. 2010. *The Development of University-Based Entrepreneurship Ecosystems: Global Practices*. Cheltenham: Edward Elgar.

- Jamshidi, Laleh, Hamidreza Arasteh, Abdolrahim NavehEbrahim, Hassanreza Zeinabadi, and Palle Damkjaer Rasmussen. 2012. "Developmental Patterns of Privatization in Higher Education: A comparative study". *Higher Education* 64 (6): 789-803.
- Lee, Molly N.N., and Stephen Healy. 2006. "Higher Education in South-East Asia: An Overview", in *Higher Education in South-East Asia*, edited by Molly N.N. Lee and Stephen Healy, 1-12. Bangkok: UNESCO Asia and Pacific Regional Bureau for Education.
- Mok, Ka Ho. 2007. "The Search for New Governance: Corporatisation and Privatisation of Public Universities in Malaysia and Thailand." *Asia Pacific Journal of Education* 27 (3): 271-290.
- Mok, Ka Ho. 2013. "The Quest for an Entrepreneurial University in East Asia: Impact on Academics and administrators in Higher Education." *Asia Pacific Education Review* 14 (1): 11-22.
- Mok, Ka Ho, and Jin Jiang. 2016. "Massification of Higher Education: Challenges for Admissions and Graduate Employment in China." Centre for Global Higher Education Working Paper Series no. 5, July 2016. London: Centre for Global Higher Education.
- Robertson, Susan, and Roger Dale. 2000. "Competitive Contractualism: A New Social Settlement in New Zealand Education" in *World Yearbook of Education 2000: Education in Times of Transition*, edited by David Coulby, Robert Cowen, and Crispin Jones, 116-131. Auckland: Kogan.
- Slaughter, Shiela, and Gary Rhoades. 2000. "The Neo-liberal University." *New Labor Forum* (Spring): 23-42.
- Songkhaeo, Thammika, and Loke Hoe Yeong. 2016. *THF Literature Review: Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context*. Singapore: The HEAD Foundation.
- Tang, Hayes. 2014. "The Scholarship of Application in the Context of Academic Entrepreneurialism." *Asian Education and Development Studies*, 3 (3): 292-302.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). 2015. *UNESCO Science Report: Towards 2030*. Paris: UNESCO.
- Wong, Poh Kam, ed. 2011. *Academic Entrepreneurship in Asia: The Role and Impact of Universities in National Innovation Systems*. Cheltenham: Edward Elgar.
- Wu, Alfred M., and John N. Hawkins, eds. 2018. *Massification of Higher Education in Asia: Consequences, Policy Responses and Changing Governance*. Singapore: Springer Nature