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Introduction

Higher education is universally acknowledged as a key pillar in constructing the new knowledge economies of the 21st. century. Each country wishes to deploy its resources in higher education to greatest advantage – to increase national competitiveness, enhance its economic growth rates, and raise its prestige internationally. Yet this occurs at the same time as nations worldwide struggle to reconcile the conflicting demands of an endlessly increasing demand for higher education, and an increasing limit on state capacity – itself partly a product of global economic re-structuring. This combination of aspiration, ambition, and constraint often leads to heightened pressures on higher educational institutions (HEIs) to diversify their income sources, including marketing their 'product' to international students.

Clearly, some nations are better placed than others to take advantage of what is becoming a growing global market for higher education, now conservatively estimated at US$30+ billion, annually (APEC 2001), and perhaps 1.4 million international students by 2010. At the same time, no single state possesses the resources to gain an advantage in all areas, or to attain complete international leadership. This is all the more the case, as massification of higher education, becomes more widespread, including in Asia – but often can still not meet ever-increasing demand. Moreover, the increasing globalisation of higher education continues to breach national boundaries - creating new challenges but also opening up prospects for new alliances, often regional. Hence, higher education policies become a mix of competition and cooperation. This analysis addresses such competitive and cooperative strategies in higher education between China and ASEAN, in particular the three ASEAN member nations of Singapore, Malaysia, and Viet Nam. Examples of regional trade agreements with an educational component, Asia Pacific consortia in higher education, and cross-border institutional collaborations, are given in each case. A brief taxonomy of cross-border educational relations is developed, and policy implications summarised, based on the case studies.

The worldwide rise in cross-border trade in educational services occurs against a background of the global transformation of economies, whereby the countries of the North are now characterised by the increasing dominance of service sector exports, relative to total GDP. Education is now increasingly recognised as one of these services, (rather than its earlier rationale as primarily educational and cultural), and is being exported vigorously by a growing number of states. In some states it forms a major component in service sector trade as a whole, most notably in Australia. Other countries, often within the same region, are major nett importers of educational services, and pay a high price for that dependence. A further key issue is the complex relationship between national sovereignty, and the promotion of cross border trade in educational services.

> In the end, ASEAN does not have to align itself with China. It just does not have to align itself against China – Chinese Diplomat

What is perceived as a barrier to trade by a major exporter of educational services, for example, may be seen as a legitimate defense of national identity, or local control over funding, and standards, by the country which is the recipient of such services. The Asia-Pacific region, one of the most dynamic and diverse worldwide, including the two giants of China and India, provides a fascinating site for the analysis of the growing cross border trade in educational services.

The Setting

China-ASEAN relations are already substantial; and growing. ASEAN-China trade totalled US$ 39.5 billion in 2000, and grew by 20.4% annually over the decade 1991-2000, and has continued to rise, growing by more than 30% in the first quarter of 2003, a rate only outstripped by that with Russia, New Zealand and Australia. China's exports to ASEAN grew from US$ 4.1 billion in 1991to US$ 17.3 billion in 2000, a rise of 422%. Over the same period, imports from ASEAN grew even more, from US$ 3.8 billion to US$ 22.2 billion, representing 584% growth. ASEAN's share of China's foreign merchandise trade grew from 5.8% to 8.3% over the same period. ASEAN is now China's fifth largest trading partner, while China's share of ASEAN's trade grew from 2.1% in 1994, to 3.9% in 2000.

While the regional economic crisis of the late 1990s profoundly dented several ASEAN members' economic growth, and global economic growth was subdued for a time thereafter, overall economic growth in ASEAN was a healthy 4.4% in 2002, and was projected to grow by about the same rate in 2003.

China's accession to WTO status in late 2001, after years of complex negotiations, was based on rather comprehensive liberalisation commitments. These should yield substantial trade measures, including in the services sector, opening up new market opportunities, and expanding

Table 1a: ASEAN's share of China's Trade 1991-2000

	% EXPORTS	% IMPORTS
1991	5.7	6.0
2000	6.9	9.9

Table 1b: China's share of ASEAN trade 1991-2000

	% EXPORTS	% IMPORTS
1991	2.2	1.9
2000	3.1	5.2

existing ones. Nonetheless some ASEAN members report concerns with barriers to China trade such as 'unpredictable laws' 'uncertain standards' and 'restrictions on trading activities'. Others, such as the Philippines see potential for its many professionals, many of whom speak English, to work in China's booming economy. Simulations show that bi-lateral China ASEAN trade is likely to grow, if offset to some degree by a reduction in trade with other partners. Trade in services, including in education, is seen as remaining a modest component of overall China ASEAN trade.

The Potential

An FTA between China and ASEAN would create an economy with a total population of 1.7 billion, a regional GDP of at least US$2 trillion, and total trade estimated at US$ 1.23 trillion. (If Japan, which declared its accession to the ASEAN Treaty of Amity and Cooperation [TAC] in Tokyo in December 2003, after China and India endorsed it at the Denpasar ASEAN meeting in October, were to be added to this group, creating an East Asian FTA, as Singapore's Prime Minister Goh again recently suggested, the total capacity would be enormously expanded. The combined population of such a total community – including India - would then be 3 billon, with a total GDP of several trillion). The removal of trade barriers would have the capacity to increase existing levels of trade substantially, particularly in the services sector, including education. Given the increasing globalisation of higher education, especially in English, but in the future perhaps increasingly in Chinese, and given too the significant English and Chinese speaking Chinese diaspora in Singapore and Malaysia (see below), the potential for increasing regional trade in higher education services, and for more partnerships between universities in China and ASEAN, is great. China's formal signing of the TAC commits it to the three pillars of cooperation: political and security; economic; and socio-cultural. Key strategic partnerships, and enhanced economic and cultural cooperation, between China and ASEAN are major expected outcomes, as well perhaps as a greater sense of community among ASEAN members and China. ASEAN is likely to become a greater focus of China's investment strategies, including key investments and partnerships in higher education, especially as trade liberalisation measures are further implemented within China and ASEAN. Trade and investment facilitation measures, to promote trade in services between China and ASEAN is specifically listed in 14.1 of the *Report of the Expert Group on Forging Closer ASEAN China Economic Relations* (2001). Data on the breakdown of ASEAN-China trade in services is notably lacking, however, including the lack of detailed information on trade in educational services. Further research is needed; meanwhile, sufficient evidence is provided below to show the growth of the trade in educational services in higher education, worldwide, and within the region. The implications of this rise for China ASEAN relations are sketched in the final section of this paper.

Implications of China's Entry into WTO

China's accession to WTO poses new challenges and opportunities within the region, and for ASEAN members in particular. Its accession will increase the openness of the Chinese economy, something that will necessitate significant re-structuring in numerous sectors of its economy, with a consequent growth in internal efficiency. As will be seen below, this certainly includes the higher education sector, where domestic criticism is now both more open, and more commonly voiced, of the relatively low levels of internal efficiency within its universities. China's willingness to open its education sector to external competition supports the overall assessment of the OECD:

> *"With accession to the WTO, China will be a more powerful driver of growth, and that momentum could, in turn be harnessed by the ASEAN countries. Market opportunities for both regions will be created by China's liberalization and … restructuring. Those market opportunities will also mean more import competition for domestic enterprises in ASEAN."*

This is all the more the case for countries that have a significant Chinese minority, and for those, such as Singapore, where Chinese (Mandarin) is widely spoken. At the same time, however, as is argued below, China's unwavering orientation towards the USA as the source of all higher education innovations, may restrict this potential for regional cooperation.

Rise in Service Sector Trade

Service sector trade is rising fast worldwide, including with China, where services currently represent about one third of total GDP. From 1990-2000, growth in services output, worldwide, grew at an annual rate of 2.9%, double that of agriculture (1.4%). For developing countries, growth in commercial services trade was an annual 9.0% from 1990-200, compared with 5.5% for developed nations. The World Bank's estimate is that liberalisation of services in developing countries could add some US$6 trillion by 2015, four times that which would accrue from the liberalisation of trade in goods. By 1997, it is estimated that global trade in services had reached a total of US$1.295 trillion, around 25% of the overall figure for global trade in commodities. Fifty-five countries have made commitments under the Global Agreement on Trade in Services (GATS). A majority of these are developing countries. Interestingly, however, despite explosive rise in cross-border trade in education, only 3 proposals deal with education, one of them being China. Asia has seen strong growth in services sector trade relative to other world regions over the decade 1990-2000, with an annual rate of increase of 9%. Developing Asia's rate of growth was even higher at 11% for the same period, while that of China was 18%, Malaysia 14%, and Singapore 8%. (Hong Kong growth was an annual rate of 9%.) This compares with a worldwide rate of just 6% for the period. Of leading individual exporters and importers over the same period, the combined figure for Hong Kong and China was a total of 5.2% of total world trade in commercial services.

GATS and Trade in Educational Services

The rise of what is now often termed trade in educational services has paralleled the overall rise in service sector trade. In itself this transition is noteworthy, representing a shift from an earlier era, when 'governments and international bodies … promoted student mobility mainly for cultural and educational reasons'. While these reasons are still pertinent, at the individual student, host university, state, and international levels, the growth of a global fee-paying market for international students is a striking development, is contributing to the rising tide of service sector trade. A recent estimate put total income generated by international students in 1998 (including their associated living costs) at a minimum of US$30 billion worldwide, or some 3% of the total value of services exports.

> Education …is fast becoming viewed as an area that might yield substantial profits in the global economy
> – *Robertson et al 2002*

The data in the above table underline that the education component is now a significant element in overall service sector trade. Much more for some countries than others, however. Australian exports of educational services have now risen to be a larger

Table 2: Export Earnings from International Students, selected major providers, 1989 – 2000, and percentage of total national service sector trade

	1989		1997		2000	
	US$ Millions	% of total service exports	US$ Millions	% of total service exports	US$ Millions	% of total service exports
Australia	584	6.6	2190	11.8	2,155	11.8
Canada	530	3.0	595	1.9	796	2.1
UK	2,214	4.5	4,080	4.3	3758	3.2
USA	4,575	4.4	8,346	3.5	10,280	3.5

export earner than some traditional agricultural commodities, for example, and in the year 2000 was estimated to have added at least US$2.15 billion to the Australian economy. They now account for 12% of Australia's total trade in services. This makes education exports the third largest service-sector earner in the country, and fourteenth largest overall . In New Zealand, by the early 1990s, earnings from international student fees were higher than from its wine industry, while in 2000, the US earned a total of US$10.28 billion from international students.

Trade in educational services can take various forms, and GATS has developed a fourfold taxonomy, as follows indicated in Table 3.

Table 3: Modes of Provision of Cross Border Educational Services

Mode	Explanation	Examples	Size & Potential
1. Cross Border Supply	The service, rather than the person, crosses the border	Distance education Education Software Virtual education (including corporate training)	Small, but growing Swiftly, with considerable growth potential, esp. via ICT
2. Consumption Abroad	The consumer moves to the country of the supplier	Students who study in Another country.	Currently, the largest share of international education.
3. Commercial Presence	The provider uses or establishes facilities in a second country	Local university, or Satellite campus. Private providers, Including language & IT	Growing phenomenon, with strong likelihood of growth
4. Presence of Natural Persons	Persons travelling to a second country to provide a service	Professors, teachers, Educational consultants	Given rising professional mobility, also likely to grow strongly.

Within the region, both Australia and more recently New Zealand, have been spectacularly successful in developing the scale of international enrolments in their universities, (the latter on a smaller scale). Australia increased its international enrolments in higher education by almost 350% over the 1990s, and well over 1,000% from 1980-2000. Initially almost entirely composed of mode 2, 'offshore' enrolments, comprising both Modes 1 and 3, is now the most swiftly rising category, in part because of lower overall costs to students. Some students may spend some time in the host country (Mode 1), whose academic staff now also often travel to teach for intensive periods in the students home country (Mode 4). Australian 'offshore' enrolments rose from 24% to 37% of the total, between 1996 and 2001.

There are a number of qualifications regarding this rising phenomenon that should be borne in mind, however:

North South Inequalities

As with other forms of trade, some nations and regions gain while others lose. This works in several major ways. Firstly, the trade is very unequal, as evident in the earnings listed above, with the most developed nations of the North able to exploit their advanced infrastructure (high quality universities with well qualified staff, research infrastructure, well-stocked libraries etc) to export educational services to the South, often the Asia-Pacific region. (Sometimes indeed, this has been categorised as a form of neo-colonialism - less brutal, but just as unequal as the older forms). Clearly however, the status of an overseas degree, from a major overseas university, whether Oxbridge, the University of Tokyo, MIT, or the University of Sydney, continues to carry significant cachet. Overall, OECD nations host 85% of all international enrolments, worldwide, with six countries accounting for 75% of all international students in OECD (see below). International higher education enrolments have doubled over the past 20 years in OECD countries and, in the late 1990s, were growing almost twice as fast as domestic enrolments (9% annually, over the period 1995-1999, compared with 5.5% domestically).

This loss of much of the substantial educational investment by third world nations in developing their young talent is often exacerbated by 'brain-drain' effects, especially when many of the most-developed nations have recently refined their migration programmes to 'cherry-pick' for certain skills. It is now the case, for example, that international students comprise the largest single category of applicants for Permanent Residence in Australia. Canada, too, has revised its points formula to give greater weight to those with tertiary qualifications, while Germany recently introduced a 'Green Card' scheme, to attract highly skilled workers, largely from the South.

Table 4: International Students in OECD countries, by number and percent, 1999

Country	No. of Students	% of Total OECD
USA	451,934	31%
UK	232,538	15%
Germany	178,195	12%
France	130,952	9%
Australia	99,014	7%
Japan	56,552	4%

OECD 2002:94 NB. In some countries, resident foreigners are included (this accounts for 34% of the German total, for example)

This loss of talent has long been a significant problem for China (which plans to introduce a similar scheme in 2004), where it is estimated that less than a third of students sent abroad to study, have returned. This haemorrhage represents a huge, ongoing loss of its best and brightest, notwithstanding current efforts to mobilise the Chinese diaspora more effectively (see Table 4).

Another way of viewing the dominance of OECD nations in international student enrolments is evident in the following figure:

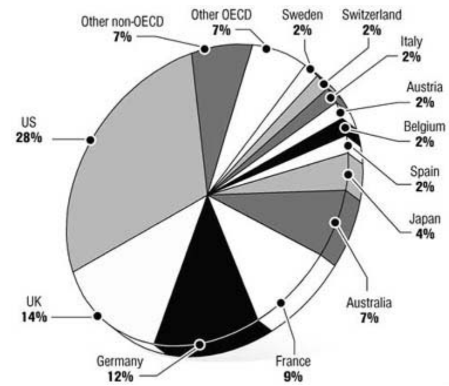

Figure 1: Host Countries for International Students, 2001. OECD 2003 p. 275

Dominance of English-Speaking Nations

Also evident in the above is the dominance of this 'trade' by English-speaking nations, with the four main English-speaking countries accounting for 54% of all international enrolments, and for some 70% of students from Asia/Oceania. Details of individual countries and totals for the four largest English-speaking host countries, together with changes in their relative share, appear in the following table.

While the relative share of total international student enrolments by English-speaking nations has slipped somewhat from 73% in 1995 to 70% in 1999, the importance of English language as a basis for internationalisation of higher education, is a significant factor, including China. The implications of this will be considered below, but it is important to remember that, within the region, the number of Putonghua (Mandarin) speakers is equivalent to those who use English - each total around 1 billion speakers. It may well be, indeed, that with the rise of greater

China as an economic and cultural force in the world, that Chinese language may become a more important medium in higher education, and this too is not without significance for regional collaboration with countries that have significant Chinese ethnic communities. Of the three considered in this analysis, perhaps the most notable is Singapore, which lays claim to both languages, and has the most sophisticated system of higher education.

To some extent, regionalism, in the form of geographical and/or cultural proximity, plays a role in the choice of destination of Asian students. The destination of students from the Asia-Oceania region is shown in Table 6

Although the US share has dropped somewhat, and the EU risen, the regional share of international enrolments has also grown, to a degree. This has significant implications for regional collaboration. Overall patterns of concentration also reflect the effects of regional mobility

Table 5: English-speaking countries' share of International Students, by origin, 1995 & 1999 (%)

	USA 1995	USA 1999	UK 1995	UK 1999	Austr. 1995	Austr. 1999	Canada 1995	Canada 1999	Total Share 1995	Total Share 1999
Asia/ Oceania	49	44	7	11	12	13	5	2	73	70

Regionalism

Asia collectively accounts for more international students sent to major host countries of the North than anywhere else - 45% of all international students enrolled in OECD countries - with the largest single nation of origin being China (including Hong Kong) at 9%. The implications of this too, are significant for the analysis provided in this booklet: the sheer scale of the Chinese system, and the limited domestic institutional capacity (despite the expansion detailed below), offers considerable scope for regional collaboration, as will be argued below. One effect of the regional financial crisis of the late 1990s was to suppress the proportion of international students from Asia somewhat, but only temporarily - the number has recovered, and continues to grow.

schemes such as ERASMUS/ SOCRATES in the European Union (EU), and on a much smaller scale, APEC/UMAP. The signing by China of the *Treaty of Amity and Cooperation* (TAC) with ASEAN at an ASEAN+3 summit in Bali in October 2003, (followed 2 months later by Japan), also provides scope to further enhance regional collaboration within higher education.

Barriers or Defenses

It is important to be reminded here, that quite what constitutes a barrier to trade, is by no means fully agreed. What is perceived as a trade barrier by a large provider, from a wealthy, highly-developed country, may well be seen as a defence of standards and quality, national integrity, or identity, by a developing country recipient. Intellectual property rights, too, may be considered to be of great importance to the overseas provider;

Table 6: Destinations of students from Asia-Oceania, 1995 and 1999, by percent.

	Destination 1995				Destination 1999			
Student Origin	Europe	EU	Americas	Asia-Oceania	Europe	EU	Americas	Asia-Oceania
Asia-Oceania	25	23	54	21	30	28	47	23

NB. Data includes only OECD member nations but, as seen above, this accounts for the bulk of international enrolments.

but less significant to the recipient country. Such dissonances remind us too, that the related issue of quality in higher education can equally be a problematic term, in more than one sense. Certainly, quality assurance measures in higher education are fairly common among Asia Pacific countries. Indeed, virtually all such countries now have detailed programmes, legislation and regulations. Even domestically, however, they may at times incompletely observed, for a variety of reasons - inadequate state capacity, corruption and cronyism, and related issues. Notwithstanding claims by APEC, which seem to have been uncritically accepted by recent OECD researchers (2003), a note of caution is in order here. If, as more detailed research in Southeast Asia has recently shown, state capacity to regulate domestic institutions for quality, notably including private sector HEIs, is often problematic, it might well be even more so for international providers, functioning under Mode 3 (Commercial Presence). There is certainly evidence, for example, that degree mills operate in the Asia Pacific area, just as in other parts of the world – and that regulatory authorities and ministries in relevant countries are very concerned about how to control such entrepreneurial activities, and limit the damage they can inflict on legitimate institutions, and sometimes unwary students. The Malaysian, Vietnamese and virtually all other governments in the region, however, are still struggling with this problem.

The following section sketches principal developments shaping the Chinese economy and society, as also that of Malaysia, Singapore, and Viet Nam.

China's position in the world and its role in international affairs is getting more and more important. This is the trend – and it's a reality that any country in the world should face up to squarely

- Zhang, Institute of WTO Studies

China – The Dragon Abroad

China's rising economic, and political weight, is re-shaping the global economy, as well as cultural and international relations, all the more so in neighbouring ASEAN. Over the 1990-2000 period, its exports grew by 300% - from US$ 62.1 billion, to US$ 249.2 billion, and its foreign trade grew by 15% annually. China's real GDP growth averaged 10.1% over the 1990s, the highest rate in the world. Its GDP for 2001 was estimated at US$ 1,150 billion, and GNI per capita at US$ 3,950 in PPP terms. From 1990-2000, the flow of foreign direct investment (FDI) into China grew more than tenfold – from US$ 3.5 billion to US$ 40.77 billion, while China was also the single largest recipient of FDI, worldwide. This represented a leap from about 10% of all FDI to developing countries to 17%, over the same period, particularly as FDI flows to ASEAN fell in the aftermath of the regional currency crisis, from US$32.5 billion in 1997, to US$13.8 billion in 2000. While not continuous, this decline in FDI occurred again in 2002, falling to US$12.4 billion, although more evident in manufacturing than in the services sector. The trend of FDI flows moving to China is only likely to increase, as a result of its accession to WTO membership, and the progressive implementation of its wide-ranging commitments to market liberalisation measures, particularly over the first 5 years of the agreement.

At the same time, however, China's economic growth has entailed both significant re-structuring of industries, with an attendant, and at times openly contested, end to the 'iron rice bowl'. The painful process of re-structuring has, *inter alia*, exacerbated regional inequalities significantly, posing significant social and political problems domestically. Indeed, each of these problems could deepen over coming years - profound existing inequalities of wealth are likely to worsen, and industry failures rise, consequent upon increased competition from external providers, after joining WTO:

China is facing increased regional disparity and growing gaps in the income level of different groups of the population. This is one of the most serious social problems arising from the development process. The acceleration of liberalisation and competition arising from China's implementation of its WTO commitments may make these problems worse.

Nonetheless, China has generally managed the tensions of developing a Socialist Market Economy well, albeit without an overall master plan. Deng Xiao-Ping characterised the process as rather like crossing a river, by feeling for stones at every step. This strength, and a non-convertible currency, meant that the Asian financial crisis of the late 1990s affected China less severely; indeed, its capacity to sustain the value of the RMB, as also its actions to assist key neighbours, prevented a bad regional situation becoming even worse. Largely as a result, the subsequent priority attached to ASEAN-China links, now sustained by annual meetings, has increased significantly. China's investments in ASEAN have been relatively modest, totalling only US$ 136 million in 1999 (still less than 1% of total FDI into ASEAN, although a much higher proportion than before the Asian financial crisis). While it is expected that the intensified competition, and surging imports, consequent upon WTO market liberalisation, will force some small and medium Chinese companies into bankruptcy, including critical challenges to service sector industries, it is not clear that this will necessarily affect the Chinese higher education sector to the same extent. This is partly due to language issues, but it is also pertinent to be reminded that China has not exempted its (higher) education system from competition, under GATS. As seen below, however, there are significant internal pressures within the Chinese higher education system that make foreign universities more competitive, notably the competitive advantage of having a foreign degree – plus perhaps the associated foreign language – within the Chinese job market.

The ASEAN Three - Rise of the Tiger Cubs

The three ASEAN member states selected in this analysis for a review of their relations with China in higher education are, as indicated above, Singapore, Malaysia, and Viet Nam. They differ widely, yet have some elements in common.

Why Choose these Three

The three countries selected show differing levels of engagement in terms of their overall interaction with China, and range in their scope to extend bi-lateral relations in higher education. Each seeks to expand the scope, reach and quality of its higher education system, either via becoming a regional educational hub (Singapore and Malaysia), or adopting external reforms, including from China (Viet Nam). A second, related rationale is that each of the ASEAN Three has a significant Chinese diaspora, in every case an artefact of each country's complex histories of Chinese engagement. While Viet Nam's Chinese minority is by far the smallest, in each case the relevant Chinese minority carries considerable weight within the national economy, as the following table underlines.

Table 7: Size and role of overseas Chinese in ASEAN Three economies, early 1990s

Country	Chinese Population	Percent of Total	Role in Economy
Malaysia	5,400,000	29.0	61% of share capital, 60% of private sector managers
Singapore	2,079,000	77.0	81% of listed firms, by capitalisation
Viet Nam	1,000,000	1.5	Before 1975, 80% industry, 100% Wholesale for foreign trade, 50% retail: 1986 Doi Moi 45% of registered private firms 1992.

As a recent analysis indicated, there are a number of contours to this Chinese demographic:

> "The relative wealth of the Chinese communities, their emphasis on education, their orientation towards commerce, and their tendency to live in urban areas, all mean that Chinese are over-represented in secondary and tertiary enrolments. It also means more specifically that they are over-represented in high technology areas such as the ICT sector, both as professionals and among the firms that are implementing ICT solutions. Nevertheless, the prejudices they still encounter, mean that Chinese are still under-represented in the government bureaucracy, and especially at the higher levels."

Despite such ongoing discrimination in some Southeast Asian states, moreover, (in the 1970s, Viet Nam passed anti-Chinese legislation, while Malaysia's *New Economic Policy* explicitly discriminated in favour of ethnic Malays), private capital still is held largely in Chinese hands.

Of note, too, are regional trading connections between the ASEAN Three, notably for example that Singapore replaced the Soviet Union as Viet Nam's principal trading partner in the 1990s, and is still (with Japan), the largest source of her imports. Malaysia is the fourth largest site for Singapore's FDI (see below).

The second rationale for the selection of these particular ASEAN 3 member states, is their spread in terms of social, economic and educational indicators. The fact that they are at significantly different levels of economic and educational development, helps explain that each has different interests in China, including in the higher education sector, and that strategies of competition and cooperation may well differ. Something of the diversity within the ASEAN three, with respect to conventional measures of development is captured in the following table:

Table 8: ASEAN Three - Population, Economy, Public Investment in Education, 2001

Country	Size of populace (millions)	GDP US$ billions	Per Capita GNI (US$ PPP)	Services as % of GDP	Hi Tech Goods as % of manuf. Exports	Adult Illiteracy (aged 15 +)	Gov't. Ed. Spending As % of GDP (2000)
Malaysia	23.8	90.0	7,910	41.9	56.9	12.6	7.5
Singapore	4.1	92.7	22,850	68.3	59.7	7.7	3.7
Viet Nam	79.5	31.2	2,070	39.1	--	7.5	--

2002 growth rates were significantly stronger in Vietnam, than either Malaysia, or Singapore, with GDP growth rated at 7.04%, 4.12%, and 2.25% respectively. For the latter two, this represented a significant improvement on 2001, when growth rates for Malaysia were 0.32%, and for Singapore –2.37%.

Malaysia – Economy, Society and Trade with China

Malaysia's current population of just over 23 million comprises three principal elements: a 58% Malay and other indigenous majority, a substantial Chinese ethnic minority of 26%, and a much smaller Indian minority, of some 7%. While Islam is the religion of the majority, Buddhism, Daoism, Hinduism, and Sikhism are also practised, and Shamanistic practices. While *Bahasa Melayu* is the official language, English is widely spoken and acknowledged as a language of commerce and 'knowledge' (see below), while several Chinese dialects are also spoken, as well as Tamil, Punjabi, Telugu, Thai, Malalalam, and in East Malaysia, several indigenous languages.

Malaysia's post colonial development was in large part shaped by its ethnic composition and history. From 1948, the new Federation of Malaya restricted citizenship to ethnic Malays, who subsequently dominated the 'administocracy'. The subsequent expansion of the federation to include Sarawak, Sabah, and crucially, Singapore (75% Chinese) proved short-lived, leading to Singapore's expulsion in 1965. Violent race riots in 1969 were followed by the *New Economic Policy* (NEP), that both imposed quotas in education, employment and access to capital upon non-Malays, and introduced incentive schemes encouraging non-Malay employers to hire ethnic Malays. Although the NEP officially ended in 1991, the state continued to lead Malaysia's development, and discriminate in favour of those designated as *Bumiputras* (sons of the soil). Despite sustained intervention, the professions are still dominated by non-Malays, while the income gap between Malays and non-Malays has also persisted – indeed also widened among Malays. A small group of around 100 families was still said to dominate the economy. While annual GDP growth of an impressive 8.5% was achieved during the early and mid 1990s, together with low inflation, and diminishing levels of external debt, the regional financial crisis of the late 1990s nonetheless hit Malaysia hard – although less so than neighbours such as Indonesia, or Thailand. Within a short space of time, around US$100 billion had been erased from the stock market, while the Ringgit and the stock market ultimately lost about half their value. Nonetheless, Malaysia continued to open its economy, cutting its import tariffs by almost half between 1993 and 2001.

The current agenda is a potentially contradictory mix of both state-guided development, and the extension of globalisation and market-based economic re-structuring. The current big picture of *Vision 2020*, by which Malaysia plans to reach developed status by that data, is centred on the familiar knowledge economy. It entails special development of two key sectors – information and communications technologies (ICTs), including a Multimedia SuperCorridor (MSC), development of which began in 1996; and education, most particularly higher education. FDI remains substantial, but market based-policies threaten the privileged position of ethnic Malays. Hence the 'electoral arithmetic' is somewhat unstable. For the rapid development of the country, there is a need to cultivate the totality of Malaysian talent; but this cuts directly across the interests of privileged Malays.

The technology to support leading edge communications, including virtual pedagogy in higher education has developed rapidly in recent years. Of Malaysia's 24.5 million inhabitants in 2002, some 8 million subscribed to a mobile phone service, and over 2 million to the internet. Annual growth for each is robust, but significant regional disparities persist. While plans and targets for Vision 2020 remain very ambitious, doubts remain about progress: "As yet, the vision has not become reality". The MSC, critical to Malaysia's goal of reaching parity with developed countries by 2020, involved major investments in such infrastructure as fibre-optic cables; time will tell however, as to longer-term results.

Total GDP in 2002 was estimated at US$210 billion, in PPP terms, while growth was 4.2%. Services comprised 48% of total GDP in 2001. GDP per capita fell from a high of US$ 4,766 in 1996 to US$ 3,257 in 1998, but has now recovered to US$ 3,914 in 2002. ASEAN statistics show that Malaysia's exports to China increased from US 1.249 billion in 1993 to US$3.491 in 2001, but Chinese imports rose much more swiftly - from US$ .816 billion to US$ 5.12 over the same period. This still represents however, a small proportion, with current exports to China being estimated at only 4.7% of total exports. Imports from China represent 6.0% of total Malaysian imports. Equally, principal destinations for Malaysian investments tend to be Singapore, US, Hong Kong and the UK, with China accounting for only about 2% of the total in 2000.

Singapore - Economy, Society and Trade with China

Somewhat like Malaysia, the small but vibrant, multi-ethnic Singapore, which only gained self government from the UK in 1959, grew strongly for much of the 1980s and 1990s, under the strong, directed leadership of Lee Kwan Yew. With a size of just 648 square kilometres, a total population of just 4 million in 2000 (three quarters of whom are of Chinese ethnicity), and few natural resources, Singapore has always felt it had to rely on its own wits to succeed, principally the energy, skills and industry of its inhabitants. High state capacity has been deployed to create, *inter alia*, a sophisticated ICT platform, that leaves it well positioned to take advantage of service sector growth.

Singapore exhibits many features of a highly developed economy. Its workforce of 1.5 million is comparatively well educated, and its GDP of US$ 120.7 billion in 2001 yields a GNI in PPP terms higher than that of New Zealand, and not much below that of Australia, Hong Kong, or Japan . The service sector comprises two thirds of total GDP. Singapore is both poly-ethnic, and highly international: a striking feature of its workforce of some 1.5 million, is the high proportion of international employees: 29% in 2000. Of these, fewer than one in five were professionals however, and only 13% held degrees. It should be noted, however, that this figure excludes those who have been granted residence, a significant number of whom, by contrast, are highly skilled. 43.5% of foreign-born workers resident in Singapore between 1991 and 2000 held a degree. One estimate showed that they were responsible for almost 37% of total GDP growth over the 1990s. Illegal migration is also an issue, including from China. Some 200, 000 Singaporeans also work abroad, some in China (see below). Singapore has invested heavily in ICT, with impressive results. Among other things, the establishment of a widespread, sophisticated ICT infrastructure means that it is well placed to take advantage of the developing architecture that supports distance and on line learning and teaching. Its National Information Technology Plan (NITP) dating from the mid 1980s, already heralded its plan to gain a competitive advantage through advanced ICT infrastructure. Internationalisation of the Singaporean economy, and privatisation of its telecommunications industry followed. By 1998, it had the world's highest penetration and teledensity rate for an emerging economy, with a decade-long history of 100% ISDN service. In 2001, the telephone density reached almost 120 per 100 people, three times that of Malaysia, and twenty-two times that of Viet Nam. The almost US$ 3 billion FDI that has resulted from this state-directed initiative, has boosted local service sector growth, and made Singapore into a regional telecommunications hub. Education, too has been a focus of investment, with year 2000 spending on education representing 3.7% of GDP. (This compares, for example, with 3.5% for Japan, and 4.7% for Australia). Including its well-supported universities, this gives Singapore a firm educational base, and, like Malaysia, but perhaps with greater prospects of success, Singapore is planning to become a regional educational hub. For the first time, for example, Singapore held major expos in India, in January of 2004. This ambition contends to a degree, with the persistence of significant unmet demand in higher education, and a correspondingly large volume of study abroad, and offshore enrolments by Singaporeans.

Singapore's economy was a model of growth for more than two decades, averaging 8.3% growth in real terms throughout the 1980s, for example. Already by 1990, its per capita GDP was only outstripped by Brunei and Japan, in Asia. An unemployment rate of 10% in 1970, was brought down to 2.5% by 1980, and reduced even further, to 1.3% by 1990. Of late however, the Singaporean economy has experienced greater difficulties, in the wake of an international economic downturn. The downturn in Singapore was dramatic – from, a GDP growth rate of 9.9% in 2000, economic growth fell abruptly in 2001 to –2.37%, rising again to 2.25% in 2002. Most of the decline was however in manufacturing, (which declined by 9.3%), while the service sector still managed to grow by 1.5%. Nonetheless, that was a sharp fall from service sector growth rates of 6.3% in year 2000. Unemployment rose to 4.5%, and by the end of 2001 as many as 25,000 workers were retrenched, including the highly skilled. While GDP per capita was US$ 25,127 in 1996, this had fallen to US$ 20,611 in 1999, and has largely remained at about that level, with 2002 figures of US$ 20,511. This has led to some gloomy internal assessments of comparative effects: 'Singapore is among the worst-hit Asian countries in the current worldwide economic downturn'. Among other consequences, have been cuts in public sector salaries (as in Hong Kong in recent years).

The situation regarding trade with China, however, reveals a different story. China is Singapore's seventh largest trading partner, and bi-lateral trade rose by an average of 15% per annum over the 1990s. Given the significance of China as a trading partner for China, however, it is no surprise to find that some 5,000 Singaporeans live and work in China, mostly in Shanghai. Moreover, China is Singapore's largest recipient of foreign direct investment, accounting for 13% of Singapore's overall FDI, as Table 9 reveals.

Overall, Singapore's trading position in relation to China has remained positive. Exports to China rose from US$ 1.903 billion to US$ 16.140

billion from 1993-2001, while imports rose rather more modestly, from US$ 2.403 billion to US$ 9.983 billion. In the context of a growing ASEAN-China trade in services, Singapore is developing a reputation as a 'destination of study' for Chinese students seeking to study abroad, while growth in tourism has been strong in both directions. Nonetheless, as a small country, the proportion of Singaporean tourists to the total visiting China remains small, around 4%.

by the French, until the 1920s. Effectively under the heel of colonialism, or fighting for its independence for at least a hundred years, Viet Nam has only recently been freed of both. As late as 1979, Viet Nam was involved in a war of resistance to China, while contested efforts to depose the Khmer Rouge in Cambodia, and establish a friendlier regime, persisted until around 1990. Vietnam's isolation, and a non-convertible currency, provided a degree of shelter during the regional financial crisis of the late 1990s.

Table 9: Singapore's sites of foreign direct investment, 1997-2001, in S$ millions

Country (and rank)	1997	1998	1999	2000	2001
China (1)	10,477	12,186	14,296	15,710	16,542
Malaysia (4)	8,908	8,610	8,517	9,754	10,413
USA (7)	2,905	3,064	4,197	6,187	6,580
UK (8)	7,678	3,276	3,387	4,903	5,768
Total Investment Abroad	158,566	177,949	209,650	230,060	257,314

Vietnam – Economy, Society and Trade with China

Of the ASEAN 3, Vietnam's relationship with China has historically been the most problematic. Long a tributary state of China, the fact that the two are now officially sisters in socialism, and that each faces the dilemma of straddling the tensions between a socialist polity, and a developing market economy, has done much to paper over the historical cracks in their relationship. While Viet Nam's longstanding resistance to Chinese incursions helped define its strong sense of nationalism, it has long emulated many aspects of Chinese culture, and now sees China as a model for development. The traditional Confucian system of learning and selection for civil service was directly modelled on the Chinese, for example, and effectively persisted within the 'native' administration established

Nonetheless, FDI fell precipitously, and growth slowed. The resumption of diplomatic relations by the USA in 1995 precipitated significant, albeit interrupted, investment by US firms. FDI should strengthen in the post SARS environment. In 2001, some 400 US firms were estimated to have been registered in Viet Nam, by which time a bi-lateral Trade Agreement had just been concluded between the two states. While Viet Nam's aspiration for WTO membership matched China's, its progress has been even slower, and current plans are to complete entry in 2005. The role of the Communist Party remains important, state capacity varies, and corruption remains a long-standing problem. Bickering between competing Ministries is a long-standing problem, that weakens overall efficiency, including in education. Public dissent is not encouraged, although significant discord persists within the political regime, and society. North South differences also persist, including in terms of both entrepreneurship and orientation to international affairs. Despite significant success in reducing poverty over the 1990s, overall Viet Nam has not managed the tensions inherent in developing a socialist market economy as successfully as its more powerful neighbour, whose success it closely observes. “A Senior official has intimated that Hanoi is currently observing political and social changes in China as a model for Viet Nam to follow”. In addition, the fact that an estimated 300,000 Vietnamese live in China, creates further potential for increasing trade in services.

Viet Nam is China’s sharpest disciple in Southeast Asia, and the Vietnamese elite freely refer to the ‘Chinese Model’ - Cheow 2004

Vietnam’s total GDP was estimated at US$ 183 billion in 2002, with GDP per capital at US$ 2,250, both expressed in PPP terms. Services occupy 39% of total GDP, slightly outweighing the proportion from industrial production. The significance of trade with China is all the more important for countries on its border such as Viet Nam, whose GDP per capita remains, however, well below the ASEAN average. However, while the ASEAN average has fallen somewhat, from a level of US$ 1,504 in 1996, that of Viet Nam has risen steadily – from US$ 337 in 1996 to US$ 439 in 2002 (ASEAN statistics, not in PPP terms). Notwithstanding historical difficulties, China and Viet Nam signed a Trade Agreement as long ago as 1992, and bi-lateral trade has grown steadily – from US$ 691 million in 1995 to over US$ 1,400 million in 2000. This has had a more significant effect on Viet Nam’s economy, than on China’s - according to the Vietnamese Ministry of Trade, this figure represented some 10% of Viet Nam’s total trade turnover, but only 0.4% of China’s. This only represents the ‘official’ trade, however: informal trade and smuggling are both significant, and rising. Regrettably, ASEAN reports reveal no data on the trade in services. Figures from the Vietnamese Ministry of Trade appear to reveal significant volatility in both exports to, and imports from, China (but the accuracy of social and economic data is undermined by the lack of overall standards for its collection). Given the sustained high rates of growth evident in both countries, however, the potential for trade to grow is great. Vietnam’s main growth sectors are agriculture and manufacturing, but service sector growth exhibits real potential, especially tourism. With the exception of 1999, the Vietnamese economy has grown by more than 6.5% each year to 2003. Exports grew by 16.7% in 2003, reaching US$14.9 billion in the first nine months. Imports however, grew by US$ 18 billion over the same period, and domestic demand remains weak. Nonetheless the growth rate for 2003 looks like reaching 7.3%, which the World Bank estimates as second only to China’s 7.8%. Recognising that in the post WTO accession climate, the service sector market in China is set to grow vigorously, Viet Nam has argued that priority should be given to selected service sectors, such as tourism, which have significant growth potential. No additional cooperation is foreseen in the area of educational services, however. Just as with China, the national slogan today is ‘regional and international integration’, and Viet Nam’s accession to ASEAN membership in 1995 means the time is ripe for further integration with neighbouring economies, including in higher education.

The above section sketched the contours and developments in each of the national economies, including service sector trade where possible, and indicated the extent of trade between each of the tiger cubs and China. The following section focuses more directly on the higher education systems of China, followed by that of each of the tiger cubs. Attention is paid to current levels of trade in education services, and forms of educational collaboration.

Competitive Challenges to Chinese Higher Education

The scale of the Chinese higher education system is only outweighed by the size of the challenges that it currently confronts. With a population of around 1.3 billion, and an unquenchable thirst for higher education, the system faces real problems simply meeting this demand. In turn, ever-rising demand is placing government funds under greater pressure, to which it is finding it more difficult to respond. Quality is another challenge, with many universities slow to change from traditional patterns that are less and less appropriate in the modern era. Equality of access and participation is yet a further problem, since both quality and quantity are very unevenly distributed across China, (as are other services). Maintaining local identity while responding to the challenge of internationalisation in higher education is a major dilemma for China, that regional cooperation has the capacity to help address. Hong Kong, (whose universities are very different to those described below), has performed something of this internationalisation function for years. Its universities have long had an enviable record of internationalisation. The following section outlines these challenges and assesses their implications for regional cooperation.

Not only does the government not loosen its authority, but the universities do not want autonomy, since it is always accompanied by responsibility - Qi and Chen 2000

Quantity: Meeting the Demand for Higher Education

While enrolments in Chinese universities continue to increase – for both 2000 and 2001, for example, enrolments were each higher by some 30% - 35% over those of the previous year - the rate of increase is nonetheless still unable to fulfil demand. While rates of participation for higher education in OECD countries average 40%, and in some countries is around 50%, in China, the equivalent rate is only about 10%, and very unequally distributed. Current government plans are for this rate to rise to 15% by 2015 (although the substantial enrolment increases seen below indicate this target may be achieved even earlier); nonetheless competition for university places remains fierce, particularly for the elite university sector, and many talented individuals miss out. Others study courses in which they have little or no interest, simply because they were fortunate to gain a place at all. Some evidence of the substantial growth in student numbers and graduations is provided in Table 10.

The relentless pressure for more places has strained state budgets significantly, and led to some devolution of finances to the regional and local levels (seel below). The proliferation of private *Minban*, or ‘People’s’ universities, in recent years, is also not unrelated - in 2002, some 133 degree-granting institutions existed, with a total enrolment of 311,200 students, or in the order of 4.3% of regular public sector enrolments. Another 1202 non-degree awarding *Minban* existed, with enrolments totalling 1,403,500. This has grown from a total of 85 Minban, only 2 of which were 4-year HEIs that could award degrees, in 2001. The 2003 *Law on Private Education Promotion*, underpinned the legal rights and interests of the schools, students and staff. It enshrined equal footing for *Minban*, as well as a reasonable return on investment: "private-school investors can get a reasonable repayment after deducting schooling costs and reserving development funds and other expenses."

World Bank data show the proportion of GDP spent on education as a whole in China to be still only about 3% in year 2000, and some have raised doubts as to the feasibility of current plans exist to raise it to 4%. This resource squeeze effectively exerts a downward pressure on quality, which is directly at odds with the expressed desire by both government, and Chinese universities, to attain international levels of performance and attainment. (Despite this, it must be said that China's persistent drive to increase its representation in major international citation indexes, is having an effect: a recent report indicated that 77,395 papers from China were recorded in key international science and engineering citation indexes for 2002, propelling it into fifth place worldwide). Moreover, if equality is a vital component of quality, then this too provides a brake on the quality of the Chinese system. Institutions in the major and more developed cities, notably Beijing, Shanghai, Tianjin, Hangzhou and Guangzhou, are far more able to

Table 10: Number of Public HEIs and Enrolments 1990-2001

Year	*Number of Institutions*	*New Students*	*Graduates*	*Student Enrolments*	*Percent Increase*
1990	1,075	609,000	614,000	1,206,300	--
1995	1,054	926,000	805,000	2,906,000	140.9%
1998	1,022	1,084,000	930,000	3,409,000	17.3%
1999	1,071	1,597,000	848,000	4,134,000	21.2%
2000	1,041	2,206,072	949,767	5,560,900	34.5%
2001	1,040	--	1,036,300	7,190,700	29.3%

Quality

This element is related to the last, since, as indicated above, the relentless pressure to squeeze more students into Chinese universities has not been paralleled by an equivalent rise in institutions, staffing, or other resources. Indeed, rather the reverse, since the pressure has been to consolidate institutions, via mergers and amalgamations. The concerted pressures have resulted in a number of problems: sharply declining staff-student ratios being just one, as Table 11 reveals.

Table 11: Changes in Staff Student Ratios, Chinese Universities, 1985-2001

Year	Student Enrolment	FTE Academic Staff	Staff: Student Ratio
1985	1,703,000	344,000	4.95
1990	2,063,000	395,000	5.22
1995	2,906,000	401,000	7.24
1998	3,409,000	407,000	8.38
2000	5,560,900	462,772	12.02
2001	7,190,700	531,900	13.52

take advantage of reforms, thereby widening the gap between themselves and their poorer or regional cousins. Equally, students from the less developed regions, or poorer provinces, are often denied the benefits of their peers in the major cities, and coastal regions. As elsewhere, aging of the profession is also a particular problem, with almost 90% of doctoral supervisors at MoE supervised universities over 56. At the same time, significant resources are being concentrated on the designated ‘Project 211’ universities. This scheme, operating since 1995, has seen something like 100 universities across the country receive a significant injection of additional resources, in an effort to fast-track the development of an internationally competitive, and internationalised, network of top Chinese universities. (Once again, however, the more prestigious universities are awarded a much greater proportion of funds under this scheme than lesser institutions). Although the total of ‘211’ universities constitutes only some 10% of all HEIs, their enrolments at bachelors, masters and doctoral level comprise 32%, 69%, 84% of the national total respectively, while 72% of Government funded research programs are carried out within designated 211 universities. Within 211 universities, 87% of teaching staff hold doctoral degrees, while 96% of state key labs and 85% of state key disciplines are sited in them. The newer 985 Project is concentrating even more resources in nine key universities.

Efficiency

Levels of internal efficiency within Chinese universities are not always high. Overall quality assurance systems are lacking, partly owing to the fact that administration of HEIs is split between several ministries, (although this is currently changing). Internal administration is large and cumbersome. As in some other countries of Asia, modest levels of remuneration mean that considerable ‘moonlighting’ by academic staff occurs, with a consequent diversion of effort and efficiency from their home institution towards second or third jobs, or small business enterprises. Attention is often re-directed towards such issues as housing, and accoutrements, rather than to the demands of the job. Despite the high ratios of administrative staff to academic staff, there are numerous complaints that too often, internal decisions are made on grounds of hierarchy (including often of administrative staff over academic staff), that may have little to do with efficient use of limited teaching and research time, and associated resources. Spreading corruption is a deepening problem, notwithstanding recent national campaigns. Administrative reforms are often slow to be implemented, and widely resisted, provoking former Premier Zhu Rong-zhi to remark, in a widely reported criticism, that ‘Universities were more like state- owned enterprises, than state-owned enterprises’.

Autonomy

Notwithstanding significant devolution of authority over the past 15 years or so from the Ministry to provincial governments, notably in the 1993 reforms and the 1998 Higher Education law, academic freedom is still restricted to a degree within China. Although provincial authorities have now been given more authority, for example over admissions policies, and are also now more responsible for institutional finances, institutional autonomy is also limited by the aforesaid dominance of non-academic staff over issues of teaching and research, and associated issues of resources. Despite the introduction of the President's Responsibility system under the new law of 1998, criticisms by numbers of academics persist of remaining state controls over universities, including approvals for new fields of study, stipulation of the curriculum, and course content. At the same time, Chinese universities are becoming part of a worldwide push for more performance data, justified under the name of accountability, but which also takes much time away from teaching and research functions, thereby in effect limiting academic autonomy. Steering from a distance is also hitching Chinese universities, like those in other countries, to national economic agendas, more closely. In China, in addition, the culture of academic freedom is not well entrenched, or even always well understood, either by university administrators, ministry officials, or at times, academics themselves.

Finance

The difficulties listed above of declining state support for the public sector, including higher education, and of simply accommodating demand, have led to measures to disperse funding sources. Indeed, there seems little choice, with the proportion of education funds to GNP falling from 2.21% in 1990 to 1.73% in 1997. Diversification measures include enhanced local responsibility for funding (via taxes); increased fees (with some provision of scholarships for indigent scholars); donations; and an increase in university entrepreneurial activities, either as spin-offs from university research, via start-up companies, or via strategic partnerships with industry, including technology transfer. The transformation of higher education funding has meant that in many institutions, student fees are a major source of income; perhaps as much as 15% of public institutional budgets, and as much as 90% of private institutions (*minban*). Tuition fees now often account for over 50% of many students' direct educational expenditures. Paralleling developments in East and South East Asia, the introduction of fee-based extension courses into Chinese universities, at evenings and weekends, (often with lower entry standards), has been a common resort, justified in large part on financial grounds.

Internationalisation: Cooperation and/or Competition

Regional internationalisation has the capacity to respond to some of these challenges, at least in part. It can reduce the costs to the state, although often not to the individual student. In some respects it also has the capacity to reduce the oft-expressed concerns by Chinese academics that internationalisation and westernisation are in fact conflated, by offering more localised responses. Such regional responses are not entirely new – as seen above, Hong Kong has, for years, acted as an important bridge between China and the rest of the world, including in higher education. The effectiveness of regional strategies however, is limited in practice by at least three specific elements. One is the unshakeable conviction of most university administrators, and most students, that the US system represents the sole source of institutional reforms, and quality higher education. Although often based on very inadequate information, in practice it restricts internationalisation options. A second lies to some extent within the control of the Ministry of Education, who formally invite 'foreign experts' to Chinese universities. The third is that of brain-drain, where, for example, it has been estimated that of the total of perhaps 320,000 or so Chinese students who travelled abroad to study over the past two decades, (many sent and subsidised by the state), only about 100,000 have returned. This pattern is at last beginning to change, however, as more opportunities open up in a dynamic China. Zhang, F. cites figures to show that of a purported 40,000+ Chinese students studying abroad in 2000, (2,800 of whom were supported by the government, 3,900 by their *Danwei*, or work unit, and some 32,000 self-supported), about half will return. If so, this represents a higher return rate than even a decade ago, and supports the thrust of ILO research, that *inter alia*, confirms, "…rapid economic growth makes a destination more attractive to both non-nationals and returning nationals". Here too, regional collaboration may offer at least a partial solution.

The Chinese government has regarded institutions and programs in transnational higher education as an increasingly important and efficient way to expand higher education, a means for enhancing quality and standards, and a mechanism for facilitating the internationalisation of Chinese higher education - Huang 2003

It should be pointed out here, however, that Chinese statistics are not always collected in a consistent manner, across different agencies and ministries. This is a particular problem with MoE statistics on study abroad, which often failed to account for the growing number of self-supported students abroad. Nonetheless, the following table reveals something of the numbers and return rates of Chinese students studying abroad, although it is acknowledged that the figures, based on data drawn from the Ministry of Education, are incomplete.

Table 12: Chinese Students Studying Abroad and returning, 1978-1999

Year	No. Studying Abroad	No. Returning	% Returning
1978	860	248	28.8
1980	2,124	262	12.3
1985	4,888	1,424	29.1
1987	4,703,	1,605	34.1
1990	2,950	1,593	54.0
1993	10,742	5,128	47.7
1996	20,905	6,570	31.4
1999	23,749	7,748	32.6

More recent figures (based on visas, rather than MoE statistics) show that self-supported students are now assuming a much larger proportion of the total number of Chinese students studying abroad, than in years past:

Table 13: Chinese students studying abroad, by category, 1997-2000

Year	Govt. Supported	Danwei Supported	Self Supported (and % of total)	Total
1997	1,906	2,442	30,731 (87.6)	35,079
1998	2,000	3,000	50,000 (90.9)	55,000
1999	2,000	3,000	80,000 (94.1)	85.000
2000	2,228	2,724	80,000 (94.1)	85,000

Importantly, trade in educational services is also expanding rapidly in the reverse direction. The significant, and rising tide of international students where, in 2002, a record 85,829 international enrolments from 175 countries were recorded at Chinese universities, has brought both more direct cross-cultural exchange, and a welcome and much-needed boost to numerous institutions' budgets. Based on an assumed average annual tuition fees of US$2,000 per-student per annum, plus at least a further

US$1,000 for accommodation, this yields a total of US$255 million, without allowing for associated, additional expenses. It must be said, however, that both source countries and income, are very unequally distributed, with perhaps 60% or more of students sourced from Korea and Japan, and most of the enrolments occurring in larger and more well-known institutions, and regions. Beijing enrolled most foreign students, followed by the municipalities of Shanghai and Tianjin; other significant provinces included Guangdong, Jiangsu, Liaoning, Shandong, Jilin and Heilongjiang. Of all international enrolments, 93 percent (or almost 80,000) were self-supporting. The Ministry of Education is reportedly developing regulations to help provide work-study opportunities, such as part-time jobs. Underlining the regional character of internationalisation (listed above), 77 percent of all international enrolments in Chinese universities in 2002 were from Asia (especially Japan and South Korea), 10 percent each from the Americas and Europe, 2 percent from Africa and 1 percent from Oceania. South Korea, Japan, the United States, Indonesia and Vietnam were the top five sending nations, accounting for than half of all overseas students in China.

Table 14: ASEAN Students in Chinese Universities, 2000 and 2001

ASEAN Students	2000	2001
- Indonesia	1947	1697
- Malaysia	<500	632
- Singapore	854	<500
- Thailand	667	860
- Viet Nam	647	1,170
ASEAN Total	4,610	4,854
Total International	52,150	61,869
ASEAN % of total	8.84%	7.85%

(NB. for statistical purposes a number of 495 was assigned for instances of <500).

While it is not possible to draw long-term inferences from such a short time series, Table 14 reveals healthy and rising enrolments in Chinese universities, including from Malaysia, Singapore and Viet Nam.

China is also generous with scholarships, having provided 5,362 scholarships to overseas students from 148 countries to study at its universities in 2000, and 5,841 from 155 countries in 2001. (China Education Yearbook 2002). Overall Asia, and 3-country data for 2003-4 and 2004-5 are presented in the following table, and reveal a strong bias towards less developed nations, as would be expected.

Table 15: University Scholarships offered by China, 2003-4, and 2004-5

	2003- 4	% of total	2004-5*	% of total*
Asia Total	2115	45.0	2101	38.6%
- to Malaysia	10	.21	10	.18
- to Singapore	10	.21	10	.18
- to Viet Nam	130	2.7	130	2.39
Overall Total	4,695		5437	

China Scholarship Council 2004 (private comunication).
* projected

Other pertinent developments include the recent mandating of foreign language instruction (mostly English) for something like 10% of subjects at major Chinese universities, including use of imported foreign language textbooks. This even extends to some subjects like law and the social sciences, and is scheduled (with no doubt some difficulties) to be extended to even provincial universities over the next five years or so. Incentive schemes, offering special salaries, assistance with housing and help with schooling for children, have also been introduced, to entice Chinese scholars back from overseas – again however, largely by wealthier and elite institutions. Last but not least, China recently announced plans to introduce a 'Green Card' system in 2004, that will afford highly skilled foreign workers long-term residence permits. This will no doubt be of interest to the small but growing number of foreign appointees who now occupy senior posts at some of China's major universities. (As an example, Professor

Gavriel Salvendy was recently appointed as the first foreign Chair Professor and Head of Department – of Industrial Engineering - since 1949 at Tsing Hua, at a salary of US$100,000p.a. He will work there some months each year, while retaining his post at Purdue University). Nonetheless, restrictions on transnational education persist – notably limits to the teaching of humanities and social sciences, and a ban on the teaching of religion.

In common with other forms of private higher education, the Chinese Ministry divides transnational higher education (*Zhongwai Hezuo Banxue*) into degree, and non-degree categories. Regulations passed in late 2003 and aimed at encouraging partnerships between Chinese HEIs and foreign institutions (OECD 2003), largely echo 1995 procedures that insisted on reputable partners, detailed documentation, a Board comprised at least 50% by Chinese citizens, and a Chinese director (Huang 2003a and b). These seem not to be entirely consonant with the spirit of China's WTO commitments in 2001. The latter's horizontal commitments specified that the establishment of wholly owned foreign enterprises, and joint ventures was to be unbound, although there were exclusions as to profit making. The commitment did, however, indicate that relevant legislation was still 'under formulation'. Educational commitments stated that the provision of educational services was unbound, and that, for example, 'joint schools … with foreign majority ownership' were permitted (WTO 2001).

By the end of 2002, more than 600 Chinese HEIs were estimated to have engaged in some form of trans-national higher education. Many were with regional HEIs, with some 146 listed by the Ministry as being with Australian partners, 58 with Japan, 56 with Hong Kong, 46 with Singapore (see below), and 31 with Taiwan. Partnerships with regional universities, especially those more integrated into the international knowledge network, (like Hong Kong institutions), have the capacity to allow access to higher education to a larger proportion of the population. Increasingly, this does not mean that the individuals need to leave home – distance education using the range of ICT that now sustain virtual teaching and learning in higher education, is growing swiftly, while still providing access to new and relevant knowledge. As is argued below, however, the most common forms of internationalisation are business and IT courses. This is no less the case in China, where it has been estimated that half all such programmes lead to an MBA, while significant international partnerships with major overseas HEIs are in practice limited to wealthier and more developed domestic partners – 'Almost all joint programmes are provided in China's most prestigious universities'. While earlier ventures were largely with US institutions, there is an evident trend towards more regional initiatives, notably with Hong Kong and Australia.

Existing China – ASEAN Relations in Higher Education

Globalisation underlines the fact that we can longer understand systems of education sufficiently, or indeed international forms of competition and collaboration, using the nation-state as unit of analysis. Regional and global consortia, are now a notable feature of the higher education architecture. They exhibit much the same strengths and weaknesses as institutional forms of collaboration. Some are weaker, others stronger. Some persist, others disappear. Some embody limited ambitions, others are global in ambition as well as geographic reach.

ASEAN-China trade in services is not well understood, or sufficiently researched (see the Conclusion to this analysis). Tourism by Chinese citizens in ASEAN is known to be large and growing, while Singapore is increasingly seen as “ a destination of study and business tours”. Further cooperative endeavours will lead to increased flows of investment, including in areas such as educational services. However there is some concern among ASEAN members, keen to take advantage of prospects for expanded service sector trade with China, that some non-tariff restrictions prevent further development of the China market, including in educational services.

Cultural Relations

The promotion of cultural ties between China and ASEAN, an element within overall ASEAN cultural policy, was inaugurated by an ASEAN + 3 Meeting of Ministers Responsible for Culture and Arts (AMCA+3), in Kuala Lumpur in October 2003, and separately endorsed by the ASEA + China Summit, which met at Bali in October 2003. The latter pledged to intensify cooperation in key areas, including education and human resource development, and exchange of relevant personnel. In this sense, it broadly functions within the expressed goals of the ASEAN Socio-Cultural Community: to “nurture talent and promote interaction among ASEAN scholars, writers, artists and media practitioners, to help preserve and promote ASEAN’s diverse cultural heritage while fostering regional identity, as well as cultivating people’s awareness of ASEAN”, although details of the ASEAN China guidelines remain to be developed. As seen below, while there is enthusiasm on both sides to strengthen relations in higher education, this is not always simple.

Trade Agreements and Consortia

At least one regional trade agreement includes cross-border education, while three principal higher educational consortia exist, that are either targeted at promoting ties with China, or that already include Chinese universities as members:

APEC

From its inception, the Asia Pacific Economic Cooperation (APEC) has included an education component. Originally formed as the APEC Education Forum in 1988, it now fits within the APEC Human Resources Development Working Group, which includes China, Malaysia, Singapore and Viet Nam, as well as a number of other countries. While APEC infrastructure to support regional initiatives in education has been modest, its aims are not. Its ambitions include, notably, the attainment of free trade and investment within the Asia Pacific region for developed countries by 2010, and for developing countries by 2020. A relevant instrument consists of an inter-governmental consultative group, the APEC Education Forum, while the Human Resource Development Working Group (HRDWG) has somewhat wider aims, embracing lifelong learning, and capacity development, but also sustainable development, and labour and social protection). University Mobility in Asia and the Pacific (UMAP), which is seen by APEC as a vehicle to promoting its ‘people-to-people’ links in education, organises one and two semester study abroad programmes for undergraduates. Members include Singapore, Malaysia (the Chair for 2003-4) and Viet Nam, while China’s proposed membership was again discussed at a UMAP meeting in Japan in March 2003. For the foreseeable future, however, further progress on admitting China is likely to remain stymied by difficulties arising from already having Taiwan as a member. Current activities consist of the further development of the existing Pilot Scheme on Credit Transfer (UCTS).

A recent APEC publication focused on identification of barriers to trade in cross-border educational services, as well as measures to promote it, and included considerations of access and equity, and the integrity of national systems. More than one country within the region voiced its concern on this latter issue, noting the necessity to 'retain the… sovereign right to determine the… domestic funding and regulatory policies/measures', as well as the integrity of the public system and local standards. Lack of regulatory transparency was also raised as another issue within the document, and has been raised by some regional economies, as potential barriers to the export of services into China, despite its accession to WTO membership.

The three regional consortia in higher education are as follows:

1. The ASEAN Universities Network (AUN), which in 2001 inaugurated *the ASEAN-China Academic Cooperation and Exchange Programme*. Members include University Sains Malaysia (USM), University Malaya (UM), National University of Singapore (NUS), and Nanyang Technological University (NTU). Its activities include the ASEAN-China Rectors conference, Roundtable, Joint Research and Training Grants as well as ASEAN-China Distinguished Professors and Lecturers Exchange Programme. One of the first actions taken was an ASEAN China Rectors meeting at Chulalongkorn University, Bangkok, in June 2002, where it was decided to explore current circumstances and interests in extending relations, via a survey of members, including prospects for virtual courses. The next round-table, scheduled for March 2004, at the Beijing Foreign Languages University, was to take further steps to advance ASEAN China collaboration. Marine Science was selected as an initial vehicle for the implementation of Joint Research and Training Grants. Chinese scientists from the nation's most eminent national university in the field, Qing Dao Maritime University, were to be afforded opportunities to conduct research in tropical and equatorial water environments, while ASEAN scientists were to be enabled to take advantage of the temperate water environment offered by Northeastern China. Ten researchers were to be selected from each side to receive three-monthly grants, for the conduct of maritime research.

Another element of the Agreement included a Joint Training activity, whereby some forty academics from ASEAN and China were to be selected for two training courses, each of a fortnight's duration. One training course was to be held within ASEAN, and another in China. The final component was the ASEAN-China Distinguished Professors and Lecturers Exchange Programme, aimed at strengthening relations between ASEAN and Chinese scholars by promoting short term academic exchanges (two weeks to one month). Exchange activities were to embrace lectures, laboratory exercises and demonstrations, research student advisement, and collaborative development of curricular and teaching-learning materials on both sides.

2. The second existing higher education consortium that involves member universities in China and ASEAN is the Association of Pacific Rim Universities (APRU) consisting of 36 leading research universities from Singapore (NUS), China, Malaysia (UM), as well as the USA,

Australia, Chile, Chinese Taipei, Philippines, Thailand, New Zealand, Russia, Japan, Korea and Canada. Member universities from China number among its leading research institutions: Peking University, Fudan University, Hong Kong University of Science and Technology, Tsinghua University, and Zhejiang University. A key APRU activity is to gather information about the extent of internationalisation activities at member universities, but at the time of writing this data was not yet available.

3. The third consortium is UNIVERSITAS 21, which includes 3 major Chinese universities (Peking, Fudan, and the University of Hong Kong), as well as major research universities from Canada, the UK, the USA, Sweden, Germany, New Zealand, Singapore (NUS), and Sweden. U 21 Global is an e-University, of the 16 universities plus Thomson Learning (a large, multi-national corporate training provider) – it offers an MBA programme, for example, headquartered in Singapore, and offers courses in Mandarin. A recent initiative, opening for business in May 2003, its on-line MBA claims to be replete with chat-rooms, threaded discussions, and other such web-based tools, and advertises that an MBA can be gained at a fee level that begins from US$10,000.

The following section presents an overview of the higher education system of each of the three tiger cubs, with analysis of the character and extent of trade and partnership with China in the higher education sector. Where possible, it illustrates institutional linkages, and joint programmes. Although at one level the most substantive form of colloboration and competition, these can also be the most labile, and sometimes difficult to trace and detail. This is for a range of reasons. Firstly, institutions are often coy about giving out details, which may be seen as commercial, and confidential. A second reason for coyness, is that MoUs may often be far less active and substantial than advertised. Inter-institutional MoUs are common; much less frequent are longstanding and substantive programmes of collaboration that yield benefits to both parties. In practice, institutional linkages vary, with some more active than others. Many Chinese universities, for example, tout widespread connections with major overseas universities. More detailed investigations within the institutions may reveal that the impressive list of partner institutions is more aspirational than actual.

Singapore

Singapore's position as a major provider of regional educational services is a heady mix of ambition and accomplishment. Originally based on the British model, the higher education system is highly structured, and integrated into national development goals, and strategies. The original institution, the University of Singapore incorporated the original Nanyang University in 1980, becoming the National University of Singapore (NUS). University enrolments grew from 9,200 in 1980 to more than 25,307 by 1990, while enrolments at the more vocationally oriented polytechnics grew from 11,105 to 29,484 over the same period. NUS was joined by the newly upgraded Nanyang Technological University (NTU), formerly the Nanyang Technological Institute, in 1991. Inadequate domestic capacity has long meant that significant numbers of Singaporeans have travelled abroad to study, while offshore enrolments are also on the rise. (At the same time, notwithstanding intense domestic pressure for places, Singapore provided 15%+ of its places for international students, to ensure that ‘tertiary institutions within the country do not degenerate into parochial institutions….The government’s policy is that this is the price that Singapore has to pay for diversity’. Table 16 shows the principal destinations of Singaporeans who, unable to gain entry to local institutions, or to gain one of the wide range of scholarships (mostly tenable at UK universities), financed their own study abroad, during the 1980s.

We have to live by our education and our skills. For all…countries, whether you are rich in natural resource, your final position depends on the skills and knowledge of your people
- Lee, Kwan-Yew 1992

Table 16 shows that the number of Singaporeans studying abroad roughly doubled over the 1980s, while the balance shifted somewhat, away from the USA, and to a lesser extent the UK, towards a more balanced, and to a lesser extent more regional, distribution. The trend towards a slightly rising share of overall enrolments going to Australia, is supported by other studies of student destinations of the period, and largely predates the much faster growth in international enrolments at Australian enrolments of the past decade or so.

Table 16: Numbers and Destinations of Singaporeans studying overseas 1981-1990(self financed)

Country	1981	1983	1987	1990
USA	1,840	4,500	4,870	4,460
UK	1447	776	1,782	2,220
Australia	771	638	895	1,921
Canada	961	1,111	1,101	1,572
Total	5019	7,025	8,648	10,173

At the same time, Singapore has clear aspirations to become a regional education hub, attracting more and more students from the region to its universities, and providing services internationally. This includes attracting branch campuses (such as INSEAD and the University of Chicago’s Graduate School of Business). Prospects for growth in service sector trade, are supported, *inter alia,* by educational data, showing a well educated populace. Proportions of the population aged 25 and over with a secondary or higher qualification rose from 37% in 1990 to 55% in 2000, while university graduate numbers more than tripled – from 77,000 in 1990 to 249,000 in 2000. This now constitutes 12% of the population aged over 25 years. The Singapore Cooperation Programme offers technical training to developing countries, either bilaterally, or in cooperation with third countries or multilateral organisations. Singapore is also a generous provider of scholarships to international students, including from ASEAN nations. Singapore’s Ministry of Education offers scholarships to citizens of ASEAN countries, for undergraduate studies in Singapore, while organisations such as the Singapore International Foundation, Association of Nanyang University Graduates and the Singapore Chinese Chamber of Commerce provide yet more. Many statutory boards, local companies, and multi-national companies also offer their own scholarships. Some impose a bond with the organisation upon graduation.

Domestic postgraduate enrolments have risen swiftly, from 2,400 in 1990 to 14,200 in 2002. Of these, about half are now enrolled full time. In addition, a significant number of Singaporeans are enrolled in degrees from overseas universities, with about 55% of the overseas enrolment total enrolled in UK universities, and 40% in Australian, in 1998. The largest UK providers are the Open University and the University of London, while major Australian providers include RMIT, Monash and Curtin). The following tables show the numbers of undergraduate and graduate enrolments, in recent years, including proportions of enrolments that were domestic and international.

Table 17a: Undergraduate Enrolments and Graduations, Local and External 1997-2000

	Enrolments			Graduates		
YEAR	External	Local	E: L %	External	Local	E:L %
1997	13,990	31,730	44	2,600	8,680	30
1998	18,000	33,090	54	3,390	9,330	36
1999	19,330	35,100	55	4,270	9,460	50
2000	21,010	37,650	56	5,350	9,410	57

Table 17b: Postgraduate Enrolments and Graduations, Local and External 1998-2000

	Enrolments			Graduates		
YEAR	External	Local	E:L %	External	Local	E:L %
1998	4420	10,240	43	890	2,170	41
1999	6120	12,760	48	2,150	2,590	83
2000	6,250	12,770	49	2,330	3,680	63

Evidently, the growth in external enrolments is significantly greater than for local, and if this trend continues, Singapore is destined to remain a significant importer of educational services for some time. Whereas cross-border delivery via distance (including on-line) programmes require no Ministry approval, local presence using a domestic (Singapore) partner, does.

Singapore-China trade and collaboration in Higher Education

At least five firm planks provide a solid platform for trade and other kinds of collaboration in educational services between Singapore and China. The first is linguistic and cultural affinity. In multi-ethnic Singapore, about three-quarters of the total population are ethnic Chinese. Of the Chinese speakers, more than one million, or over 42% speak Hokkien dialect, while the next largest group are Teochew, who add a further 21%. Thus there is a firm base in linguistic groups that understand forms of Mandarin/ Putonghua. Cantonese is spoken by only 15% of Chinese speaking Singaporeans. The second plank is provided by the strong commercial connections between Singapore and China, as noted above. The third is Singapore's strong regional presence in service sector trade. It has "… a long tradition as a provider of trading and financial services in the region, and business and related entrepreneurial activities'. This notably includes an explicit intention to become a regional education hub, attracting increasing numbers of international students to its universities. Currently, it attracts significant enrolments, largely from Indonesia and Malaysia (OECD 2003); but has wider ambitions. Fourthly, as indicated above, Singapore makes a good number of its scholarships available to international students, including those from beyond ASEAN. Fifthly, Singapore and China concluded a specific Memorandum of Understanding on 29 May 2002, signed by the respective Ministries of Education.

Given this solid platform, comprising trade, cultural and linguistic affinity, and educational agreement, a solid degree of collaboration in the arena of educational services was to be expected. Beginning in 1999, the two Ministries of Education committed to an Memorandum of Understanding (MoU), which led to exchanges between teachers, scholars, researchers and students. Subsequent expansion in such visits between the two countries was followed by a further MoU, signed in May 2002, that formalised an exchange programme for outstanding students from each country. Scheduled to begin in 2003, it offered 50 students from each country, a 15 day exchange, and was organised with the support of the respective national youth organisations – the National Youth Council of Singapore, and the All China Youth Federation. An explicit aim of the exchange programme is to broaden bilateral ties between China and Singapore, and to foster understanding, collaboration and bonding between students from Singapore and PRC students. The Chinese universities involved were the Beijing Language University, Beijing Post and Communication University, Beijing University for Foreign Studies, and Tsinghua University.

In this context, it is no great surprise to find that of all three tiger cubs, Singapore's relations with China in the higher education sector were found to be by far the strongest, and most sophisticated. Its universities are the most developed of all three, its service sector trade is the largest and most developed, its ITC infrastructure world-leading, and its Chinese ethnicity, and Chinese language base comparatively the strongest. Already, 46 partnerships exist with Chinese HEIs. Five examples of Singapore-China programmes are treated here:

1. National University (NUS) of Singapore inaugurated its Shanghai College in 2003, partly in collaboration with Fudan University, and major Chinese firms. Essentially a placement programme with a strong focus on technology entrepreneurship, it directly parallels NUS's other overseas campuses, such as that in California's Silicon Valley. All are based on the same aim: " to cultivate leading entrepreneurs and valuable global human capital by immersing a highly selected group of NUS students in the dynamics of high growth potential ventures and distinguished academic environment." It offers internships of up to 12 months duration in Shanghai, with high tech companies, often of international origin. Students are also required to take entrepreneurship courses at Fudan Univesity, (which also has its developing stable of start up companies). Credits obtained from these Fudan courses and the internship are credited towards the NUS degree requirements, and the aim is to stimulate.development of both an entrepreneurial hub in Singapore, and trade between Singapore and Shanghai. In particular, the aim is to enhance Singapore firms' presence in China which, as indicated earlier, is already substantial, and where Singapore currently allocates most of its FDI. The goal is to develop experienced China professionals, with in-depth industry experience: "the NUS College in Shanghai aims to contribute to Singapore's economic future by cultivating China-savvy professionals." The aim is for the course to be revenue neutral for students. As indicated, the programme is new, (so new indeed that the section of the NUS website devoted to Faculties and Courses lists only the two NUS colleges in the USA, but not the more recent one in Shanghai). The first cohort of 15 students was planned for January 2004, and ultimate plans are for 100 students to undertake the programme each year.

2. The International Master of Business Administration (IMBA) programme is a collaborative venture between National University of Singapore (NUS) and Peking University (PKU). The NUS advertises major benefits of the programme as being not merely undertaking a dual degree offered by NUS and Peking University, but as

completing one of the first programmes in the world to offer modules in both English and Chinese. The program claims to be able to meet the indigenous needs of business operation in China while tapping the expertise provided by both universities. The goal is for graduates to be not only effectively bilingual, but also to be equipped with business knowledge of both east and west, and to be effective Asia-Pacific professionals. The programme, offered in Singapore and Beijing, charges a full-time annual fee rate of S$18,000.

3. NTU's Nanyang Business School has already established a partnership with Shanghai Jiaotong University, (established in 1897 and one of China's top universities), who together offer an Executive MBA programme. Cementing NTU's significant record of providing bi-lingual management programmes to senior policy makers and business executives in China, it was launched in Shanghai by Singapore's (Acting) Education Minister in December 2003, and involves collaboration between the Nanyang School of Business, and SJTU's Aetna School of Management. It furthered reciprocal arrangements whereby, for example, SJTU has been offering its MBA programme (with its depth knowledge of the Chinese business environment) in Singapore, in collaboration with NTU, as from 2002. A further interesting initiative in the cultural arena forms part of NTU's push to widen its traditional dependence on commerce, science and industry, and to become more comprehensive. It has investigated collaboration with Peking University and Tsing Hua, in the area of humanities, as part of NTU's plan to develop a leading Chinese Studies department.

4. Programmes are also offered by China to the Singapore market. Singapore's senior civil servants, for example, can also avail themselves of Tsing Hua University's Executive Programme for Senior Singapore Civil Servants, which has been running for some years. Tsing Hua's website indicates that a cohort of such students recently completed the sixth such programme

5. Examples of private sector partnerships include an exchange programme of the new Singapore Management University (SMU), established in January 2000 as the first publicly-funded private university with a focus on business and management programmes. It offers, *inter alia*, a one or two semester exchange programme with three Chinese universities: Nankai University, Sun Yat Sen University, and Xiamen University. The Ministry of Trade and Industry make an Asian Business Fellowship available, limited to scholars who are undertaking the exchange programme with Chinese partner universities.

Malaysia

As with Singapore, the origins of the Malaysian higher education system are inextricable from the history of British colonialism. In Malaysia's case, its history of ethnic relations is also a crucial component in understanding the development of higher education. A quarter of today's Malaysians are classifed as Chinese, and another 8% as Indian. Of all ASEAN nations, Malaysia subsidises the costs of higher education most. 92.7% of direct expenditure on tertiary education institutions is public, which compares with 52.4% in Australia, and 44.5% in Japan. In Malaysia's case this in effect amounts to a massive subsidy to *Bumiputras* since, traditionally, ethnic quotas have forced many non-ethnic Malays into private HEIs, or abroad for further study. It is estimated that more than 90% of private sector HEI enrolments are non-Bumiputra, while the selfsame policy of Malayanisation is sometimes said to have led to the appointment of less experienced *bumiputra* staff without all the necessary qualities of excellence and leadership, at public HEIs. Experienced non-*bumiputras* have tended to respond to the lack of career prospects at such institutions, and the loss of salary relativity, by migrating to the private sector.

The University of Malaya in Singapore, in 1949, can be said to represent the beginning of the Malaysian higher education system. In the post-colonial era, overall enrolments grew rapidly:

Table 18: Higher Education Enrolments, Malaysia 1970-1990

Enrolments	1970	1980	1990
Degree	3,318	12,262	28,010
Diploma	7,677	20,018	60,030
TOTAL	10,995	32,290	88,040

Compiled from Lim 'Malaysian and Singaporean Higher Education', 1995, p. 77

Malaysian HEIs also began to diverge from their common British heritage during the 1980s – but only in part. From 1970 Behasa was mandated as the official medium of instruction in higher education, with only a few exceptions, more at the postgraduate level. The former dominance of expatriate staff ended, with local Malaysian academics, largely *Bumiputras*, forming effective replacements. Malays had also been rapidly trained in the 1970s, in the aftermath of the race riots, to replace expatriate administrators. Nonetheless, this phenomenon of indigenisation was perhaps less of a break than might have been supposed:

> '… the expatriate academic community has been rapidly and effectively replaced by a Malaysian academic community, but one which (remained) basically … Western biased.'

By the 1990s, some of the more obvious Western legacies thought inappropriate to Malaysia had been abandoned. The dominance of English however, meant that while Behasa remained the language of instruction at public HEIs, English was used in private institutions. Enrolments rose rapidly over the 1990s - but nonetheless failed to keep pace with unrelenting demand.

Table 19: Undergraduate enrolments in Malaysian Public and Private HEIs, 1995-1998.

	Public HEIs	Private HEIs
1995	79,014	127,600
1998	136,689	150,900
2000	173,324	213,674

The year 2000 total for private HEI enrolments includes 10,283 international enrolments.

1995 saw Malaysian HEIs still able to offer places to only 6% of the age cohort, at that time, the lowest among ASEAN nations. (This is claimed to have now reached 16% of those aged 17-23). This meant that enrolments were limited to between 25% and 40% of qualified applicants each year, over the 1980s. In practice, this meant both continuity and change. Large numbers of Malaysians continued to study abroad: whereas some 8,200 applicants were admitted to domestic universities in 1985, for example, a further 43,200 were studying for degrees overseas, and another 2,300 for Diplomas. The combination of limited domestic capacity, ethnic quotas and an appetite for overseas study, was largely responsible: World Bank data for the mid 1990s showed that some 34% of total Malaysian tertiary enrolments were nationals studying abroad. This represented a total annual cost of some US$600-980 million, and has been an ongoing concern, spawning an Expatriate Programme in 1999, designed (not entirely successfully) to lure skilled Malaysians back home. Change was evident in the moves to expand private higher education, licensed by the passage of key legislative instruments. These included the Private Higher Education Act (1996), National Council on Higher

Education Institutions Act (1996), the National Accreditation Board (1997), the Universities and University Colleges (Amendment) Act 1996 and the National Higher Education Fund Board Act 1997. The ongoing squeeze on places and funds led to significant expansion of private higher education in the years following 1996, including branch campuses, and twinning programmes. This effectively shifted the balance from strong state support to forms of strategic cooperation and competition, now termed Malaysia Inc. "A Malaysia Inc approach in education is making it possible for the private sector to meet the needs for tertiary education by offering degree, diploma and certificate level courses."

The Seventh Malaysia Plan (1996-2000) contained ambitious targets for education, not least higher education. Of the total education allocation, some 35.1% was planned " to expand the capacity for tertiary education, particularly at degree level". The regional economic crisis temporarily dented these ambitions, but also increased the likelihood that the private sector would expand. By 2001, private higher education had indeed expanded considerably, as seen in Table 20.

causing a swell in domestic enrolments, and difficulties in staffing. Equally, opportunities for domestic academic staff to study abroad were curtailed, which also had consequences for academic staff:

> *… university tutors and lecturers (were encouraged) to further their postgraduate studies within any Malaysian university. This intention was to reduce the cost of staff development and to reduce the outflow of Malaysian currency. This made the university teaching profession less attractive to newcomers. As a result, there was a significant decrease in the number of applications for the posts of tutors and lecturers.*

When study abroad was again opened up, efforts were made to curtail costs by expanding twinning programmes, which had the effect, *inter alia*, of reducing the time spent abroad by staff: " The arrangement enables academic staff to be trained and later gain foreign university degrees by spending only a quarter of their time at the foreign university". Cost savings would have been considerable, but it is arguable that the quality of the experience for Malaysian staff also declined.

Table 20: Private HEIs in Malaysia, as of May 2001

	No. of Institutions		No. of Students		No. of Academics	
Institution Type	Total	Kuala Lumpur	Total	Kuala Lumpur	Total	Kuala Lumpur
College Status	652	158	209,589	48,512	8455	1808
University Status	10	2	20,839	933	855	45
University Branch Campus	4	2	1,641	110	95	11
TOTAL	666	162	232,069	49,555	9395	1864

The regional financial crisis meant that the very generous system of national scholarships that financed thousands of ethnic Malays abroad was curtailed, at least temporarily. Altogether, tens of thousands of Malaysian students returned from abroad, at least temporarily,

Malaysian membership of the Commomwealth lay, at least in part, behind the history of internationalisation of its higher education system. Sunway College was one of the major early initiatives in twinning arrangements, which at the time was the only means to avoid the restrictions of the 1969 regulations that prevented private colleges from offering degrees. It fostered links with eight universities in New Zealand, Australia, the UK, and the USA, and by the late 1990s had an enrolment of 3,500. Several UK and Australian universities, notably Monash and Curtin University of Technology from Australia, and Nottingham from the UK, have now moved to establish branch campuses in Malaysia. The Monash campus, established in 1998, and known as Monash Sunway, offers degrees in commerce, law, economics and computing, with the prospect of transfer to the Australian campus, with credit. From the Malaysian perspective, these branch campuse have several advantages. These include responding to the demand for skilled personnel, most particularly in areas such as engineering, technology, and the emerging sciences such as IT. At the same time, students can save travel and living costs associated with living abroad, while the additional infrastructure costs the government little. Secondly, " the presence of off-shore campuses will provide the impetus to both public and private local higher education institutions to improve their quality and standard of education". The establishment of these branch campuses is only possible with the permission of the Ministry, and after gaining accreditation by the *Lembagi Akreditasi Negara* (LAN), the National Accreditation Board listed above. The overseas institution must operate according to certain conditions. One of the most significant is the conduct of courses in Behasa, although exemption may be provided to teach some courses in English or Arabic (something clearly necessary in the case of twinning programmes). Secondly, all such campuses must teach the following courses: "Malaysian Studies, Islamic Studies (for Islamic students), and Moral Education (for non Islamic students. The current Minister, Tan Sri Musa Mohamad, has reiterated as recently as December 2003, that part time distance and and online qualifications from non-accredited HEIs, some of which were characterised as being of 'dubious quality… (and) not even recognised in their own country', would not be accepted for purposes of public sector employment.

Some have urged caution in relation to these and other developments, to ensure that "the quality of education, among other things, is upheld, fees are reasonable, and the teaching learning facilities that are provided are at par with public institutions". Equally, concerns have been voiced in Australia, as regards the parity of quality of the Malaysian campus, the extent of quality assurance applied by Australia to such off-shore operations, and the working conditions, relative to the main Monash campus. The rapid growth of private sector HEIs from the mid 1990s, a result of government privatisation policy, has led to considerable concerns being voiced about the potential for a decline in quality: "Do less privileged students pay more for inferior education that is available in some private institutions".

The most recent stage has seen a coordinated attempt to position Malaysia as an educational hub within the region. The government provided assistance and encouragement to private HEIs to attract greater numbers of international students, with private international enrolments rising to 12,000 in 1999. International enrolments at public universities numbered 5,239 in 2003, according to official figures, while the Ministry of Education claims that students from 57 countries are now enrolled. This is largely in accord with OECD estimates of about 19,000 international enrolments. The *Study Malaysia* website is designed to sell potential students on the attractions of pursuing degrees at Malaysian universities. Foreign universities are being encouraged to set up offshore branches in Malaysia .

The Malaysian Association of Private Colleges and Universities (MAPCU) also advertises its interest in promoting Malaysian education internationally, including via international allegiances. This includes establishing branch campuses of reputable foreign universities in Malaysia, and twinning arrangements. It argues that quality is ensured by maintaining parity of course content and academic standards, although degrees are awarded locally. In certain cases, twinning programmes are now conducted entirely in Malaysia (the so-called 3+0 model) although the degrees continue to be conferred by the foreign universities.

The recent staging of Malaysian universities Expo's. in countries such as Thailand, China, Indonesia and Brunei was coordinated by the Ministry of Education. Current policy has moved from a heavy dependence on the state, towards a 'Malaysia Inc.' approach, which embraces both domestic private sector HEIs, and foreign HEIs, as the Ministry's website indicates:

> *To take full advantage of the opportunities offered by an increasingly borderless world, foreign universities are being encouraged to set up offshore branches in Malaysia, but only the best will receive approval. At the same time corporations have been given the mandate to establish private universities. This dynamic relationship between government, the private sector and strategic foreign academic partners will no doubt help us realise our goals.*

Malaysia-China trade and collaboration in Higher Education

Much of the above appears not to relate to China. For a country with more than one quarter of its population defined as of Chinese ethnicity, ambitious plans to develop into a regional education hub, and geographic proximity to its large and powerful neighbour, it is perhaps curious that Malaysia has not yet developed more solid China links. Of the more than 5,000 international students enrolled at Malaysia's public universities, a mere 119 were listed as originating from China. In the reverse direction, 136 Malaysian students were listed as studying in China. Recipients of awards to study in Malaysia, that were covered by MoUs, were modest, as indicated in the following table.

Table 21: Awards to Chinese students covered by MOUs, to study at Malaysian public universities

YEAR	TOTAL
2000-2001	10
2001-2002	-
2002-2003	5
2003-2004	3 offered, one filled

Little evidence was found of ongoing programmes of staff or student exchange, twinning, branch campuses, or research collaboration. At the system level, the only real evidence of trade in educational services consisted of attempts to project Malaysian higher education into China, via the recent staging of Malaysian Expo's in China, listed above. Little evidence was found to assess the success of such ventures, in recruiting Chinese students for its universities. The private sector fared little better. Inti College has had a campus, the Beijing Inti Management College (BIMC) operating in Beijing since 1994. The China programme students study at BIMC and later apply for further study in Inti's partner universities in UK, Australia or to the main campus in Malaysia. No formal staff and/or student exchanges, or research collaboration, exists.

Vietnam

The contours of the Vietnamese higher education system continue to be affected by the legacy of many of the same factors that have shaped its overall economy, culture and society. Re-unification, less than thirty years old, has left its mark on the Vietnamese higher education system, as has the fact that so much of its energy and resources were long consumed by the needs of successive defence budgets. As indicated earlier, Viet Nam has only been free of war for a little over 20 years, after a decades-long struggles, successively against French, US, and Chinese forces.

While rises in higher education enrolments have significantly outstripped those at elementary and secondary levels, (more than doubling each year during the mid 1990s), the persistence of significant economic constraints limits the capacity of the public system to meet ever-increasing demand. Poor coordination, low levels of efficiency, and some lingering unresponsiveness to the needs of a modernising economy and workforce, also continue to weaken state capacity in higher education, just as they do within other sectors (See above). Hence, it is likely that Viet Nam will see further growth of private higher education, over the coming years. Indeed, despite some problems, privatisation (termed in Viet Nam, as in China 'socialisation') is set to continue and expand over the coming decade. Nonetheless, the longstanding national value placed on public education means that it continues to receive strong support by both the state, and households, despite, as seen above, low levels of GDP per capita. The government, for example, has made sustained efforts to maintain or even extend the proportion of the budget devoted to education, which was estimated to be 3.5% of GDP in 1995. To this, however, must be added a further 2.5% of GDP that is contributed by households and by formal cost recovery measures, thus making an impressive total of some 6% of GDP (Kelly 2000). Nonetheless, for some decades Viet Nam has struggled to accommodate demand for higher education, as its secondary schools continue to pour out graduates eager for places in its colleges and universities.

Given ongoing resource constraints, and low levels of GDP, however, the attainment of Viet Nam's ambitious targets for education in the decade 2001-2010, as indicated in Table 22, must remain questionable.

Table 22: Viet Nam's Higher Education Targets 2001-2010

% of higher education enrolment in semi-public and private HEIs	10%?	30%
Net upper secondary enrolment	38%	50%
% of trained working labour force	19%	42%
Higher Ed. students per 10,000	118	200
Enrolment of Masters candidates	11,727	38,000
Enrolment of Doctoral candidates	3,870	15,000
Lecturers with Masters Degrees	27%	40%
Lecturers with Doctoral Degrees	18%	25%

It should also be noted that *if* these ambitious targets are met, especially at the upper secondary level, it will only further increase the current pressure on the higher education system. In this context, it is likely that, as with China, which faces something of the same difficulties in meeting demand within the state system, the extension of private HEIs will expand over the coming years. The revision of the Constitution in 1992 gave priority to investment in education and encouragement to other (non-state) investors, and since then the number of *dan lap* or 'People-established' universities, has expanded. (Just as in China - and for the same reasons - the term ‘people’s universities’ is preferred to that of ‘private universities’). Enrolments in higher education are still very largely at public sector HEIs, although enrolments at ‘People’s’ HEIs continues to grow rapidly. The following two tables give a clearer idea of numbers in both public and private sector HEIs, and how the proportions are changing.

There is also wider evidence of significant problems in the system as a whole, which this move to privatisation may even exacerbate. In particular, quality of teaching staff remains an issue, with less than 20% of academic staff holding a doctorate. (Of those who do, many gained their post-graduate degrees decades ago, in the former USSR, or in one of its former satellites, and are not research active). Significant numbers are due to retire soon, and at current remuneration levels, it will be hard to replace them. Low resource levels mean that many HEIs need to run small businesses, in order to gain additional income, and this further detracts from the energy available for teaching, learning and research. Moonlighting (the practice of full time public sector staff, having a second, or even a third job, in order to gain additional income), is a major problem, detracting from the already modest levels of resources available in public sector HEIs. Private sector staff are often less well qualified than their public sector peers, although better remunerated. Quality assurance is a major issue, not least in the private sector, which recently was caught up in a major scandal, involving lower standards, over-enrolments, and

Table 23: Higher Education Enrolments by institution and category, 2000/1 and 2001/2

Students	College 2000/1	University 2000/1	Total 2000/1	College 2001/2	University 2001/2	Total 2001/2
Female	91,457	309,506	400,963	103,323	328,000	431,323
Minority	1,817	1,425	3,242	2,229	1,787	4,016
Public	171,922	642,041	813,963	192,466	680,663	873,129
Non-Public	14,801	89,464	104,265	18,397	82,593	100,990
Full Time	148,893	403,568	552,461	167,476	411,721	579,197
In-Service	19,819	223,837	243,656	24,478	251,600	276,078
Other	18,011	104,100	122,111	18,909	99,935	118,844
Graduate Students	45,757	117,353	163,110	47,133	121,804	168,937
TOTAL	186,723	731,505	918,228	210,863	763,256	974,119

Table 24: Enrolments, Public Semi-Public and Private HEIs, 1996/7 – 1998/9.

Type of HEI	Number 1996/7	% 1996/7	Number 1997/8	% 1997/8	Number 1998/9	% 1998/9
Public	525,596	88.50	631,994	88.35	696,375	87.17
Semi Public	42,448	7.15	37,518	5.25	33,254	4.16
People’s	25,840	4.35	45,719	6.39	69,288	8.67
TOTAL	593,884	100.00	715 ,321	100.00	798,817	100.00

Taken together, what the data above reveal, is that effectively, private sector HEIs doubled their share of enrolments over the three years from 2000 to 2002. Unless there is a dramatic policy shift, it seems reasonable to predict that growth in the private sector is likely to outstrip that in public sector HEIs, at least in the medium term. All the more so, when Vietnamese public sector HEIs can only place about 10% of qualified secondary graduates. Indeed, MOET’s plans envisage private sector HEIs catering to 30% of total enrolments by 2010, a big rise from the current level of 11% or so. Certain elements within MOET, however, are less than content with this, and continue to resist the planned changes.

bribery. Ministry officials were also not found to be entirely exempt. Despite strong rhetorical support from government, in practice it has been difficult to maintain levels of public funds, in light of the need to expand the system, and parents have had to shoulder a larger financial burden, as a result. Hence there is a concern that equity, already a significant issue, may well worsen, in the face of higher fees.

A further parallel with the Chinese university system, consists of the aim to use international partnerships to raise quality and extend access via international partnerships. Each such partnership must be accredited at Ministry level. Of such existing connections, one of the more significant is that of Royal Melbourne Institute of Technology (RMIT) who recently opened a purpose built campus in Sai Gon. Plans exist for a parallel campus in Ha Noi. Twinning also exists in the form of a partnership between Ha Noi Economics and Ho Chi Minh Economics, and the Institute of Social Studies in the Hague, Netherlands. Founded as a donor programme in 1994, the two-year course graduates some 60 students a year, using Dutch, Vietnamese and other international teaching staff. As aid and teaching support from Holland was phased out, the course, taught in English, moved from full-time to part time, to cater both for local employed Vietnamese students, as also others who may be on mission for an agency, or employed in Viet Nam on a commercial contract. Other such twinning programmes have been less successful. Many Vietnamese students also study abroad, especially those who can take advantage of the perhaps 2,000 or so scholarships made available by foreign countries and HEIs, or those (largely from Viet Nam's south) who are able to afford the significant fees, sometimes with (overseas) family assistance. By no means all return at the end of their period abroad, however, and ministry officials and others are highly concerned about the ongoing loss of talent.

Viet Nam-China trade and collaboration in Higher Education

Can links with China in higher education also help to achieve the aims expressed above, of using international partnerships to both raise quality and extend access? Existing higher education links to China are difficult, if not impossible to trace fully. It is impossible to be sure how many of these MoUs represent genuinely functional partnerships, or merely formal agreements, without real life or substance. One of the more substantive forms of collaboration consists of the provision of foreign language training by the College of Foreign Languages, Vietnam National University (VNU), Hanoi, to Chinese students. The following figures supplied by MOET reveal very modest enrolments by Vietnamese students at Chinese universities, via institutional agreements. They are strongly outweighed by those in the reverse direction:

Table 25: Vietnamese Students at Chinese Universities, via institutional agreements, 1992-3 t*o 2003-4*

Enrolments	U/graduate	Graduate	Non-degree	Total
1992-1993	5	4	1	10
1993-1994	6	4	10	20
1994-1995	6	4	10	20
1995-1996	3	7	10	20
1996-1997	5	5	10	20
1997-1998	10	15	20	45
1998-1999	15	3	21	39
1999-2000	10	14	21	45
2000-2001	11	17	22	50
2001-2002				66
2002-2003				30
2003-2004				22
Total				387

Such formal agreements between public sector HEIs comprise only a small proportion of the much larger number of Vietnamese enrolments at Chinese universities cited earlier. Clearly, the number of private and scholarship students from Viet Nam enrolled in Chinese universities vastly outweighs those cited above. Indeed, notwithstanding some past historical tensions, the totals covered by cross-border institutional agreements are surprisingly small, especially for large neighbours, and countries with significant historical and cultural affiinities. Scholarships are a further element of bilateral collaboration, and as indicated above, China provided 130 scholarships to Vietnamese students to study at Chinese universities in 2003.

Table 26: Chinese Students at Vietnamese Universities, via institutional agreements, 1992-3 to 2003-4

Enrolments	Total
1992-1993	6
1993-1994	5
1994-1995	5
1995-1996	5
1996-1997	1
1997-1998	7
1998-1999	7
1999-2000	8
2000-2001	5
2001-2002	6
2002-2003	6
2003-2004	16
TOTAL	75

More than profound differences in size between the two systems is evident from the list of bi-lateral institutional partnerships, however. With the exception of a single link between the National Economics University of Ha Noi, and the University of Hong Kong, there is no further representation from Hong Kong universities. Perhaps this reflects, in part, Hong Kong's recent re-unification and understandable aspirations to further its integration with mainland universities. It may also reflect the relatively low priority attached to Viet Nam, among Chinese institutions, particularly those from wealthy Hong Kong. The list of Vietnamese HEIs again reinforces findings from elsewhere, that it is the larger and more solid HEIs that are better able to take advantage of international partnerships. With very few exceptions, the Vietnamese HEIs listed comprise major institutions in Ha Noi and Saigon. The range of Chinese HEIs by contrast is more mixed, including some of China's top universities, and a range of others. Specialist HEIs are well-represented on both sides, as might be expected, given the traditional mono-technic structures of higher education in each in each case, a legacy of the old Soviet model).

If relations between public sector HEIs are hard to trace, private partnerships are even more so. Fragmentary evidence suggests several links exist between private HEIs, mainly in Ho Chi Minh city, and various Chinese HEIs. One example consists of an agreement between the privately founded ***Dai hoc Dan lap Ky Thuat*** (People's University of Technology) in Ho Chi Minh city, and Tianjin University, which resulted in a Vietnamese student being invited to Tianjin, for 3 months. The relatively new and dynamic private College of Technology and Industrial Management (CTIM), headed by Chinese-speaker and Tsing Hua graduate Professor Thuc, formerly Vice Rector of the University of Technical Education (UTE) in HCM city, has links with Tianjin University, to exchange teachers and students each year. Several CTIM students have also studied for a time at South China Normal University, as also one of CTIM's Chinese-language staff. A further relationship exists between CTIM and Hunan Normal University where, again, one of CTIM's language teacher is studying. This exchange involves exchange of students at undergraduate level, and teachers, who study for a Masters degree. Staff visits have been arranged, together with short courses for students, at low cost.

It is likely that Prof. Thuc's dynamism, and Chinese experience, lie behind these partnerships.

Conclusion: Summary and Policy Implications

Clearly, rationales for both competitive and cooperative strategies in bi-lateral and multi-lateral educational services trade, are mixed. It is also important to point out that only China, of the four countries considered here has made a specific GATS commitment in the area of educational services, (although Malaysia for example, has made commitments in financial and other services). Drawing on the above case studies of cross-border connections in education, however, it is possible to distil elements that make successful cross border endeavours more likely. The following table summarizes the existing relationships between each of the tiger cubs, and China, within the higher education sector.

Table 27: China-ASEAN Cross Border Educational Services - a Summary

	Mode I	Mode II	Mode III	Mode IV
Singapore	NTU Management Training (by distance)	Chinese students at Singapore universities. *Singapore students at Chinese universities* *Tsing Hua Exec. Programme.*	NUS FUDA (Shanghai College) NUS BEIDA (IMBA) *SJTU NTU (MBA)*	NTU Management Programme (in Shanghai)
Malaysia		Chinese students at Malaysian universities. *Malaysian students at Chinese universities*	INTI college (Beijing Campus)	
Viet Nam		VNU language courses for Chinese students *Vietnamese students at Chinese universities*		*Chinese consultants training Vietnamese?*

Notes: Italics indicate Chinese exports; non italics indicate Chinese imports

Several conclusions may be drawn from the above analysis. Perhaps the first is that, given the lack of detailed data on the extent of cross border services in education, something that this paper, and other current research by the OECD is designed to address, more research is needed. The case for detailed research into China-ASEAN trade in services is particularly strong, as ASEAN itself points out: "While there is information on aggregate level of commercial services trade by China and ASEAN, there is little statistics on bi-lateral or ASEAN-China trade in services."

Secondly, the differential pattern of engagement with China in the realm of educational services is worthy of some reflection. Clearly, Singapore's wealth, well-developed infrastructure, including that of ICT, and strongly-supported universities, leave it best-positioned of the three Tiger Cubs, to take advantage of opportunities in China, notwithstanding its relatively small size. Its strong service-sector presence in the region, and substantial history of engagement with China, especially in the services sector, confers a further advantage. (In this sense, perhaps, the parallel with Hong Kong is striking, notwithstanding Hong Kong's much greater proportion of Cantonese speakers). Malaysia's ambitions to develop into a regional educational hub are as yet less well translated into a significant engagement with the sizeable China market for educational services. While at one level this is surprising, given the competitive advantage that Malaysia's significant ethnic Chinese population apparently confers, it may also reflect Malaysia's complex ethnic history, and its less well-developed infrastructure, both in higher education and other service industries, and ICTs, relative to Singapore. Viet Nam's much less well-developed university system, more modest state capacity, and far smaller Chinese minority, leaves it least able to take up opportunities in China. Indeed, as was seen above, the principal example of its exports consisted of Vietnamese-language training for Chinese students, while significant numbers of Vietnamese students travel to China's universities. In this sense, it may well be that the principal opportunity is for China to export educational services, including consultancy services, to Viet Nam.

China's own projection of its educational services internationally, is clearly growing. The 85,000 international students currently enrolled, including from each of the Tiger Cubs, and programmes offered in Singapore, may only be the beginning of a rising tide in China's trade in educational services; all the more so, if the worldwide importance of Putonghua continues to increase. There is already evidence of Chinese universities delivering training programmes to clients in Singapore. Could this portend further examples of higher education programmes delivered internationally in Putonghua, including via the web?

Whatever the case, the above analysis clearly shows that there is considerable scope for further growth in regional trade in educational services. All four higher education systems are net importers of higher education, and all are likely to remain so, for the foreseeable future. This should not be taken to mean that there is not considerable scope for export growth, however, and Singapore, and to some extent China, already reveal nodules that could be further developed. Regulatory issues should not be underestimated however. There is evidence of some complaints that regulatory barriers are preventing the extension of service sector trade into China. There is also evidence of some uncertainty in Singapore. Given that, as was indicated above, several regional governments already exhibit difficulties in regulating domestic HEIs, the addition of complex cross border issues into the regulatory environment, will add significantly to this difficulty.

Cross-border delivery of higher educational services among neighbours with cultural and linguistic affinities has the potential to provide local solutions to local problems; in particular, commonly experienced regional tensions between internationalisation and indigenisation. Indeed, the Asia Pacific region seems notably less well integrated than, say, the EU, or the Americas, in this regard. Given the cachet that gaining a foreign degree from an English-language university still confers, especially a relatively elite one, growth in regional trade and collaboration may take time to change, but some of the partnerships between major regional institutions pointed to above already reveal signs of a shift. At the same time, the analysis has once more underlined that, just as with nations, it is the wealthier and better-established institutions, in the major urban areas, that are best placed to deliver such services. This finding reinforces that of other research, which shows that the benefits of internationalisation are not equally dispersed – indeed almost always accrue to the more favoured institutions. In an era characterised by growing gaps between rich and poor, and increasing concentrations of wealth in relatively few hands, it is important to reiterate the public good dimensions of higher education policies, and their implications for equity, both within and between countries.

Biographical Note

Anthony Welch's international reputation in education focuses largely on comparing policies and practices internationally, and (the internationalisation of) higher education. Of particular interest for the BICA project is his ongoing major project on internationalisation of Chinese universities, (with Dr. YANG, Rui). This groundbreaking work, is charting the extent of internationalisation in the Ch. H/Ed system, and staff and student perceptions. The current BICA project is thus complementary and Welch will be able to draw to an extent on congnate research, and add to it, via examinination of the ASEAN connections, GATS, and the influence of the Chinese diaspora in H/Ed. In addition, to some China experience, Welch has just published a major book comparing educational reforms in the Asia Pacific region, and his extensive and innovative research contributions have addressed international higher education and the academic profession. Lastly, he has significant knowledge and experience of the Vietnamese education system, an previously coordinated a special programme he devised for education managers in Vietnam's universities and vocational institutions. He has significant knowledge of H/Ed. systems in China and key ASEAN states, including the analysis undertaken for BICA 2002/3.

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