



Does Globalization Lead to Convergence in Higher Education? An Empirical Study of Four East Asian University Systems, 1946–1996: Hong Kong, Singapore, Taiwan, Thailand

Lucinda Li *

Graduate Program, School of Education, University of Auckland, New Zealand.

It has been widely assumed that globalization inevitably leads to convergence, which is generally defined as a tendency of societies to grow more alike. This paper investigates the claim of convergence by examining changes in four aspects of university policies in four East Asian polities, namely, Hong Kong, Singapore, Taiwan, and Thailand, over a period of 50 years. The four policies being examined in this study are student enrollment, female participation, medium of instruction, and university regulation.

Findings show that while universities, being part of the international academic community, are susceptible to the influence of global forces and tend to become more and more alike in structures, processes, and systems, they are also under the dominance of their governments and local forces whose influences set them apart from their counterparts in other parts of the world in various ways. It is found that convergence and divergence can both exist at different aspects of the same policy or practice and that convergence occurs in some countries but not others. Its presence depends on which aspect of a policy or practice is examined and when and where. The actual outcome is determined by the dynamic interaction of global, regional, national, and local forces.

Introduction

Globalization has been a subject of intense debate in academic circles for more than 20 years. Many claims have been made, but few conclusions can be drawn. This paper uses empirical evidence gathered from a longitudinal study of four public higher education systems from 1946 to 1996 to compare and examine the effect of globalization on university education, specifically, on whether and how far it leads to cross-national convergence between university systems.

*Corresponding author: Auckland, New Zealand, Email: kclucinda.li@gmail.com

Four aspects of university development are selected for examination here: student enrollment, female participation, medium of instruction, and university governance. Time changes in these aspects will reveal whether and how far the four systems are being influenced by the global trends of economic competition (as reflected in the case of student enrollment), liberal ideology of equal rights (in female participation), and deregulation (the relaxation of central control in university governance) and whether national culture remains standing (as in medium of instruction) amid the strong global currents.

Four East Asian polities, namely, Hong Kong, Singapore, Taiwan, and Thailand, are selected for this exercise chiefly on the criterion that they have sufficient similarities (e.g., in geographic location and in economic achievement as the Asian "tigers") and contrasts (e.g., in history, colonial heritage, social conditions, and political architecture) for adequate comparison.

The comparison begins from the mid-1940s, just after World War II when most countries were war torn and poverty stricken, and extends to the mid-1990s, when the forces of globalization had been felt for more than 10 years by almost all parts of the world.

In this paper I first examine the "convergence theory" and its relationship to globalization. Then I compare the changes observed in the four selected aspects over the 50-year period with three focus points roughly dividing the period into three, at approximately 1946, 1971, and 1996, to mark the speed and extent of change. Lastly, I present a brief summary of the findings and discuss their implications.

Convergence Theory

Globalization is a complex and multilayered social phenomenon. Its multicausal nature and multidimensional effects have made it a subject of intense debate and continual investigation. After 20 years of discussion and exchange in academic circles and at different levels of organization, including local, national, regional, and transnational, the debate is as alive as ever on what globalization means, what causes it, and what its effects are.

According to David Held and his associates, the wide spectrum of perspectives on globalization can be classified into three broad schools of thought, according to how they conceptualize globalization and all addressing its causal dynamics, socio-economic consequences, implications for state power and governance, and historical trajectory (Held, McGrew, Goldblatt, & Perraton, 1999). They call these schools of thought the hyperglobalizers (or globalists), the skeptics, and the transformationalists.

In brief, globalists are people who see globalization as real and inevitable. Driven by forces that include advanced technologies, free markets, capitalism, liberal ideology, and world culture, from a supranational level, globalization is seen as a process that transforms the world economically, politically, culturally, and ideologically. Proponents contend that transformation is toward unity, overriding national and local barriers, bringing homogenization (becoming the same), universalization (being everywhere), and standardization (adopting the

same measurements)—in short, convergence (becoming more alike) in everything and everywhere. They believe that global forces will make the contemporary world borderless (Ohmae, 1990), a global village (McLuhan, 1964), a McWorld (Barber, 1996), and the process is inexorable. They also perceive that in the new world order the nation-state is going to wither as its role has become unnecessary and obsolete in an interlinked economy and global society.

Globalization skeptics, on the other hand, are people who deem contemporary globalization essentially a myth, more of an ideology of discourse than reality. They argue that the contemporary levels of economic interdependence are by no means historically unprecedented and the current world economy is nowhere global (Hirst & Thompson, 1999; Thompson, 2000; Hay, 2003). Further, they find that national governments maintain strong regulatory power in their national economies and are very much the primary architects of the current international economy (Wade, 1990; Weis, 1997). In their view, geography and nation-states are far from over (Gertler, 1997). Under globalization, the skeptics see the world as becoming more divided and fragmented and at greater risk of protracted conflict and wars between religions, cultures, regions, and nation-states (Regan, 1996; Gantzel, 1997; Cassen, 2000).

Transformationalists adopt a position beyond the two earlier approaches. In the main, they agree with the globalists that a form of global activity goes on in the contemporary world that causes many rapid and radical social, political, and economic changes, hence reshaping modern societies and world order. However, they do not believe that the trajectory of globalization is fixed and destined for an inevitable outcome. Instead, they see globalization as an essentially contingent historical process, full of contradictions, and nothing but a dynamic and open-ended process (Giddens, 2002). In terms of the implications for nation-states, transformationalists accept that globalization has eroded some national sovereignty of nation-states for example, in economic policies, but they do not believe that nation-states are going to disappear or be replaced by supranational organizations (Cable, 1999; Green, 1999). Some scholars even argue that the role of nation-states has been strengthened by globalization (Giddens, 2000). However, just as the process is viewed as open and contingent, there is no strong theory or suggestion articulated by this group as to the direction and outcome of globalization.

Among the three schools of thought, globalists most explicitly offer a direct causal theory on globalization, hypothesizing convergence as an inevitable outcome of globalization. Although they may have different underlying theoretical assumptions and evaluations of global forces' impact, globalists as a group see them as supranational, transcending national and local barriers and homogenizing economic, political, cultural, ideological, and educational systems.

However, such a perspective has been criticized as being too simplistic and deterministic. Three major lines of criticism have been levied against it. First, it has been criticized for ignoring possible reactions and resistance of local actors (Wong, 2002).

Second, it has been charged that many claims are made without support from empirical evidence. The tendency to make sweeping generalizations and abstract theoretical assertions insufficiently connected to specific historical examples and evidence is particularly identified as a major problem with the existing literature (Busch, 2000; Monkman & Baird, 2002; Yang, 2003).

Third, it is found that most existing literature claiming convergence has not given adequate attention to the complexity of the concept of convergence. In most circumstances, the term *convergence* is employed with little or no definition. The casual use of the term has led to its frequent misapplication. As some scholars such as Clark Kerr (1983), Colin Bennett (1991, 1992), and Colin Hay (2000) have pointed out, what the term means, what drives convergence, whether there are different levels or aspects of convergence, and how convergence can be measured are important questions and significant to the interpretation of empirical evidence but have not been adequately addressed in most social research.

This paper attempts to provide a better understanding of the globalization process and how its influences are realized in particular settings and places by means of a longitudinal comparative study of four public university systems in East Asia. Also, as a prerequisite to the investigation of the convergence hypothesis, the concept of convergence needs to be defined. In this study, *convergence* is taken after Kerr (1983) and Bennett (1991) as a "process of becoming more alike," instead of a static condition of "being" at a particular point in time.

Changes in University Policies, 1946–1996: Findings and Discussion

Student Enrollment

Hong Kong

For the British colonial administration in Hong Kong, the major function of universities and higher education in the tiny colony was to produce the kind of educated workforce that was required by the economy. Education was an instrument to facilitate and support economic growth (Hong Kong [HK] Government Secretariat, 1981; HK Institute of Education, 1999).

Despite its impressive economic success, Hong Kong had a very slow-growing university sector. From 1911 to 1963, there was only one university for the entire colony. By 1947 there were places for about 600 students, less than 1 percent of the relevant age cohort (HK Education Department, 1947). In 1950 the number of places rose only to 715 (Simpson, 1967). In the United States, there was a university system open to all already by the 1950s, with more than 15 percent of the age cohorts admitted to higher education institutions (Trow, 1973). The Hong Kong system was extremely elitist.

A second university was founded in 1963. It helped expand the sector but only to a limited extent. The new university enabled students from the Chinese

school stream, who were previously excluded from gaining admission to the English-speaking University of Hong Kong, to realize their aspiration for university education without having to leave home. However, its founding was not due to the government's intention to increase educational access but a calculated measure to contain political interference from the Chinese governments of both the mainland and Taiwan. By 1971 the total number of university places available increased to 5,659 (HK Education Department, 1971), which represented a mere 2 percent of the relevant age cohort (HK Government Secretariat, 1981).

The restricted access to university education was a deliberate policy of the British administration. Fear of social disorder stirred by an agitated educated unemployed army as in Europe, India, and Pakistan in the 1960s and 1970s convinced the colonial government to keep the university door closed to the majority of the local population (HK Government, 1978). The government was content with the small number of university graduates—just sufficient to meet the demands of the modernizing civil service and technical professions until the end of the 1980s.

In the 1980s the intensified global and regional competition brought by economic globalization and the worldwide spread of advanced technologies placed enormous pressure on the colonial government to produce more high-level workers to increase the small island's competitiveness. Yet, it was not until driven to it by two political events in the latter half of the decade that the government finally opened up the university sector.

The two political events were (1) the negotiation between the British and Chinese governments in the mid-1980s over the sovereignty of Hong Kong and (2) the Tiananmen Square incident in mainland China in 1989, in which the government allegedly massacred protesting students. These two events led to an unprecedented policy of expansion of the university sector toward the end of colonial rule. Both events sent the territory into a panic, with business investment collapsing, property prices stumbling, and the local population leaving in throngs (Wu, 1992). The high rate of brain drain through emigration became a grave concern for the colonial government. To calm the public, rebuild its human resource base, and restore confidence in business in the territory, the government embarked on an unprecedented expansion plan.

In addition to its earlier decision to build a third university by 1991, the plan called for doubling intake of first-year students within five years. The increase to 15,000 full-time students by 1996 would raise the participation rate of 17- to 20-year-olds from the prevailing 8.6 percent to 18 percent (HK University Grants Committee, 1996). From a British administration that had closely guarded the university sector for the past 150 years it was a surprising move to now suddenly opt for such an ambitious plan only a few years before handing the colony back to China in 1997. The plan finally transformed the higher education landscape of Hong Kong from an elites-only to a mass-education system before the end of the 20th century, all for the purpose of economic development.

Singapore

The National University of Singapore (first known as University of Malaya) was established by the British administration in 1949 for people in the Malay Peninsula and the surrounding territories. In its first year, it had a total student population of 645; students came from all over the region of Southeast Asia (University of Malaya, 1951). The number quickly grew to 1,825 by 1957 (Ong, 1973).

After British withdrawal from the island, university provision remained limited under the new national government elected in 1959. There was only one public university in Singapore between 1949 and 1968. The number of undergraduate places rose to 1,641 by 1960 and to 4,680 by 1970 during the same time that the country's population increased from 1.6 million to 2 million (Singapore Department of Statistics, 1983).

As in Hong Kong, educational institutions were perceived by the Singapore Government as instruments to meet the workforce needs of the national economy. The workforce function was the key role of all public institutions, including universities. The Singapore government closely monitored the education sector to ensure the workforce targets were met in the most effective and economical way. Elaborate planning and tight scrutiny were pursued by government departments.

In 1968, after a long and bitter struggle between its founders and the government, the private university Nanyang was finally recognized by the government and included in the public sector. The expanded university sector provided 6,000 full-time undergraduate places by 1972 (Pang & Hassan, 1976). Like the Hong Kong government, the Singapore government intended to train only a small group of elites and thus favored a restricted intake policy for universities. For example, in 1987 the number of applicants who were able to gain entry to the National University of Singapore was only 50 percent (Low et al., 1991). The small number of university places meant many students left to study overseas (Selvaratnam, 1994).

The period 1980–1996 was a time of rapid and substantial development in the university sector of Singapore. The island economy depended heavily on an imported high-level workforce, while large numbers of students were leaving for overseas studies and not returning. The exodus of students began to worry the government as the continuous outflow of talented young people approximated a brain drain as well as financial loss to the small island. Facing severe regional and global economic competition, the government saw an urgent need to maintain and expand its worker pool, particularly in engineering, banking, accountancy, and architecture (Lee, 1980a).

The need to expand the pool of human talent and to diffuse public frustration with inadequate educational opportunities convinced the People's Action Party (PAP) government to take a new approach. In the early 1990s the Ministry of Education (MOE) announced a new policy by which all students who qualified for university entrance and were deemed of capable of passing examinations would be admitted (Low et al., 1991). At the same time, the higher education sector was allowed to expand, with more universities, including private and open universities, and polytechnics set up to satisfy the public demand for higher

education. The opening up of the university sector to private participation marked a completely different stance from the government's previous higher education policy. In 1991 the university sector offered places to 15 percent of all full-time tertiary. In 1991, university places amounted to 15 percentage of all tertiary enrollment, and this number jumped to 35.5 percent (31,895 degree places) in 1996 (Singapore Ministry of Education, 1997).

Taiwan

After repossessing the island of Taiwan from the Japanese after World War II, the Chinese Nationalist government began to restructure the educational system of the island. One of the major changes was to expand higher education to generate economic growth. Like the British administration in Hong Kong and the PAP government in Singapore, the Chinese government saw the workforce function as one of the major roles of education.

Again, similar to Hong Kong and Singapore, the development of the university sector in Taiwan was slow and under strict government control. The social demand for skilled workers to meet the needs of industrialization in the 1960s was answered by the vast expansion in sub-degree tertiary institutions, such as junior colleges. The number of institutions offering degree-level programs, that is, universities and independent colleges, increased from 4 in 1946 only to 16 in 1971 (Taiwan Ministry of Education, 1971). Student enrollment, however, increased massively, from 5,379 in 1950 to 95,145 in 1970 (Hsieh, 1989). It showed that institutions expanded not only in total numbers but also in student capacities.

Despite the abundant educational opportunities offered by junior colleges and the open-admission University of the Air (similar to Open University in the United Kingdom), the competition for conventional university places was extremely intense among young Taiwanese. The admission rate was about 25 percent in the late 1970s and 30 percent in the late 1980s (Wu, Chen, & Wu, 1989). The government decided whom to admit and for what courses solely on the basis of results from the university joint entrance examination. The pressure for academic achievement on students was extremely high. As in Hong Kong and Singapore, the limited university places in Taiwan drove many students to study overseas.

Facing the increasing pressure of social demand and global competition, as well as political threats from the opposition party in the 1990s, the Nationalist government finally decided to abandon its conservative approach by rapidly expanding the university sector. The government began to accept that the larger the number of college and university students in the population, the better the human quality the country would have (Liu, 1994). The number of degree-granting institutions rose from 9 in 1971 to 24 in 1996 (Taiwan Ministry of Education, 2002). The total student enrollment in these institutions was 171,602.

Realizing that public provision alone could never be able to satisfy the population demand for university education, the Nationalist government decided to open up the sector to private providers, which had already been very active at the junior college level. By increasing private participation, the government was

able to achieve the expansion target but with much less capital outlay. A new university law passed in 1994 set a new road map for the higher education sector by encouraging more private participation. By 1995, 45 percent of universities and independent colleges on the island were private institutions. The new public-private partnership approach enabled the island nation to achieve the targeted student enrollment (and economic success) affordably.

Thailand

The Thai university system was established by King Rama VI in the early 20th century to modernize the civil service (Techakumpuch, 1973). More universities were founded by various government departments, such as the Ministry of Agriculture and Ministry of Culture, during the 1930s and 1940s owing to their needs for an expert workforce. By the end of World War II, there was a small, well-established higher education sector in Thailand. In 1948 there were five state universities, all in the capital city of Bangkok. Total student enrollment was 10,561 out of a total population of 17.3 million (Haddad, 1994). The system was extremely elitist.

Thailand had been ruled by a military junta for most of the years since becoming a constitutional monarchy in 1932. The military government tightly controlled the university sector for fear of an uprising of an educated mass (UNESCAP, 1992). But the need for professional, technical, and skilled workers to support the export-led industrialization and national growth overrode the government's fear. University education was given the priority to develop (Thailand Ministry of Education, 1971).

From the 1960s, the education sector was injected with resources to expand. By the early 1970s, the number of conventional universities in the public sector had risen to nine. These institutions provided 45,950 student places, mostly at the undergraduate level (Thailand Ministry of Education, 1971). In 1973 the number fast increased to 72,030 full-time undergraduate places in the traditional universities. The competition for a university place was extremely severe, given the total eligible population of 40 million. The admission rate was only about 30 percent of all applications (Harman, 1994).

From the 1980s, the Thai government faced increasing pressure for educational reform. The changing world economy, which had become knowledge- and skill-based; the democratization of politics at home; and the rising social demand for higher education put tremendous pressure on the government to open up the higher education system. A new policy in the 1980s led to the higher education sector expanding at an incredible rate. The 1990s saw the fastest growth of new public universities and the greatest expansion of existing ones. By 1996 there were 22 universities and university-level institutions in the public sector. There were altogether 904,636 students in these institutions, although over 72 percent of them were in the two open universities.

Discussion

Clearly, the four national university systems had followed the Western trend of development, expanding enrollment (see Table 1) and shifting the system from

an elitist to a mass-education structure, albeit achieving the transition only in the 1990s. These systems were all under the tight control of their ruling governments, which tended to keep the sector selective and small for fear of an educated population that might threaten their political power. The purpose of universities was largely a pragmatic one for these four governments: an instrument to train skilled and educated workers for national needs. Public universities, being financed and controlled by governments, were used as a means to economic ends.

Table 1: Student enrollment at public universities

	Hong Kong	Singapore	Taiwan	Thailand
ca. 1946	600 (1946)	645 (1949)	5,379 (1950)	10,561 (1948)
ca. 1971	5,659 (1971)	6,000 (1972)	95,145 (1970)	45,950 (1971)
1996	15,000	31,895	171,602	904,636

Note: The years in parentheses are the actual years of the figures shown.

The intense competition of a technology-intensive economy on both the regional and the global levels in the 1980s and 1990s left the four governments no choice but to turn to universities for a solution. Universities in these four polities were assigned the responsibility of producing the workforce required to ensure national success in a knowledge-based global economy. The workforce need was the main reason underlying the vast expansion of the sector during the 1980s and 1990s in these four Asian economies.

Female Participation

Hong Kong

Following the British model and legislation, local education in Hong Kong has always been open and equally accessible for all creeds, races, and sexes (except in single-sex schools). University education is no exception. However, there were no female students when the first university began operation in 1911. The first group of female students was admitted in 1921, 10 years later. The gap was very much due to the traditional Chinese attitude in those days against women receiving education, especially higher education, than due to any government discriminatory policy. Under increasing Western influence, attitudes became more liberal and the male-to-female balance in universities improved rapidly over time. The proportion of female students at the undergraduate level rose from 28 percent in 1946 (HK Education Department, 1947) to 33 percent in 1970 (HK University and Polytechnic Grants Committee, 1976) and 49 percent in 1994 (HK University Grants Committee, 1996).

The rise in proportion of female students was much sharper between the 1970s and 1990s than earlier years. This period also coincided with the time

when the tiny colony prospered, becoming one of the four "little dragons" of Asia. Increasing affluence coupled with Western influence on equal opportunity for all gradually diminished the traditional Chinese favoritism toward sons. The attitude change enabled female students in Hong Kong to enjoy equal opportunity with their male counterparts right up to the university level.

Singapore

In Singapore, women were able to participate in university education as soon as the system was established. The principle of equal opportunity for sexes was incorporated in the national Ten-Year Plan drawn up in 1949 under British rule. Women faced no official or legal barrier to pursuing any level of education, including higher education, in Singapore. When the first public university began operation in 1949, it had 36 female students, representing 5.6 percent of all students. The numbers rose to 37.3 percent in 1971, a faster growth rate than that of Hong Kong (Singapore Department of Statistics, 1983).

When its industrialization began in the 1960s, the island nation had a shortage of skilled labor. To maximize the labor pool to support economic development, the government actively encouraged women to continue their education in the 1970s. The gender gap in higher education began to narrow, and women reached a largely balanced participation rate in the early 1990s. In 1996 there were more women (55 percent) in the two universities than men (Singapore Department of Statistics, 1997).

The "over participation" of women in higher education became a concern to the government, which began to intervene from the late 1980s. A policy of positive discrimination was implemented to ensure that certain professions, such as national health service, and courses, such as medicine, would not end up with too many women (Low, 1997). The policy was defended on the grounds that women tended to leave their profession to have children, wasting government resources in the form of a million-dollar subsidy to each student (South China Morning Post, 2 March 2002, p. 6). On a different note, former Prime Minister Lee Kuan Yew once openly expressed his regret at giving women equal opportunities in education and employment, which he felt made it difficult for women to find husbands (Low, 1997).

Female equity in Singapore society was clearly something controlled by government leaders more for their convenience than for principles of equity, equality, and human rights.

Taiwan

By law women in Taiwan were entitled to equal opportunity in education. Equal rights in education irrespective of age, sex, and religion were enshrined in the national constitution of Three Principles of the People (MOE, 1995). However, the number of women studying at universities was only 1.2 percent of the total enrollment in 1946, the lowest of the four polities (Taiwan Ministry of Education, 1947). The only university on the island at the time was established by the Japanese colonial government in 1928 for the Japanese people living there. Over 80 percent of students were Japanese. The small number of Chinese

students there were concentrated in the medicine department, where women were a minority.

The years immediately after World War II were complete chaos on the island. The island was first repossessed by the Chinese mainland government from the defeated Japanese. The new government undertook a complete restructuring and reorganization of the university to remove all Japanese systems. Then in 1949 the Nationalist government, after being defeated on the mainland by the Communists, moved its national headquarters to the island. Under the new government, the whole island with its social, political, economic, and educational systems was revamped.

The new social and educational systems allowed the university sector expand. Given the increased provision for them, female participation began to rise steadily, reaching 39 percent in 1970 (Hayhoe, 1995) and 47 percent in 1996 (Taiwan Ministry of Education, 1997). Despite lack of restrictions for participation in universities, more women were studying at junior colleges, the less prestigious institutions, than at universities, the top echelon of the educational hierarchy. The persistently smaller number of women applying at universities was suggested to be the result of family attitudes in Taiwan, where boys were traditionally given preference over girls in the pursuit of higher and better education (Wang, 2001).

Thailand

Despite the Royal Proclamation of the Compulsory Primary Act in 1921 that gave women the same right to education as men (Thawisomboon, 1965), the patriarchal and hierarchical tradition continued to favor males in society, work, and education (Luke, 2001). By the late 1940s, female students constituted only 12 percent of the total student enrollment (Sargent & Orata, 1950).

The need for an educated workforce to support industrialization and national economic plans convinced the government to begin a vast educational expansion in the 1960s, which opened a floodgate to women. Although the original male dominance of Thai culture continued to exist in society in the 1970s, women were fast catching up with their male counterparts in education. In the 1971 academic year, 43.3 percent of students in the nine conventional universities were women (Thailand Office of the National Education Commission, 1971). The ratio rose to almost 1:1 in the early 1990s. In 1995 female students finally surpassed men in numbers, constituting 51.4 percent of the total university enrollment (Thailand Ministry of University Affairs [MUA], 1996).

Discussion

Women in these four polities had enjoyed the expansion of educational opportunities at university level since World War II and achieved equal parity with men by the mid- or late-1990s (see Table 2). Their increased opportunity was very much a result of their governments' decision to expand the university sector and student enrollment to meet workforce needs of the industrialized economy. While the general direction of increased participation was similar

among the four polities, the governments encouraged women to exercise their rights in education to different extents and for different reasons.

Table 2: Female participation rate in Hong Kong, Singapore, Taiwan, and Thailand, 1946–1996

	Hong Kong	Singapore	Taiwan	Thailand
ca.1946	28% (1946)	5.6% (1949)	1.2% (1946)	12% (1949)
ca.1971	33% (1970)	37.33% (1971)	39% (1970)	43.4% (1971)
ca.1996	49% (1994)	55% (1996)	47% (1996)	51.4% (1995)

Although none of the four governments in this study formally declared any objection to women enjoying equal opportunity in education, these governments clearly showed different degrees of enthusiasm for different reasons. In Hong Kong the colonial government neither encouraged nor discouraged female participation at universities. It simply adopted and followed the usual Western system and ideology of open and equal opportunity for all. In Singapore the government took a pragmatic stance, regulating women's participation at universities according to the needs of the national economy or government plans. Women were seen as a buffer to the labor market, serving as additional workers when needed or homemakers when the national population was shrinking. The Singapore government did not hesitate to employ national campaigns and legal mechanisms to attain its economic targets.

In Taiwan it was not the government but traditional social barriers that hindered women from participating equally in education. The Nationalist government, for its political campaign, was keen to support women in exercising their entitlement to education, which was one of the core values of the national founding principles. In Thailand women had been supported by the royal decree in the early 20th century in obtaining an education. Although some government officials had concerns and reservations about the “over-participation” of women, they could not defy the order of the greatly respected king. Thus, under royal encouragement women in Thailand pursued education to the highest level, and Thailand was one of the earliest to achieve equal female participation at universities compared with other Asian countries.

The developments in these four polities indicated that, although there was a similar growth in female participation at universities, the convergent development grew from different reasons.

Medium of Instruction

In one way or another, the governments of the four countries were all concerned with legitimization and consolidation of their control through nation building. As language is one powerful instrument of assimilation, the way

governments set the medium of instruction for schools and universities reflects in large degree the intention and underlying reasons of a government. In normal circumstances, the national language would be the medium of instruction at schools and universities to ensure that the same culture and identity are internalized in young, formative minds, making a unified nation. This is the case in most sovereign states, such as French in France, English in England, and Chinese in China. Also, usually the language spoken by the majority of the nationals is the national language.

Thailand

In Thailand Thai is the official language of the nation and the government, and it is spoken by the majority of the population. A kingdom before 1932 and a constitutional monarchy post 1932, Thailand is a country proud of its national heritage and keen to maintain its unique cultural characteristics, including its language (Thailand National Economic and Social Development Board, National Statistical Office, and Chulalongkorn University, 1974). As a national tradition and cultural bond, the national language of Thai has always been used by everyone in daily communication, administration, and education instruction. Even in the early days of university education, instruction was in Thai even when textbooks were in foreign languages. The national language remained the medium of instruction at universities in the global era despite the growing dominance of English as an international lingua franca.

While upholding the status of the national language, the Thai government was aware of the importance of English and its capital value in the global age. In the early 1970s, the Thai government had set up English Language Centers to provide intensive language training for its university instructors, postgraduate students, and selected teachers and civil servants (Thailand Ministry of Education, 1971). In the 1990s, to meet the global challenge the government again devised plans to improve language proficiency of graduates especially in English. The government effort had made English the major second language in Thailand. Some international programs were even conducted in English for the purpose of attracting overseas students (Thailand MUA, 1995). But for the great majority of students in Thailand, the national language continued to be the primary language of education and communication.

Taiwan

In Taiwan the medium of instruction at national universities was Mandarin, but Mandarin was not the language spoken by the native people on the island, who constituted 84 percent of the total population (World Factbook, 1999). Rather, Mandarin was seen more as a foreign language imposed by the Nationalist government, which fled to the island from the mainland in 1949. The adoption of Mandarin as the national language in official communication and education instruction was seen by the natives as a means of colonization and control by the Nationalist Chinese government. Fostering the learning of Mandarin at all levels of education, and making it the official language in the

island nation, the Nationalist government tried to build a nation with Mandarin at the center of power and national identity.

Singapore

In Singapore, despite the bulk of its population being Chinese, Malay, and Tamil, English was used as the sole medium of instruction at state universities from the 1940s to the 1990s. The use of English from the late 1940s to the mid-1950s was easier to understand given the British rule of the island city in those years. However, English remained the medium of instruction when Singapore became an independent state in the late 1950s. There were two main reasons for the government's decision. One was to unite a population that had been segregated and fragmented by the dividing lines of culture, ethnicity, and language. The other was utilitarian. English, being the international lingua franca, offered an immense practical value and competitive advantage in the global era. Thus, for the PAP, the de facto only political party in the country since the island's independence in 1959, English was a powerful instrument and had great capital value for the party's economic ambition and nation-building project. To the PAP government, anything that could help realize its economic and political goals would be put on the national agenda and fully utilized.

Hong Kong

In Hong Kong, despite over 98 percent of its residents being Chinese, the colonial government decided that English should be the medium of instruction in the first and subsequent universities (except the Chinese University of Hong Kong, which used bi-lingual teaching). This was for the obvious reasons of maintaining the hegemony of the ruling master and assuring effective communication between government and subjects. Therefore, from the perspective of the British government, preserving the privileged status of English and encouraging its learning in the colony was absolutely essential and necessary for consolidating government power and control. In the case of British Hong Kong, the use of English as the medium of instruction in elite universities rendered support to the government in its own kind of nation-building project.

Discussion

As shown in Table 3, only Thailand among the four polities used the national, native language as the medium of instruction at universities for the purpose of strengthening national culture and identity. To the Thai government, a national language of Thai helped unite the country together. The 'colonial governments, such as the British administration in Hong Kong and the Nationalist government in Taiwan, imposed their own languages on their dependent territories to maintain their hegemony and strengthen their control. The Singapore government continued to use English as the first language for its capital value in the global economy despite it being neither the national language for the island state nor the mother tongue of its majority population.

It appears that the governments of Hong Kong, Singapore, Taiwan, and Thailand all decided on their language of education instruction for the same

reason, namely, to support their nation-building projects, whether for political or economic ends, or both. However, while goals may be the same, the means can be different. In the case of medium of instruction, it is clear that policy intention converges but policy instruments diverge.

University Governance

For Western societies, academic freedom and institutional autonomy are the most important and distinctive values of a university. Given the Western roots of the university systems of Hong Kong, Singapore, Taiwan, and Thailand, it would be natural to expect that these two values are deeply embedded and closely guarded by the institutions and are part and parcel of their institutional makeup and operation. However, evidence shows that this is not the case.

Table 3: *Medium of instruction at state universities*

	Native language	Medium of instruction
Hong Kong	Cantonese	English
Singapore	Malay/Chinese/Indian	English
Taiwan	Local Taiwanese dialect	Mandarin
Thailand	Thai	Thai

Hong Kong

Modeled on the British system, universities in Hong Kong were incorporated by public ordinance as independent, autonomous, and self-governing entities. Although almost entirely financed by the government, each university had its own governing bodies, a board and senate, responsible for the institution's own governance and quality control. There was also a go-between institution, the University Grants Committee (UGC), that was set up in 1965 to advise the government on development and funding of universities. Other than having the governor of Hong Kong as the ex officio chancellor of all universities, performing mainly ceremonial duties, the government had no direct involvement with the institutions in the running of their business.

Despite the indirect steering from the UGC, universities in Hong Kong had always been able to chart their own course and determine their output and standard, just like their counterparts in the free West. Interference from government in universities' operation and academic decisions, as well as on staff and student activities, had been unheard of until the 1980s.

The growing dominance of economic growth on the national agenda and the intensifying global competition in the 1980s and 1990s put an enormous pressure on higher education in this tiny trade-dependent colony. Universities were assigned different roles by the government in its workforce plan and advised via the UGC of their required graduate output (HK University and Polytechnic

Grants Committee, 1992). The economic pressure on universities to perform was further reinforced by the growing influence of the New Public Management (NPM) approach, which emphasizes market competition and performance measurement and has become a dominant ideology in the United States and major Western societies since the 1970s (Clark, 1998; Marginson & Considine, 2000; Slaughter & Leslie, 1997). Universities in Hong Kong were increasingly demanded to account for their expenses, quality, and performance (Mok, 2000a). Following the concept of new managerialism—a management style that emphasized goal setting, was achievement oriented, and used budget control—the Hong Kong government extended its control, via the UGC, to cover curriculum design, pedagogical design, implementation quality, outcome assessment, and resource provision.

The 1990s witnessed increasing control and regulation of universities by the government through annual reports, institutional visits, and planning and cost-consciousness initiatives (HK University Grants Committee, 1996). Between 1946 and 1996, the colonial government had changed from a *laissez-faire* sponsor to a strong steering supervisor, while the universities had changed from autonomous to state-dependent institutions.

Singapore

Like Hong Kong's, the first university in Singapore was also modeled on the British system of self-governance, tradition, and value system (Chen, 1960). After the PAP government took power in 1959, the whole higher education system was turned into a state instrument to bring about the essential social and economic transformations needed for national survival (Pang, 1966). The university, being the principal center of higher learning and research, was tasked with the production of a technological and professional workforce (Pang & Hassan, 1976). To ensure that the state university geared itself to market demands as directed, for decades the government selected and appointed its vice-chancellors. For some years, the position was held by senior government ministers such as the deputy prime minister or the senior minister of state for education. The university was controlled “down to the smallest details” (Puccetti, 1972, p. 231).

For its survival, the PAP government intended to use every resource to its optimum? To ensure that the huge resources invested in the university sector were used efficiently, the PAP government adopted an approach of airtight control (Low et al., 1991). Through the Ministry of Education (MOE), the government held extensive control over the university sector. The MOE decided on the number of universities and student enrollment numbers and set policy guidelines for admission standards, educational performance, enrollment levels, student payments, and other aspects of institutional operation. It had power to approve curriculum, new programs, and program changes; determine appropriate facilities, teacher qualifications, and teachers' fitness to teach; and review management structure. It also determined the annual budgets of higher education institutions and the amount of public support allotted to them. Contrary to the *laissez-faire* policy of the British administration, the PAP government's leitmotif

was to “leave as little to chance as possible” (Low et al., 1991, p.201). Given the meticulous planning and iron policy of the government, there had always been little room for institutions to maneuver. Institutions had no freedom to decide on their own objectives and development. Each institution was assigned a specific role to complement the national workforce project. All courses were centrally planned to avoid duplications between institutions or production of socially divisive inclination. Decisions to open, expand, or close courses were based mainly on their contributions to the economy. Students, too, had little freedom of choice (Low et al., 1991). They were streamed by the government into faculties and courses upon entry according to their academic achievement irrespective of their personal interest. University staff was kept in tune with government philosophy and policies through various encounters such as committees, conferences, and commissions in which they were familiarized and internalized with government positions and decisions (Lim, 1983; Yip, 1971).

To the PAP government, the 19th-century Western model of the ivory tower was neither relevant nor appropriate for the new Singapore. The iron grip of the government on universities continued through the 1970s to the 1980s. Through control of the purse strings, the PAP government was the piper who called the tune. The government turned universities into state instruments to support its modernization and nation-building projects.

The 1990s saw a radical change in government regulation of universities. After decades of micromanagement and airtight control, the PAP government believed that universities in Singapore were lacking in initiative and responsiveness, prohibiting them from becoming world-class institutions. As stated in the vice-chancellor’s report of the National University of Singapore, the top national university in the island state, its new goal for academic year 1996–1997 was to establish itself as “a premier hub of learning, scholarship and research in Asia, in line with Singapore’s development as the ‘Boston of the East’” (1997, p. 18).

To encourage them to have more self-initiative and be more responsive to market needs and innovative in their strategies, a policy of decentralization, devolution, and diversification of funding was adopted in the 1990s. Institutions were encouraged to take more initiative in their academic planning, quality assurance, cost reduction, linkages with industries, overseas connections, and income generation. University institutions were expected to cease to be mere teaching institutions and develop into world-class centers of academic and research excellence (National University of Singapore, 1996).

From micromanagement to self-regulation, university governance in Singapore made an about-face. The increased responsibility in planning, operation, financial viability, and policy setting, however, should not be seen as an increase in autonomy and freedom for universities as all major decisions were subject to the approval of the government, still steering but at a distance. The changes should neither be seen as an outcome of the NPM influence as the government has never relinquished its control. Rather, the transformation was brought about by the government’s new plan for universities to become premier institutions on a par with the best in the world so as to take the country to a better

future in the 21st century (National University of Singapore, 1996). Decentralization (lessening government control) and autonomization (enabling more autonomy) of universities were strategies of the PAP government for securing further national success in the new era.

Taiwan

Similar to Singapore, Taiwan had an authoritarian regime from 1949 until the early 1990s, when democratization of politics began to take place. Before the 1980s its higher education was characterized by rigid centralization and tight control.

Unlike Hong Kong, Taiwan had no buffer institution, such as the UGC, to go between the government and universities, was not under the direct control of the government via the MOE. The MOE was established in 1928 in mainland China as the highest authority in national academic, cultural, and educational administrative affairs (Taiwan Ministry of Education, 2001). It was empowered to set policies for all levels of education and to supervise and regulate all educational institutions, from primary to tertiary and from private to public. The same mode of governance was transplanted to Taiwan when the Nationalist government took itself to the island in 1949.

Under the autocratic regime of the Nationalists, the power of the MOE was pervasive as well as far ranging. It determined the size of the sector, number and type of programs offered, number of students and staff, level of tuition fees, graduation standard, medium of instruction, school calendar, and appointment of presidents of public institutions (Kumnuch, 1996; Law, 1995; Wu, Chen, & Wu, 1989). Universities and other higher education institutions in Taiwan had little autonomy, whether at the institutional or academic levels.

The internal political rivalry forced the Nationalist government to implement real democracy to appease the local Taiwanese (Tsai, 1996). Martial law, in place since 1949, was removed in 1987. Liberal reforms, for example, formation of intervarsity- and university-based teacher associations and student associations, were gradually introduced.

The most significant change in terms of institutional governance was the passing of the new University Law in 1994. The new law allowed institutions to determine their academic and personnel matters, such as student admissions, programs and evening schools, staff rank and qualifications, and most importantly, elect their presidents, deans, and department heads (Taiwan Ministry of Education, 2001). It also empowered universities to conduct self-accreditation, which is deemed a fundamental value of a university. By academic year 1996–1997, 15 universities were granted such power and many more were in the pipeline (Mok, 2000b).

The internal political situation in Taiwan had led to a democratic reform in university governance in the de facto state. The recent relaxation of central control allowed institutions to have increased independence in matters of finance, recruitment, academic planning and standards, and institutional management. Despite skepticism from some critics on the extent of depoliticization (reduction of political influence) in education, the university sector of Taiwan had

ostensibly moved from a system of rigid centralization and tight control toward one of deregulation and devolution in the 1990s. Institutions had more freedom and autonomy than before.

Thailand

The university system in Thailand was a royal project, established by King Rama VI in 1916 in the course of national modernization. Although state universities had their own charters and governing bodies, being government units themselves they were subject to the same top-down management and close monitoring by the military junta as was any other government agency.

However, the primary concern of the military junta for power and control made universities a particular subject for close monitoring. Over the 80 years of university history, the real autonomy of Thai universities varied. For many years, the chairs of university councils were held by key political figures, including royal princes and top military officers, some of whom were prime ministers (Chulalongkorn University, 1955). The heavy political presence in the top governing body was to ensure a high degree of government control and compliance (Watson, 1989). Yet institutions were able to retain some degree of academic freedom and institutional autonomy, for example, financial flexibility, from time to time (Suwanwela, 1996).

The creation of the Ministry of University Affairs (MUA) in 1982 with its authority over all public and private universities began a period of micromanagement of educational institutions in Thailand (Suwanwela, 1996). Before 1959, universities were under the authority of different government departments. The scattered nature of the sector made coordination and regulation difficult. To better coordinate the development of universities for enhancement of national development, all public universities were centralized under the office of the Prime Minister (Techakumpuch, 1973) and later transferred to the new Office of Public Universities in 1972 and the MUA in 1982 (Thailand MUA, 1995).

In many ways, the MUA is a blend of Hong Kong's UGC (modeled on the British system) and France's Ministry of Higher Education (Watson, 1989). Its control extended to the entire university sector and penetrated every level of university operation, from policy setting to faculty development, curriculum and syllabus appraisal, personnel management, and budget allocation. Being part of the government bureaucracy as in Taiwan, universities were managed and regulated as a strict government business. There was heavy military and government official presence on university management boards. All university affairs were run according to detailed instructions given by the government; for example, it determined the number of students admitted and admission procedures.

The excessive centralization and control were detrimental to universities, especially with respect to academic quality, institutional autonomy, and flexibility. A proposal from one academic circle in the early 1970s called for separating universities from the civil service system to empower universities with greater autonomy (Techakumpuch, 1973). The idea gained little foothold because of the lack of support from both the government Budget Bureau and university

staff. The former did not want to lose control over how the money allocated to universities was spent, while the latter feared that the change would cost them their civil servant status and associated benefits (Techakumpuch, 1973).

Facing intensified regional and global economic competition, the Thai government began to demand that tertiary institutions improve their teaching and research to support the country's continued progress (Thailand MUA, 1995). Believing that autonomy and independence could help improve efficiency, flexibility, and innovation in universities, the Thai government determined to decentralize the sector by turning universities into autonomous institutions with decision-making power and financial autonomy from a new block grant system (Thailand MUA, 1995, 2001). This proposal too was met with widespread resistance from the Budget Bureau and university staff. By the mid-1990s, only two new universities, which had been established in the early 1990s, agreed to operate as autonomous institutions. The proposal failed to secure support from any established university. Despite the government's desire to move from a state-control to a state-supervision² model and allow universities more freedom and autonomy, the reform was blocked, at least up to the mid-1990s, by the entrenched conservatism and resistance to change within the sector.

Discussion

Universities in these four polities were regulated differently by their governments. The Hong Kong system had the highest degree of academic freedom and institutional autonomy among the four, due to its British origin and tradition. The Singapore system, although also having a British origin, was tightly controlled and micromanaged by the PAP government. The Taiwanese and Thai systems, both being part of the government bureaucratic structure, were rigid and excessively centralized.

Government regulation of these systems began to change in the 1990s. The Hong Kong government began to swing from a *laissez-faire* approach to a strong supervisory role following the world-dominant ideology of NPM. Universities were put under increasing pressure to be accountable, cost efficient, and high performing. The reason for adopting strong managerialism by the government was largely to contain the huge public financial outlay caused by the massive expansion in provision in the 1990s. The Singapore government turned to a more decentralized and autonomous model to encourage universities to become responsive, innovative, and world-class institutions, which the PAP government believed to be crucial for national success in the global era.

Taiwan was forced to decentralize and depoliticize higher education by the democratization movement at home. To appease the population, the Nationalist government, by means of a new university law, endowed universities with more freedom and autonomy in the 1990s. In Thailand, for national development, the government was willing to deregulate state universities, but the change was not accepted by the sector itself.

As shown in Table 4, changes in university regulation went different directions in the four East Asian polities. The four governments determined the type of reform that fit their agenda and national contexts.

Table 4. Changes in university regulation, 1970s–1990s

	1970s	1990s
Hong Kong	Laissez-faire	Strong managerialism
Singapore	Airtight control	Autonomization
Taiwan	Excessive centralization	Decentralization
Thailand	Top-down management	Status quo

Conclusions

This study has demonstrated the effects of globalization on four different university systems, which resulted in convergence as well as divergence. The evidence shows that educational policies in each polity were influenced by not only global trends and forces but also what happened in the region and within its national boundary. Global, regional, and local forces affected each polity, whether large or small, and shaped its trajectory and development. However, the final decisions on how to respond to the internal and external pressures rest with the national governments.

In the main, strong evidence supports the hypothesis that globalization leads to convergence in many aspects of university policy if *convergence* is defined as "increasingly alike." In this study, growing similarities are observed across the four systems in the accelerated expansion of the university sector—increase in number of institutions, increase in student enrollment, and higher female participation—especially after the mid-1980s. But more striking is the highly similar attitude of these four governments toward the role of universities as the central part of their national workforce projects and the engine for economic competitiveness and national growth.

However, evidence of nonconvergence is also present if we take the direction of change and the underlying reason or motive as the measurement dimensions. A complicated pattern of convergence and divergence emerges with four distinctive combinations clearly identified:

Type 1—The same policy is adopted by different countries for the same reason, as in enrollment expansion

Type 2—The same policy is adopted by different countries for different reasons, as in female participation

Type 3—Different policies are adopted by different countries for the same reason, as in medium of instruction

Type 4—Different policies are adopted by different countries for different reasons, as in university regulation

The picture is by no means simple and unidirectional. Empirical evidence has shown that similar global pressures can result in a variety of outcomes in different national and cultural settings. The actual outcomes are determined by the dynamic interplay between global, regional, and local forces. Globalization

needs to be understood in the wider social, economic, cultural, and political contexts.

This paper has shed more light on the impact of globalization on higher education through examination of a number of indicators. The diverse outcomes of globalization with different combinations of convergence and divergence have been supported by empirical evidence. While this study stopped at 1996, its model of investigation and findings have provided a reference for future studies.

To further understand globalization processes, it is highly recommended to continue the investigation in the same manner from 1997 onward till today in light of these four polities experiencing severe political, social, and economic challenges in the past decade. To give a few examples, Hong Kong ceased to be a British colony and became a part of the People's Republic of China in 1997; the Asian financial crisis that began in Thailand in 1997 and swept across Asia and the world subsequently severely affected these four East Asian polities; the opposition party (Democratic Progressive Party) took over government in Taiwan by the opposition party (Democratic Progressive Party) in 2000 from the ruling Nationalist Party for the first time since 1946; and ruling power returned to Singapore's Lee family in 2004. Whether and how these or other events that happened post 1996 at the global, regional, and local levels affect the course of higher education in these four polities remains to be assessed.

References

- Barber, B. R. (1996). *Jihad vs. McWorld*. New York: Baltimore Books.
- Bennett, C. J. (1991). What is policy convergence and what causes it?" *British Journal of Political Science* **21** (2 April 1991): 593–610.
- Bennett, C. J. (1992). *Regulating privacy: Data protection and public policy in Europe and the United States*. Ithaca, NY: Cornell University Press.
- Busch, A. (2000). Unpacking the globalization debate: Approaches, evidence and data. In: Hay C, Marsh D, eds., *Demystifying globalization*. Basingstoke, UK: Macmillan Press, in association with POLSIS, University of Birmingham, 2000:21–48.
- Cable, V. (1999). *Globalization and Global Governance*. London: Royal Institute of International Affairs.
- Cassen, B. (2000). "To save society." In: Lechner FJ, Boli J, eds., *The Globalization Reader*. Malden, Mass.: Blackwell, 14–16.
- The World Factbook (1999). Washington, DC: Author.
- Chen, C. E. (1960). Higher education in Malaya, 1945–1960." Unpublished BA (Hons.) thesis. Singapore: University of Malaya.
- Chulalongkorn University (1955). *Chulalongkorn University Handbook*. Bangkok: Chulalongkorn University.
- Clark, B. R. (1998). *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Paris: Pergamon for IAU Press.
- Gantzel, K. J. (1997). War in the post-World War II world: Some empirical trends and a theoretical approach. In: Turton D, ed., *War and Ethnicity*:

- Global Connections and Local Violence*. Rochester, N.Y.: University of Rochester Press, 123–144.
- Gertler, M. S. (1997). Globality and locality: The future of 'geography' and the nation-state. In: Rimmer PJ, ed., *Pacific Rim Development: Integration and Globalisation in the Asia-Pacific Economy*. Canberra, Australia: Allen & Unwin / Australian National University, 12–33.
- Giddens, A. (2002). *The Third Way and Its Critics*. Malden, Mass.: Polity Press.
- Giddens, A. (2002). *Runaway World: How Globalisation Is Reshaping Our Lives*, 2nd ed. London: Pacific Books.
- Green, A. (1999). Education and globalization in Europe and East Asia: Convergent and divergent trends." *Journal of Education Policy* 14, 55–71.
- Haddad, W. D. (1994). *The Dynamics of Education Policymaking: Case Studies of Burkina Faso, Jordan, Peru, and Thailand*. Washington, DC: World Bank.
- Harman, G. (1994). Student selection and admission to higher education: Policies and practices in the Asian region. *Higher Education* 27:313–328.
- Hay, C. (2000). Contemporary capitalism, globalization, regionalization and the persistence of national variation. *Review of International Studies* 26, 509–531.
- Hay, C. (2003). *What's Globalisation Got to Do with It?* Birmingham, UK: Political Science and International Studies, University of Birmingham.
- Hayhoe, R. (1995). An Asian multiversity? *Comparative Education Review* 39, 299–321.
- Held, D., McGrew, A., Goldblatt, D., and Perraton, J. (1999). *Global Transformations: Politics, Economics, and Culture*. Cambridge, UK: Polity Press.
- Hirst, P., Thompson, G. (1999). *Globalization in Question: The International Economy and the Possibilities of Governance*, 2nd ed. Malden, Mass.: Polity Press.
- HK Education Department. (1947). *Annual Report for 1946–1947*. Hong Kong: Hong Kong Government: Author.
- HK Education Department (1971). *Annual Summary 1970–1971*. Hong Kong: Hong Kong Government: Author.
- HK Government. (1978). *White Paper on University Preparation and Tertiary Education*. Hong Kong: Government Printer: Author.
- HK Government Secretariat. (1981). *The Hong Kong Education System: An Overall Review*. Hong Kong: Government Printer: Author.
- HK Institute of Education. (1999). *Handbook on Educational Policy in Hong Kong (1965–1998)*. Hong Kong: HKIEd: Author.
- HK University and Polytechnic Grants Committee. (1976). *Special Report, October 1965 to June 1976*. Hong Kong: Hong Kong Government: Author.
- HK University and Polytechnic Grants Committee. (1992). *Report for the 1988–91 Triennium*. Hong Kong: Government of Hong Kong: Author.
- HK University Grants Committee. (1996). *Higher Education in Hong Kong: A Report*. Hong Kong: Government of Hong Kong: Author.

- Hsieh, H. S. (1989). University education and research in Taiwan." In: Altbach PG et al., eds., *Scientific Development and Higher Education: The Case of Newly Industrializing Nations*. New York: Praeger, 177–214.
- Kerr, C. (1983). *The Future of Industrial Societies: Convergence or Continuing Diversity?* Cambridge, Mass.: Harvard University Press.
- Kumnuch, E. A. (1996). A Comparison of the Higher Education Systems of Taiwan, Singapore, and Hong Kong as a Model for Developing Nations, 1945–1980." Unpublished PhD thesis (College Teaching), University of North Texas.
- Law, W. W. (1995). "The role of the state in higher education reform: Mainland China and Taiwan." *Comparative Education Review* 39, 322–355.
- Lee, K. Y. (1980). NU must be relevant to economy. *Speeches* 1980, 3, 11–24.
- Lim, L. Y. C. (1983). Singapore's success: The myth of the free market economy. *Asian Survey* 1983, 23, 752–764.
- Liu, V. M. (1994). The experience of Taiwan: *Higher Education, Issues in education in Asia and the Pacific: An international perspective* (pp. 91-93). Proceedings of a conference in Hiroshima: OECD.
- Low, G. T. (1997). *Women, Education and Development in Singapore*. Singapore: McGraw-Hill.
- Low, L., Toh, M. H., and Soon, T. W. (1991). *Economics of Education and Manpower Development: Issues and Policies in Singapore*. Singapore: McGraw-Hill.
- Luke, C. (2001). *Globalization and Women in Academia: North/West – South/East*. Nahwah, N.J.: Erlbaum.
- Marginson, S, and Considine, M. (2000). *The Enterprise University: Power, Governance and Reinvention in Australia*. Cambridge, UK: Cambridge University Press.
- McLuhan, M. (1964). *Understanding Media: The Extensions of Men*, 2nd ed. New York: New American Library.
- Mok, K. H. (2000a), The quest for quality people and learning society for the 21st century Hong Kong." *Chulalongkorn Education Review* 6, 52–69.
- Mok, K. H. (2000b). Reflecting globalization effects on local policy: Higher education reform in Taiwan." *Journal of Education Policy* 15, 637–660.
- Monkman, K. and Baird, M. (2002). A review of three books: Educational change in the context of globalization. *Comparative Education Review*, 46, 497–508.
- National University of Singapore. (1996). Vice-Chancellor's report for the academic year 1995–1996." In: *Annual Report of the National University of Singapore 1995–1996*. Singapore: Author,
- National University of Singapore. (1997). Vice-Chancellor's report for the academic year 1996–1997." In: *Annual Report of the National University of Singapore 1996–1997*. Singapore: Author.
- Ohmae, K. (1990). *The Borderless World: Power and Strategy in the Interlinked Economy*. New York: Harper Business.
- Ong, P. E. (1973). The origins and early development of the University of Malaya, 1949–62." Unpublished BA (Hons.) thesis, University of Singapore, Singapore.

- Pang, B. O. (1966). *Education for Industrial Development and Multi-Racial Living*. Singapore: PAP 15th Anniversary Celebration Souvenir Publication.
- Pang, E. F. and Hassan, R. (1976). Higher education and economic growth in Malaysia and Singapore." In: Tapingkae A, ed., *Higher Education and Economic Growth in Southeast Asia*. Singapore: Regional Institute of Higher Education and Development, 1–56.
- Puccetti, R. (1972). Authoritarian government and academic subservience: The University of Singapore. *Minerva* 10, 223–241.
- Regan, P. (1996). Third party intervention in intra-state conflicts: Mapping strategies for stopping the violence. In: Pettman R, ed., *Rethinking Global Affairs: New World Order / New International Relations / New Zealand*. Wellington, NZ: Victoria University of Wellington, 22–54.
- Sargent, S. J. and Orata P. T. (1950). *Report of the Mission to Thailand*. Paris: UNESCO.
- Selvaratnam, V. (1994). *Innovations in Higher Education: Singapore at the Competitive Edge*. Washington, DC: World Bank.
- Simpson, R. F. (1967). The development of education in Hong Kong: Problems and priorities." Unpublished PhD thesis, University of Hong Kong, Hong Kong.
- Singapore Department of Statistics. (1983). *Economics & Social Statistics, Singapore, 1960–1982*. Singapore: Singapore Government: Author.
- Singapore Department of Statistics. (1997). Yearbook of statistics, Singapore, 1996. Singapore: Singapore Government: Author.
- Singapore Ministry of Education. (1997). *Education Statistics Digest, 1996*. Singapore: Singapore Government: Author.
- Slaughter, S. and Leslie, L. L. (1997). *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore & London: Johns Hopkins University Press.
- Suwanwela, C. (1996). Academic freedom and university autonomy in Thailand. *Higher Education Policy* 9, 277–279.
- Taiwan Ministry of Education. (1947). *Education Statistics of the Republic of China* (in Chinese). Taipei: Author.
- Taiwan Ministry of Education. (1971). *Education Statistical Indicators of the Republic of China*. Taipei: Author.
- Taiwan Ministry of Education. (1997). *Education Statistical Indicators of the Republic of China*. Taipei: Author.
- Taiwan Ministry of Education. (2001). Higher Educational Administration: Author. Retrieved 13 October 2001 from <http://www.high.edu.tw/ch2.htm>
- Taiwan Ministry of Education. (2001). Reforms in Higher Education: Author. Retrieved 13 October 2001 from <http://www.high.edu.tw/ch1.htm>
- Taiwan Ministry of Education. (2002). *Education Statistical Indicators of the Republic of China*. Taipei: Author.
- Techakumpuch, S. (1973). Thai universities: A glimpse at some of the issues. In: Yip YH, ed., *Development of Higher Education in Southeast Asia: Problems and Issues*. Singapore: Regional Institute of Higher Education and Development, 86–99.

- Thailand Ministry of University Affairs. (1971). *Education in Thailand 1971*. Bangkok: Author .
- Thailand Ministry of University Affairs. (1995). *Thai Higher Education in Brief*. Bangkok: Author Ministry of University Affairs: Author.
- Thailand Ministry of University Affairs. (1996). *Higher Education Data and Information*. Bangkok: Author
- Thailand Ministry of University Affairs. (2001). Universities at a glance: Author. Retrieved 29/09/01 from www.inter.mua.go.th/glance/index1.html
- Thailand National Economic and Social Development Board. (1974). National Statistical Office, Chulalongkorn University. *The population of Thailand*. Bangkok: Committee for Internal Coordination of National Research in Demography, Thailand.
- Thailand Office of the National Education Commission. (1971). *Educational Report. Institutions of Higher Education, Thailand*. Bangkok: Office of the Prime Minister, Thailand.
- Thawisomboon, S. (1965). A summary of education in Thailand." In: Thawisomboon S, Malakul ML, Pin LT, Nguyen HB, eds. *Education in Thailand and Vietnam*. Honolulu: East-West Centre.
- Thompson, G. (2000). Economic globalization? In: Held D, ed., *A Globalization World? Culture, Economics, Politics*. London & New York: Routledge, with Open University.
- Trow, M. (1973). *Problems in the Transition from Elite to Mass Higher Education*. Berkeley, Calif.: Carnegie Commission on Higher Education.
- Tsai, C. H. (1996). The deregulation of higher education in Taiwan." *International Higher Education (Boston College)*, 1996 Spring.
- UNESCAP. (1992). *Social Costs of Economic Restructuring in Asia and the Pacific (Development Papers No. 15)*. Bangkok: Author.
- University of Malaya. (1951). *Annual Report of the University of Malaya, 1949–1950*. Singapore: Government Printing Office.
- Wade, R. (1990). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton, N.J.: Princeton University Press.
- Wang, R. J. (2001). Gender barriers in higher education: The case of Taiwan." *Education Policy Analysis Archives* 8 December 2001, 9 (51).
- Watson, K. (1989). Looking west and east: Thailand's academic development." In: Altbach PG, Selvaratnam V, eds., *From Dependence to Autonomy*. Dordrecht, Netherlands: Kluwer Academic, 63–95.
- Weiss, L. (1997). The myth of the powerless state. *New Left Review* 225, 3–27.
- Wong, T. H. (2002). *Hegemonies Compared: State Formation and Chinese School Politics in Postwar Singapore and Hong Kong*. New York & London: Routledge Falmer.
- Wu, K. B. (1992). *Higher Education: Investment in Science and Technology during the Time of Political and Economic Change*. Washington, DC: World Bank.
- Wu, W. H., Chen S. F., and Wu, C. T. (1989). The development of higher education in Taiwan." In: Altbach PG, Selvaratnam V, eds., *From*

Dependence to Autonomy: The Development of Asian Universities.
Dordrecht, Netherlands: Kluwer Academic, 257–276.

Yang, R. (2003). Book review of *Globalization and education: The quest for quality education*, edited by Joshua Ka-ho Mok and David Kin-keung Chan. Hong Kong: Hong Kong University Press (2002). *Comparative Education Review* 47, 343–345.

Yip, Y. H. (1971). Role of Universities in National Development Planning in Southeast Asia. Paper presented at the Role of Universities in National Development Planning in Southeast Asia, 26–29 July 1971, Singapore.

Opinions expressed by authors are their own and not necessarily those of ARIE journal, the editorial staff, or any member of the editorial board.