Internationalism in Higher Education: A Review

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Contents

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Executive Summary

1. Internationalism in higher education is an issue that is the focus of increasing attention. But it is ill defined, and ill understood. The main objective of this paper is to provide an evidence-based review of developments in the internationalization of higher education in order to explore their consequences and implications for the UK in particular.

International trends and developments

2. Five major trends have shaped international developments. First, the number of students studying outside their home country has risen and will continue to rise, though the students are not evenly distributed across countries in terms of either their sources or their destinations. In particular, there has been a large increase in the number of students coming from a small number of Asian countries, and a large increase in the numbers of foreign students in the US, UK, Australia, Germany and Japan.

3. Second, staff mobility has also risen rapidly, in part because of the increase in the mobility of research students. Whereas once this was seen exclusively in terms of "brain drain" and "brain gain", the notion of "brain circulation" is gaining currency, with a recognition that scientists working overseas very often return to their home countries in due course, or transfer knowledge, expertise and sometimes industrial cooperation to their home countries.

4. Third, there has been a rapid increase in trans-national education, defined as universities in one way or another setting up shop in overseas locations. The countries most actively into aged in the trans-national provision are the USA, the UK and Australia. In some importing countries trans-national provision provides a significant proportion of the higher education offering. This often combines the offshore presence of foreign institutions with e-learning.

5. Fourth, recent increases in international teaching activities have been concentrated in professional subjects such as business and IT. Particularly in countries where students pay (though less so where they do not) sciences and humanities subjects have not attracted as many overseas students as professional ones.

6. Finally, while research has always been an area for international collaboration, there is evidence that international collaboration in research has increased substantially in recent years. One worrying trend is that there is evidence that increases in research students have been modest in comparison with those of non-research degree students in Australia and the UK. This seems surprising, given the emerging understanding about the economic role of science, in which highly trained scientific labour plays an important role in straddling countries to help them develop in synergetic ways.

Underlying interests and factors

7. Underlying these developments are the changing interests of governments, institutions and individual students, which are increasingly being influenced by global competition and markets.

8. Governments have various economic and political interests in their higher education systems, which in turn have an impact on what happens internationally. For example, government policies tend to influence significantly the size and responsiveness of the domestic higher education system in meeting and domestic demand. If the size of the sector is too small for domestic demand, and if the government does not have a framework for private providers to enter higher education, a proportion of their students may end up studying abroad.

9. The regulatory and quality assurance requirements of such countries can also have a powerful influence on the manner in which foreign institutions develop their activities in these countries. Some countries have positively discouraged overseas universities from establishing a presence by highly restrictive quality assurance regimes. Others have welcomed overseas universities, seeing them as a means both of developing their own capabilities and of attracting students from neighbouring countries.

10. For exporting countries, government policies can shape the level of domestic competition among higher education institutions both for students and for public funds. Or, as in the case of the United Kingdom and Australia, government policy can substantially curtail the income universities can receive from domestic students, while leaving unregulated the fees charged to overseas students. In turn, directly or indirectly, this can encourage institutions to undertake international activities. Thus, government policies can be a major driver for countries to turn into importers or exporters of higher education.

11. For developed countries, their geopolitical and economic interests also lead to specific rationales that exporting countries adopt for their blend of internationalism. According to the OECD, developed countries can have three types of rationale for why they support internationalism, which are not mutually exclusive. These are: the development of mutual understanding, acquiring human resources, and revenue generation.

12. Developed countries have traditionally supported internationalism principally to enhance mutual understanding among different cultures; but the economic and competitive concerns of acquiring human resources and revenue generation that have driven many of the new developments are new.

13. Among some countries there is emerging a more integrated economic approach to internationalizing higher education, which emphasizes the development both of scientific research capacity and of education, with a view to developing a knowledge-based economy. Singapore is a good example of this.

14. At institutional level, institutions too are increasingly motivated by their desire to enhance their own international reputation and also by their need to increase their revenues. Such motives are often driven by the tight national competition for students

and/or adverse public funding conditions in their home countries – which leads them to seek students and income from overseas.

15. There appear to be commensurate changes in the motives of individual students too. Students increasingly see higher education as a route to employment. Their decisions are influenced by the perceived costs and benefits as well as their ability to pay. It is interesting that the market for overseas students became dominated by Anglophone countries in the 1990s, in spite of the fact that these countries charge full cost fees whereas other countries, such as Germany or France, charge low or no fees to overseas students. This implies that the perceived benefits from qualifications in Anglophone countries began to outweigh the considerably cheaper costs of studying in others, helped by access to the English language and active marketing.

16. In summary, the interests of government, institutions and individuals appear to be changing in mutually reinforcing ways, all leading to a greater market-orientation of higher education from an international perspective. It is this market orientation that appears to be the new driver of international trends today – both in importing and exporting countries. However, the different capacities of exporting countries, most notably concerning language, appear to have compelled them to take different approaches. Large global markets have emerged around fee paying students. Smaller global markets appear to be emerging around high calibre students, with institutions and countries trying to attract them to enhance their reputation.

Consequences

17. The most significant consequence of such market driven developments is that the impact of internationalism is unevenly (and some would say inequitably) distributed between countries and between individuals. As far as the importers are concerned, poorer countries, or individuals, have more limited options, while larger countries have better prospects to attract competing institutions from abroad.

18. This is not to say that more opportunities to import higher education are necessarily a good thing. Quite apart from the issue of the quality of the provision made by exporting countries, which is not of a uniformly high standard, scrambling foreign institutions can make policy making in higher education problematic for middle income developing countries.

19. And while market-led developments are helpful for the expansion of activities for which students are willing to pay, such as professional education, they may result in an imbalance in provision with a decline in those other activities that cannot attract as many fee paying students, such as research or non-professional subjects. This is so both as regards the subjects studied by students going abroad, and also overseas universities engaging in trans-national provision. As a consequence, the sought-after improvement in capacity may not be available.

20. Against the generality of the trends described here, there are also some counter-market developments. The tradition of openness and collaboration in higher education along with a growing open source software culture is leading to several "open" initiatives such as MIT's OpenCourseWare and the Open Knowledge Initiative. Nevertheless, though it is too early to tell the overall impact of these

initiatives, it is unlikely that they will reverse the general trend towards the market orientation of international higher education.

Implications

21. Internationalism can have significant benefits; it can also have risks.

22. At the **input** level, increased student access and an increasingly international pool of candidates for higher education are the main benefits. Countries without well-developed higher education systems, and the citizens of those countries, can have access to higher education of the highest quality, and this can help build domestic capacity. However, the risk is that international opportunities are likely to be unevenly distributed at national and individual levels, militating against poorer, smaller countries and poorer students.

23. In **process** terms, the main benefits may be international collaboration in offshore courses, multi-cultural campuses and internationalised curricula. On the other hand, market-driven competition may jeopardize the traditional ethos of cooperation.

24. In **output** terms, an important global benefit is an increase in trained human resources in professional fields where demand is significant. On the other hand, a high concentration of students in such subjects could lead to a certain lack of diversity at institutional, national and global levels. Another risk is that research training may be given a disproportionately low emphasis in comparison with taught programs. Finally, there is a risk that international markets may lead to an erosion of quality, unless quality assurance mechanisms are put in place in a collaborative manner.

25. There are several **policy implications for the UK.** First, internationalism that is purely market-oriented may be inadequate to support the scientific research training of high calibre international students which could bring benefits – both to the UK and to the sending countries.

26. A second lesson for the UK as a country committed to international development is that the current thrust of internationalism is unlikely to solve the problems of the least developed countries, and may indeed exacerbate it.

27. Third, domestic funding policies create powerful incentives for institutions in their international activities. The question is whether the current policy framework skews institutional attention away from domestic and European students, and towards international students.

28. Internationalism is clearly a subject that requires significant and continuing policy attention. It is important to engage in systematic data collection both quantitative and qualitative, and to undertake a policy review periodically. The future of internationalism is too important to be shaped as a series of unintended consequences of miscellaneous policies or market forces.

Internationalism in Higher Education: A Review

Introduction

29. Internationalism in higher education has become an increasingly important issue. More signs of internationalization are visible today as more students study abroad, as universities from developed countries establish offshore centres in developing countries, and as for-profit providers begin to provide higher education programs at a global scale.

30. Proponents of these developments argue that internationalism represents an important opportunity to expand access to deserving students, particularly in countries with weaker higher education systems. Opponents see internationalism as an undesirable signal that higher education is becoming a tradable and a private good, when it ought to remain a public good. Yet others are worried about the implications of cultural imperialism.

31. The main objective of this paper is to provide an evidence-based review of developments in the internationalization of higher education in order to explore their full implications for countries such as the UK. More specifically, this review aims to:

a. provide a summary of the key trends to date to understand the nature of change that is taking place,

b. develop a framework of understanding about underlying interests and factors behind these changes; and

c. identify benefits and risks for both developed and developing countries and implications for the UK.

The primary target audiences are British policy makers and the university community.

International trends and developments

32. The main purpose of this section is to provide an overview of international trends and developments in higher education that collectively define "internationalism." Five components have been identified as critical and will be examined in the following sections: (a) increased student mobility; (b) increased staff mobility; (c) transnational provision including e-learning and offshore campuses; (d) the rise of professional subjects; and (e) internationalization of science.

Increasing student mobility

33. According to OECD statistics, in 2001, there were 1.5 million foreign students studying for higher education in OECD countries, or 5% of the total enrolments, which is double that of 20 years ago[1]. While these numbers are still small relative to the total number of HE students globally, the increase has been rapid –16% in the last three years - and is expected to continue. According to one forecast, the global demand for international higher education is set to exceed 7 million students by 2025, four times as many as the global demand in 2000[2].

34. These students are not evenly distributed either in terms of source countries or destinations. On the sending side, Asia as a region has been dominant, with China, Korea, India and Japan sending 8%, 5%, 4% and 4% of all foreign students in OECD countries (Table 1). Other Asian countries such as Malaysia, Indonesia, Singapore and Hong Kong are also high ranking in the list of sending countries. These Asian countries are likely to be where the largest increases in foreign students in the last two decades have come from. For instance, in the US, India has been the largest single source of international students in the past two years, with the total number of students doubling in the last decade[3]. Some of the smaller countries such as Luxemburg, Iceland, Zimbabwe and Jamaica have also been sending students overseas as a large proportion of their domestic tertiary enrolments.

[1] OECD Education at a glance 2003. Also a forthcoming publication from OECD titled "Internationalization and trade: new challenges for higher education," edited by Kurt Larsen and Stephan Vincent-Lacrin provides the most comprehensive overview and summary of global trends, analysis and implications. This paper draws heavily on their chapter 1: Cross-border education: an overview; and chapter 5: Key developments and policy rationales in cross-border post-secondary education. UNESCO statistics show that the total number of tertiary students studying abroad may be of the order of 2 million or 2% of the global total enrolments.

[2] IDP. Global student mobility 2025.
http://www.idp.com/marketingandresearch/research/article414.asp

[3] Open Doors, 2003. http://opendoors.iienetwork.org/

Table 1: Top 20 countries of origin for foreign students in 2001

Rank	Countries of origin	Total enrolled in OECD destinations	% of total
1	China	124,000	8%
2	Korea	70,523	5%
3	India	61,179	4%
4	Greece	55,074	4%
5	Japan	55,041	4%
6	Germany	54,489	4%
7	France	47,587	3%
8	Turkey	44,204	3%
9	Morocco	43,063	3%
10	Italy	41,485	3%
11	Malaysia	32,709	2%
12	United States	30,103	2%
13	Canada	29,326	2%
14	Indonesia	26,615	2%
15	Spain	26,196	2%
16	United Kingdom	25,198	2%
17	Hong Kong	23,261	2%
18	Russian Federation	22,004	1%
19	Singapore	19,514	1%
20	Poland	19,205	1%

Source: OECD: Education at a glance 2003

35. On the receiving end, there is a greater concentration of foreign students than on the sending side, with the US (31%), the UK (15%), Germany (13%), France (10%), Australia (8%) and Japan (4%) leading the others as shown in Table 2.

Table 2: Top six countries of destination for foreign students and their regional origin in 2001

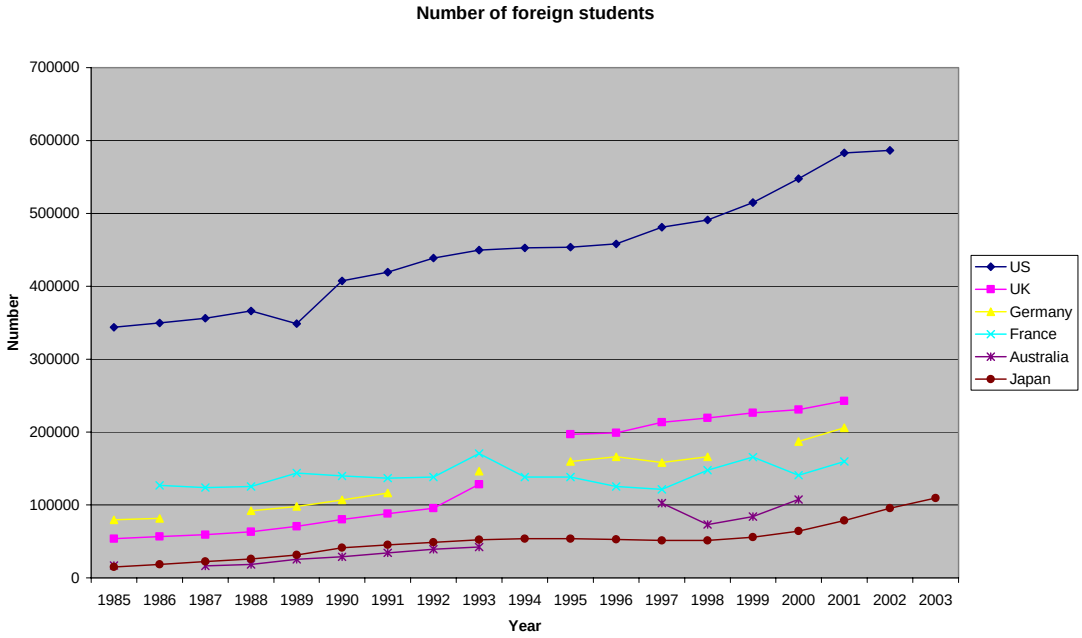
	Destination country							
	United States	United Kingdom	Germany	France	Australia	Japan	**Total OECD destinations**	% of total
Main geographic source regions								
Total from Africa	29,677	18,134	19,394	75,465	3,837	676	**174,040**	11%
Total from Asia	294,230	74,400	67,658	19,828	77,849	58,170	**642,202**	42%
Total from Europe	69,607	109,454	100,359	41,404	12,763	2,106	**522,521**	34%
(of which, from EU countries)	(41,277)	(98,177)	(46,368)	(27,531)	(8,794)	(1,239)	**(347,050)**	(23%)
Total from North America	49,502	18,564	5,387	5,242	5,477	1,474	**98,533**	6%
Total from Oceania	4,011	1,790	323	200	6,534	443	**15,178**	1%
Total from South America	28,142	2,926	4,265	4,253	920	761	**53,839**	3%
Total from all countries	**475,169**	**225,722**	**199,132**	**147,402**	**120,987**	**63,637**	**1,538,867**	100%
% of total	31%	15%	13%	10%	8%	4%		

Source: OECD Education at a glance 2003. NB Totals may not equal 100% owing to rounding

36. As can be seen from Fig 1, there have been significant changes in the numbers of foreign students in these six countries in the last fifteen years. In absolute numbers, the US has seen the largest increase, closely followed by the UK. In terms of the percentage increase, Australia saw the most aggressive rise recording a six fold increase, followed by the UK and Japan, both of which saw a four fold increase[4]. Even through Australia only ranks the 5th largest destination, it has a much larger proportion of international students within its total higher education enrolments than the other five.

[4] OECD op cit.

Figure 1: Changes in the number of international students in six countries 1995-2003



Source: Japan Central Council of Higher Education Final Report on International Student Exchange in Higher Education, December 2003[5].

Increasing staff mobility

37. There are few direct data on staff mobility. However, Open Doors, the publication which records the number of international scholars visiting the US, showed that the number increased by 40% between 1993/4 and 2002/3, which was greater than the increase in the number of foreign students during the same period (30%)[6]. Since many new faculty recruits would be taken from PhD students finishing their degrees, the growing number of international students at that level could also lead to increasingly international academic recruitment. This may be particularly true in European countries, given high intra-region student mobility, comprising 23% of all international students (see Table 2), and given also no restrictions over labour mobility across borders.

38. A majority of foreign students in higher education are enrolled in undergraduate programs[7]. However, when compared against enrolment patterns of domestic students, foreign students are more likely to enrol in graduate programs, including advanced research programmes.

[5] The original sources of data are as follows; US: Unesco (1985-1993) and Open Doors (1994-2002); UK: UNESCO (1983-1996) and HESA students in higher education institutions (1997-2002); Germany: UNESCO (1983-1996) and Bildung im Zahlenspiegel (1997-2001); France: UNESCO (1983-1995) and French Ministry of Education (1996-2001); Australia: UNESCO (1984-1997) and AEI Overseas Student Statistics (1998-2000); and Japan: Foreign Student Section of the Ministry of Education, Culture, Science and Technology.
[6] Open Doors op. cit.
[7] OECD op cit.

Increasing transnational provision

39. Transnational provision, defined as higher education institutions offering degree programs abroad, either directly through e-learning, in collaboration with local institutions (for instance through franchise arrangements or partnerships) or through establishment of offshore campuses, appears to have been increasing rapidly, although there are no overview data to cover the global trends at large.

40. A number of countries experienced an influx of transnational education from foreign universities in the 1990s. However, their responses have been dramatically different. Some countries such as Malaysia, Singapore and Hong Kong, which are the largest recipients of transnational education globally, have embraced these trends. All three countries experienced small numbers of local institutions collaborating with foreign institutions, starting in the mid 1980s,[8] but it was only in the mid to late 1990s that their governments developed a clearer regulatory framework for entry by foreign universities, with a view to expanding substantially their higher education capacities[9]. All three countries are explicit in their goal to become higher education hubs in Asia. Other countries such as South Africa, Israel, and more recently China and India have also experienced a large influx of interest from foreign institutions in the 1990s but have responded with a tightened regulatory framework, expressing concern about the quality of provision[10].

41. Within transnational education, there are three inter-related developments: e-learning; the rise of for-profit providers; and off-shore activities by conventional higher education institutions. The main source countries have been the US, Australia and the UK, but other English speaking countries such as Canada and New Zealand are following rapidly. More recently, institutions from non-English speaking OECD countries such as Germany and Japan, as well as developing countries such as India, are also gearing up for expansion[11]. Australia is the only country for which detailed data are available for transnational education. Australian institutions offered nearly 1600 programmes abroad, 57% solely through offshore programmes, 17% through online learning, 16% through a mixed mode between the use of its offshore centres and online learning[12].

42. An interesting observation made by the OECD study is that "these usual boundaries between public and private, for profit and non-profit – a distinction that may remain clearer in domestic education - have tended to blur" in transnational education. Indeed, public institutions become private institutions and even create for-profit institutions in foreign countries.

43. **E-learning and distance education**. As far as e-learning goes, most of the early initiatives are not meeting their original promise, at least in the timeframe

[8]Observatory on Borderless Higher Education (OBHE) Briefing Note No. 14. Transnational education Part 1: The major markets – Hong Kong and Singapore. November 2003

[9] OBHE International Branch Campus; Lee, M. N. N., Private Higher Education in Malaysia: Expansion, Diversification and Consolidation. A paper presented at a UNESCO conference in 2001.

[10] OBHE, Breaking News on China November 4, 2003; India May 16, 2003 [South Africa and Israel]

[11] OBHE Breaking News on Germany Jan, 14, 2004, Japan March 18, 2003; and India October 12, 2003

[12] OBHE Briefing Note. No. 15. Transnational higher education part 2: shifting markets and emerging trends. December 2003

expected. There have been several visible failed efforts: Columbia's Fathom[13], and NYU's online courses, for example. There have been considerable delays in others: Western Governors' University managed to win accreditation only in 2003, 5 years after the initiative was announced, and Thomson's Universitas 21 Global has only launched their first program in 2003 after years of preparation by the consortium of 21 universities worldwide[14]. Others are apparently reviewing their strategies: Cornell's for profit e-learning program has just announced that it will be re-structured, as has the UK's flagship e-learning institution, eUniversities Worldwide, which is effectively being discontinued.

44. This does not mean that e-learning has not grown explosively as a medium of instruction in tertiary education. On the contrary, in the US, the number enrolled in distance education has increased rapidly from 1.3 million in 1998 to 2.9 million in 2001, in 56% of all accredited institutions[15]. In the UK, over 100 institutions are providing distance learning courses in addition to face-to-face instruction[16]. According to one survey, 33 responding institutions in the UK reported 8100 distance-based international students, which comprised roughly 11% of all international students in these institutions in 2000/01[17]. UK's Open University Worldwide is poised to become a global provider, with the current enrolment of 30,000 outside the UK and a further 10,000 through a partnership with other institutions[18]. In Australian institutions, the number enrolled through distance learning rose from 6% of total foreign students in 1996 to 9% in 2001, reaching over 12,000 students in 2003[19]. For New Zealand, one third of transnational education is reported as being delivered solely through distance education, and another quarter through mixed mode[20].

45. While the number of online students has certainly soared, it has become clear that e-learning comes with its own constraints. First, it is not clear that e-learning leads to significant cost savings[21]. Even publicly listed education companies have experienced significant losses in e-learning, though they are edging towards profitability[22]. The simplistic idea that once course material is developed, it can be duplicated and made available to thousands globally at low cost has proved to be inaccurate, partly because of the need for more intensive work up front to get the course materials on line, and of the need for follow up learning support.

46. Second, keeping students motivated across distance is not easy, an observation that would be no surprise to distance educators. Many institutions are finding that the mixed mode, where face-to-face is combined with e-learning is the right answer.

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[13] Chronicle January 17, 2003
[14] Chronicle March 14, 2003.
[15] US Department of Education NCES, 2003
[16] OECD op cit.
[17] OBHE Briefing Note. No. 8. Online learning in Commonwealth universities: selected data from the 2002 Observatory survey, part 2. October 2002.
[18] OECD op cit.
[19] IDP as cited in OECD op cit.
[20] OECD op. cit.
[21] OBHE Briefing Note. No. 18. Pricing online learning: practice, rationale and transparency. March 2004.
[22] OBHE Briefing Note. No.9. Mapping the education industry, Part 1: public companies – share trends and financial results. January 2003.

Indeed, most cross-border e-learning or distance education is complemented by campus-based learning operated by local partners[23].

47. **For-profit companies**. There has been a visible rise in the for-profit entry to higher education, initially in the US. The University of Phoenix's (UoP) approach provides the clearest case of success with over 200,000 students in 2003, but there, the lesson has been that e-learning costs more, and indeed they have charged students more for it, and have had to focus on the most motivated and time-constrained target population: working adults[24]. The UoP model, however, has been largely domestic, and while they have been signalling their intention to expand overseas, through Apollo International, it is not yet clear whether their model will work outside the US. While the number of for-profit entries continues to rise, the initial fear that they may directly challenge existing higher education institutions has largely subsided in the US, at least for now. This is because most of the new entrants have developed niche markets that are not directly competing against conventional institutions.

48. Sylvan Learning represents another type of for-profit entry into the sector, which has been more focussed on international expansion than the Apollo group, the owner of UoP[25]. They have acquired a number of colleges abroad, most notably in Spain and Latin America, and are poised to become a large global provider of higher education programs. Their business model appears to be to acquire existing colleges and expand their enrolments so as to raise their revenue through tuition. While their influence has been felt in the size of organizations, and in the greater emphasis in English and IT teaching, it is not clear that ownership by Sylvan has greatly changed the nature of education in the colleges it has acquired.

49. **Off shore activities of conventional higher education institutions**. There has also been a rapid increase in off shore activities of conventional higher education institutions. The US probably leads the way in terms of the longevity and the number of US accredited courses and institutions abroad. However, many of these operate principally for US students' study abroad programs[26]. Only a small number of universities have branch campuses abroad for foreign students, including a small group American Universities, principally in the Middle East, which are typically chartered and accredited in the US, but operate as independent institutions offering American style education.

50. Since the mid-1980s a number of institutions first from the US, and then from the UK and Australia, first slowly and then rapidly in the late 1990s, have begun to take an additional step in their international student recruitment by becoming active locally either by establishing programmes in collaboration with local institutions or on their own through developing branch campuses. One report found that of the 18 cases of branch campuses operating in 2001, 8 were Australian, 4 British and 6 American[27]. A recent report by the Australian government shows that the number of their offshore programmes grew exponentially and there were nearly 1600 programmes offered

[23] OECD. op. cit.
[24] Yoni Ryan and Lawrence Stedman, The business of borderless education, 2001 update, 2002. Chronicle, December 19,2003. For profit colleges: growth at home and abroad.
[25] Chronicle. June 27, 2003. In Chile, a Fast-Growing University, Owned by Sylvan, Produces Profits and Scorn.
[26] OBHE Briefing Note. No. 5. International branch campuses: scale and significance. 2002.
[27] OBHE Briefing Note. No. 5. International branch campuses: scale and significance. 2002

abroad by Australian institutions in 2003[28]. The number of foreign students studying in Australian institutions abroad grew from 18% of total international enrolments in 1996 to 29% in 2002. There are no equivalent reliable data for the UK as a whole, but the estimated number of foreign students enrolled in UK affiliate institutions abroad range from 150,000 to 200,000 in the late 1990s to the early 2000s[29], close to the total number of international students in the UK.

51. The scale of transnational education can be significant in some countries[30]. In Hong Kong, about one quarter of higher education students are enrolled in programmes with foreign linkages, including 385 registered programmes by foreign institutions and another 473 programmes that are operated by foreign institutions in collaboration with Hong Kong's publicly funded universities. In Singapore, foreign programmes accounted for 44% of graduates from undergraduate programmes in 2002, offered by 127 foreign universities with Australian and UK institutions comprising 71% of these.

52. What kind of institutions tend to become involved in transnational education? While there is no comprehensive analysis, a scan of the names of institutions from the US, UK and Australia suggests that the world's best known research universities generally do not get engaged in the creation of offshore programmes for enrolling foreign students. There are odd cases of prestigious entrepreneurial research universities, but by and large, most of them are not.

The rise of professional subjects

53. There is increasing evidence that transnational provision is concentrated in professional subjects, most notably business, and to a lesser extent IT. For instance, in Hong Kong, of the 385 foreign programmes, 65% are concentrated in business with another 11% in IT. For another 473 programmes which are undertaken by foreign institutions in collaboration with local publicly funded universities, the proportion is dramatically different: 37% in business is followed closely by 24% in sciences and 18% in humanities. This difference may reflect the greater propensity of foreign institutions to concentrate on professional subjects as 'safe bets' when they are not guided by local institutions. 49% of Australia's foreign programmes are offered in business, followed by 15% in humanities, 14% in sciences and 12% in IT.

54. This provides an interesting contrast to international students' choice of field of study when they go overseas, which is more evenly balanced across fields[31]. In fact, there is a significant contrast in the pattern of field choice among international students between Germany, where the choice is evenly balanced with humanities and arts scoring the highest, and the UK and Australia, in which business and engineering are most popular.

55. The rise of business as a field is not surprising, given its global popularity and relative newness in many countries. Business schools represent a field in which

[28] OBHE Briefing Note. No. 15. Transnational higher education part 2: shifting markets and emerging trends. December 2003. AVCC, Offshore programmes of Australian universities, May 2003.
[29] OECD. British Council 200:1www.britishcouncil.org/promotion/pmi.htm.
[30] OBHE Briefing Note No. 14. Transnational education Part 1: The major markets – Hong Kong and Singapore. November 2003
[31] OECD.

arguably the first global ranking was developed. It is also a field in which private institutions have emerged, even in the heart of continental Europe where private institutions have been rare in higher education. It is interesting to observe the extent to which business studies have become important in global terms even for universities for which they have not been a traditional area of strength. This is also the field in which the world's top players have been engaged in transnational provision: Chicago has offshore campuses in Spain and Singapore, INSEAD in Singapore, while Wharton has helped develop a private university in Singapore.

Internationalization of research

56. Scientific developments have been an international phenomenon for some time. There is a long tradition of using foreign centres of excellence for research training as well as international exchange, dating back to the 19th century when German research universities led the way for the others. This does not mean that the level of internationalism has remained unchanged over time. Although there is surprisingly little research on the subject, one study from Canada shows that there has been a steady upward trend of cross-border collaboration as measured by co-authorship between scholars from different countries, in humanities and social sciences as well as in pure science and engineering (see table below).

Table 3: Canadian and world publications and international collaboration

	Canadian publications						World publications		
	humanities and social sciences			Pure science and engineering			pure science and engineering		
	total	internatl collabtn.	% of intl. collabtn.	Total	Internatl collabtn	% of intl. collabtn	total	internatl collabtn	% of intl. collabtn
1981	4478	493	11%	16273	2761	17%	389301	22440	6%
1986	5144	629	12%	20274	3973	20%	428027	33441	8%
1991	5446	791	15%	23662	5956	25%	489709	54010	11%
1995	5467	967	18%	25882	7955	31%	539157	78255	15%

Source: Gingras, Y., B. Godin, and M. Foisy, Chapter 4. The internationalization of university research in Canada, in Bond, S.L.,and J. Lemasson ed. A new world of knowledge: Canadian universities and globalization. 1999. IDRC

57. Increasing instances of collaboration are not surprising given the rising number of international students, particularly those involved in graduate research. Many of them are likely to continue collaborating with their fellow students or advisors upon their return to their home countries.

58. There is one intriguing pattern of foreign student enrolments in postgraduate programmes emerging in Australia, a country which has seen the most aggressive growth in the number of foreign students in the last two decades. There has been a large decline in the proportion of foreign students participating in post graduate research programmes, owing to much larger increases in international students participating in taught masters programmes, which is leading to considerable concern in that country about whether internationalism is "dumbing down" graduate education[32] (see Table 4).

[32] Margison. S, The phenomenal rise of international degrees down under, in Change May/June 2002.

Table 4. International students in postgraduate programs in Australia

	Research degrees		Taught master degrees	
	Number	% of total who are international students	Number	% of total who are international students
1988	2,703	14.8	1,015	5.6
2000	4,450	4.6	20,254	21.2

Source: Australian Government, Department of Education, Science and Training. http://www.dest.gov.au/highered/statpubs.htm#time

59. In the UK, there is a much less pronounced but a similar trend, in which the increase in foreign research students is small in comparison with the number of taught master students (Table 5). Although the number is much larger, the slow growth may potentially be a serious issue for the country in the light of a declining trend of domestic research students.

Table 5: International students in postgraduate programs in the UK

	Research degrees		Taught master degrees	
	Number	% of total who are international students	Number	% of total who are international students
1996	30185	15	38423	19
2001	38570	16	70485	29

Source: HESA Students in higher education institutions 1996/7 and 2001/2

60. These developments are against a background in which there has been a changing understanding about the role of science in economic activities. The second world war led to greater understanding about the critical role that science can play in technological developments, leading to government funding of science worldwide. In the 1970s, however, growing tensions around trade and economic competitiveness made leading countries wary of the prospect of free-riders in science, from which non-investing countries could reap the benefit of other countries' science[33].

61. In the 1980s and 1990s, however, the emergence of new science-based industries such as ICT and biotechnology, most notably represented by Silicon Valley, led to a new level of awareness that scientific spillover tends to be geographically focussed[34]. Benefits from scientific discoveries tend to fall upon local firms rather than distant ones. There is also evidence that scientific knowledge is not something that can easily be brought in – it takes in-house scientific capacity within an

[33] For instance, there were allegations that Japanese companies were free-riding on world science. See Keith Pavitt. National policies for technical change: where are the increasing returns to economic research, in Proceedings from National Academy of Science, USA. November 1996.
[34] Narin et al 1997, Hicks et al 2001.

organization to understand and explore the true potential of science[35]. Being connected to scientific developments through people is critically important.

62. Recent research also highlights the important role of highly skilled labour for the development of highly growth oriented clusters such as Silicon Valley and its imitators[36]. There have been a large number of highly skilled immigrant workers from Taiwan, China and India working in Silicon Valley, many of whom had come to the US for their graduate studies[37]. One established scholar who has been studying the Silicon Valley phenomenon for over a decade suggests that the phenomenon that these countries had described as "brain drain" in fact led to "brain circulation", and has helped invigorate not only Silicon Valley itself, but also clusters in Taiwan, India and China, which developed complementary products in close relationship with Silicon Valley[38]. Scientific research training of international students may actually represent economic benefits of the kinds that many countries are interested in.

Summary

63. The main question addressed in this section is what have been the most salient trends and developments that defined the nature of internationalism? Five trends and developments have been shown to be significant. First, the number of students studying outside their home countries has risen and will continue to rise. The students are not evenly distributed across countries in terms of either their sources or their destinations. For instance, there has been a large increase in the number of students coming from a small number of Asian countries, and a large increase in the numbers of foreign students in the US, UK, Australia, Germany and Japan.

64. Second, staff mobility has also risen rapidly. Third, there has been a rapid increase in trans-national education, particularly by institutions in the UK and Australia, which often combines off shore presence of foreign institutions with e-learning. Fourth, recent increases in international teaching activities have been concentrated in professional subjects such as business and IT.

65. Finally, international collaborations in research have increased rapidly, although there is contrasting evidence that increases in research students have been modest in comparison with those of non-research degree students in Australia and the UK. This seems unfortunate, given the emerging understanding about the economic role of science, in which highly trained scientific labour plays an important role in straddling countries to help them develop in synergetic ways. The next section will address interests and factors that may have shaped these trends.

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[35] Cohen and Levinthal 1997.

[36] Bresnahan, T. et al. 'Old Economy' Inputs for 'New Economy' Outcomes: Cluster Formation in the New Silicon Valleys. in Industrial and Corporate Change. Vol 10 No. 4. 2001

[37] Saxenian, A. Silicon Valley's new immigrant entrepreneurs, PPIC. 1999. http://www.ppic.org/content/pubs/R_699ASR.pdf. Saxenian, A. Local and global networks of immigrant professionals in Silicon Valley, PPIC. 2002. http://www.ppic.org/content/pubs/R_502ASR.pdf

[38] Saxenian, A. and J. Hsu. Silicon Valley-Hsinshu Connection: Technical Communities and Industrial Upgrading. in Industrial and Corporate Change. Vol 10 No. 4. 2001

Underlying interests and factors

66. What are the underlying interests of governments, institutions and individuals? How do these interests translate into factors that influence the international trends as described in the first section? The main purpose of this section is to develop a framework for understanding the trends, which will serve as a basis for exploring the possible consequences in the next section. Governments have various interests which shape their domestic and international policies about higher education. These policies in turn shape the contexts for institutions and individuals, which in turn lead to intended as well as unintended developments.

Governments interests and policy contexts

67. Governments have various concerns about higher education in their respective countries that have an impact, one way or another, on what happens internationally. Among these concerns are the economic role of higher education; expanding access; controlling public expenditures; ensuring quality of provision; and ensuring international competitiveness. In the following paragraphs, governments' interests and rationales for internationalism will be outlined first, followed by discussions about how they shape the specific policy contexts of importing and exporting governments[39].

68. **Governments' interests in higher education** – in both developed and developing countries - can be summarized in terms of the following five concerns:

a. **The economic role of higher education**. Governments are increasingly interested in higher education as a key to economic competitiveness. For OECD countries, a transition to a knowledge-based economy is creating a renewed emphasis on universities not only as a source of **skilled labour**, but as a source of **scientific discoveries leading to commercialization** that help local companies to obtain a technological edge in international competition. For developing countries, it is important to develop an educated workforce of a reasonable size, in order to catch up and to remain abreast of scientific progress.

b. **Expanding access**. One major consideration for governments is to gradually expand access to higher education so as to provide appropriate levels of educated labour commensurate with the level of desired economic development. This implies a transition from elite to mass higher education systems for maturing economies.

c. **Holding down public expenditure through private provision and/or cost recovery.** Increased interest in higher education does not mean that governments have unlimited resources for it. Indeed as the size of higher education increases, most governments find it difficult to pay all related costs from the public purse. OECD and developing country governments alike are increasingly considering alternative options such as opening up the

[39] This section draws on key insights on the national characteristics and their implications as articulated in OBHE report titled Transnational higher education part 2: shifting markets and emerging trends, December 2003.

higher education sector to private or foreign providers with cost recovery from individuals.

d. **Ensuring quality of provision**. The more the country opens up the sector to diverse providers, the more likely that these will include unreliable providers who are motivated by quick profits, which may lead to low quality of education. Though by no means all private institutions are suspect in terms of quality - indeed some of the world's finest universities are private including those in developing countries – the proliferation of private institutions tends to raise public concerns about the dilution of quality and standards.

e. **International competition in higher education**. There is an increasing awareness among governments about the need to think about international competitiveness within higher education in its own right. The initial round of GATS in which higher education is being discussed as a sector of trade will still take a while to resolve, and it is now clear that definitive directions will not emerge for some years yet. However, one outcome of GATS appears to be a heightened level of awareness about detailed regulatory issues in higher education among governments and universities, and an expanded group of policy makers including those responsible for trade and economic policies.

69. **Policy contexts**. These interests are reflected in government policies, which usually comprise: government funding that determines the size of publicly funded tertiary education; the regulatory framework for public institutions; the regulatory framework for private universities; the regulatory framework for quality assurance; and any specific support for international activities. These policies can have significant but different effects on the one hand on **importing countries** that are sending students or receiving transnational institutional presence, and on the other hand on **exporting countries** that are receiving foreign students and are sources of transnational education. These are discussed below under these two headings.

70. In **importing countries**, government policies tend to determine the size and responsiveness of the domestic higher education system in meeting social demand. If the size of the sector is too small, given social demand, and if the government does not have an appropriate framework for private entry to higher education, a large proportion of their students may end up studying abroad, as they did, for example, in Malaysia and Jordan in the 1980s, and Sri Lanka today.

71. The government may set up a policy framework for expansion by allowing greater autonomy to public institutions while encouraging private entry, particularly through partnership with foreign institutions, as Singapore, Hong Kong and Malaysia did.

72. Most countries which have experienced active imports of transnational education have felt the need to establish some form of quality assurance mechanisms, which in turn can promote or inhibit further growth in transnational provision depending on its level of tightness. In the case of Malaysia, accreditation was set up as part of the essential framework to encourage foreign participation, and the country saw more transnational provision. Recently, Malaysia announced that it would only

allow those trans-national providers with good standing in their home country league tables to operate in Malaysia[40]. In South Africa, the government tightened regulatory conditions in 1997 by requiring registration and quality assurance processes and prohibited foreign institutions from operating through franchising local institutions without a direct presence in the country. The number of foreign institutions declined dramatically as a result and continues to do so as they fail to meet accreditation requirements[41].

73. The policy environment in **exporting countries** influences the level of competition felt by higher education institutions, often by restricting new entry or expansion, which in turn can influence the level of institutions' interests in international markets. For instance, if there is sufficient domestic demand for the supply of higher education, and if the level of competition among domestic institutions is low, there may be little reason for institutions to go after international markets.

74. If the domestic market is highly competitive, for example because of tight public funding as in the UK and Australia in the 1980s and 1990s, many institutions will be more interested in exploring other growth options, including international markets. Indeed the experience of these countries suggests that one of the critical factors may be the regulatory framework around domestic students and fees. If fees for domestic students are regulated, while those for non-domestic students are not, this creates a structure that provides incentives to recruit non-domestic students. The same point applies if the number of domestic students is tightly controlled, perhaps because of the availability of public funding.

75. Public policies also influence the governance and managerial structures of higher education institutions, which can in turn determine their ability to develop plans and make decisions about international recruitment or offshore activities. In both the UK and Australia, universities were autonomous to begin with, but increasing demands for accountability from the government pushed them to develop greater managerial capacity, which in turn helped them make strategic decisions about their activities overseas.

76. For developed countries, their geopolitical and economic interests also lead to specific **rationales** that exporting countries adopt for their blend of internationalism. According to the OECD, developed countries can have three types of rationale for supporting internationalism, which are not mutually exclusive.

a. Developing **"mutual understanding"** is the most traditional approach, based on geo-political needs for better cross-cultural ties. One example is the ongoing European effort to create a European citizenship through shared education. Foreign aid to developing countries was another avenue which provided for scholarships and academic collaborations. However, this rationale appears to be overshadowed by others as reflected in the declining development assistance, with an important exception within Europe.

[40] OBHE Breaking News on Malaysia, 27 April, 2004.
[41] OBHE Breaking News on South Africa, 24 June, 2004.

b. Acquiring **human resources** is another rationale that has existed for some time, but it has become important, particularly in countries such as Germany (and Japan though the OECD study does not classify the latter explicitly) in recent years, and represents governments' interest in attracting the best foreign students to their higher education institutions.

c. **Revenue generating** is arguably the most recently established rationale, arising from fiscal pressures, and often including explicit interest in generating trade surpluses. This rationale is most evident in Australia and the UK.

77. For most OECD countries, mutual understanding has provided the key rationale for their international policies when they established themselves as exporters in the first place. However, key policy changes have been taking place for attracting human resources as well as revenue generating, with competition between the two approaches[42]. Most exporting countries in fact adopt a mix of both, with Germany, France and Japan tending to focus on attracting human resources, and Australia on revenue generating, and the UK and US somewhere in between.

78. Here, one critical factor that separates the two approaches may be the language of instruction. Non-English speaking countries have much greater difficulties in competing against English speaking countries, which dominate the scene, and have increasingly adopted a very different approach.

79. Germany has been a major exporter of higher education, but reemphasized its resolve to attract more foreign students through a joint declaration by the Federal and state leaders in 1996, around the time it was overtaken by the UK in the number of foreign students. German universities along with other continental European peers do not charge fees to foreign students, and the government has added to this subsidized higher education further attractions by increasing the number of scholarships rapidly (50% per annum in the 1990s)[43]. France has also made a move to strengthen its scholarship administration in 1998.

80. Japan is another country that moved to embrace the human resource approach in the past two decades. In 1983, the government developed an explicit target to increase the number of foreign students in Japanese universities to 100,000, a five fold increase, which was just achieved in 2003. Japanese universities charge the same level of fees to foreign students as they do domestic students. Their public university education is therefore a subsidized proposition for foreign students. However, the principal policy instrument was the increased number of government sponsored scholarships, which rose from 2000 in 1983 to 9000 in 2002. The Japanese government has reaffirmed its emphasis on attracting the best and the brightest by instituting a select but explicit scholarship program for foreign students called the Young Leaders Program in 1997. According to one Japanese government study, their level of scholarship provision is similar to the 10,000 in France, but higher than the 6,000 in Germany, or 3-4000 each in the US, UK and Australia[44].

[42] OECD op. cit.
[43] OECD op. cit.
[44] A final report by the Central Higher Education Council of the Japanese Ministry of Education, Culture, Science, and Technology on Foreign Students dated December 2003.

81. What has been the situation in English speaking countries? The numbers quoted by the Japanese government study include key scholarship programs that cover the full costs of higher education such as Fulbright in the US or Chevening in the UK. However, there are other implicit subsidies that reward excellence. In the US, for instance, about 50% of graduate students in research institutions received financial aid from their host institutions in 2001[45], which usually comes from federal and other research funding, and can cover the full cost of study including stipends. Indeed, the US practice of admitting research students along with a financial aid package involving work-study such as teaching assistantships and research assistantships provided directly by the institutions is probably a fairly attractive proposition for incoming students. The UK has similar albeit more limited research awards, which cover the tuition difference between home students and overseas students for an annual total of about 800-900 students[46].

82. Some of these governments have made other explicit changes to promote the country's relative attractiveness for international students, such as simpler visa processes for students or provisions enabling them to work during their study (e.g. the UK), and the availability of information about higher education in embassies or other overseas representative offices (e.g. Australia, the UK, Germany). Indeed, tighter visa conditions are reported as one of likely causes of the sluggish growth of international students in the post 9/11 US.

83. Singapore has developed an integrated economic rationale for internationalizing its higher education. The country has an explicit policy goal to develop itself as a hub for higher education in Asia, with a view to strengthening its scientific research capacity, enhancing innovations, and developing into a stable knowledge-based economy. Since the late 1990s, its Economic Development Board has aggressively encouraged the world's best research universities to developing some presence in Singapore, with a view not only to develop better educational capacity but to developing the needed research and scientific capacity in selected fields.

84. Recently, other developing countries have adopted similar approaches to varying degrees. For instance, the Indian government has instituted an explicit incentive for encouraging revenue generating, which appears to be prompting some institutions to try to do so abroad. The Malaysian government has made it an explicit policy goal to become an Asian hub for higher education, clarifying their human resource interest. In the Middle East, Qatar, UAE and Kuwait are competing to establish high education institutions with the involvement of foreign institutions each with aspirations to become regional hubs for higher education.

[45] Todd Davis, IIE. First look at US mobility statistics. A presentation given at a conference at Melbourne, October 22, 2003.
[46] Overseas Research Students Awards Scheme (ORSAS). See http://www.universitiesuk.ac.uk/ors/ORSscheme.asp

Institutional interests and capacity

85. The factors driving institutional behaviour can also have a significant impact on what happens internationally. There are two main ones: to build an international reputation and to seek new sources of income.

86. Traditionally, many established universities have had a strong interest in **developing an international atmosphere** within their campuses for the development of their students. Good international recruitment is seen as one way of building **brand and reputation**. In increasingly competitive domestic markets, it is not easy for institutions to make a significant change to their international reputation either through domestic recruitment or through research. Attracting high calibre students from abroad can be one alternative route for improving image and reputation. The competitive circumstances are significantly different for each institution, which is one reason why not all institutions from the same country follow the same international strategies.

87. There is also a newer revenue raising interest in international education among universities. Institutions facing tougher financial situations are increasingly keen to develop an **alternative source of revenue** through recruiting international students and charging them fees. For some publicly funded universities in which fees charged to foreign students are less tightly regulated, international recruitment can be seen as a lucrative alternative to domestic students, as in the UK or Australia. In Japan, the shrinking young population means that the domestic competition for students is getting tougher, and more institutions are interested in exploring new markets.

88. Even where there is interest in engaging in international activities, not all institutions can do so effectively. Indeed, universities need to have some basic **institutional capacity** to develop plans and implement them – and this is not a trivial capacity. Particularly for major decisions such as the development of off-shore presence, institutions must have flexible governance/management structures. It also would appear that the lack of institutional capacity to establish different strategies can produce a lemming like approach among institutions. This may explain the UK growth in offshore programmes in the late 1990s, when many institutions appeared to be scrambling to get in on the act, even though there was little evidence of financial benefits.

89. It is important that the institution also has sufficient knowledge about the country of delivery. UK universities have a long history of working with students from Hong Kong, Singapore and Malaysia. And it is easier for Australian universities to understand the higher education systems in these countries given their similar Commonwealth heritage.

90. To be able to engage in transnational provision, it is increasingly important to have internal expertise in different delivery modes, so that a mixed mode can be used when appropriate, and of course, the ability to deliver a programme in English and /or the local language depending on the local needs is also an important factor.

Individual students' interests and constraints

91. There is perhaps only one main factor that influences individual behaviour in terms of its effect on the international higher education scene: the fact that higher education is increasingly seen as a route to good employment. For that reason, families in many countries are willing to invest in their children's education.

92. Choice about higher education becomes akin to an investment decision; the **costs** are considered in the light of the **benefits** that higher education would bring to individuals. The former would include the level of fees as well as the cost of living, and opportunity costs given the duration of the study. In Germany, for instance, even with free tuition, the cost of living can mean significant costs for foreign students. The latter would include the **quality of education** and **brand name** as well as other positive attributes that can enhance the employability of students such as **proficiency in English**, or **experiencing a foreign environment**. Visa considerations, particularly with respect to prospects of employment following study may also be important for their decision making about international destinations.

93. The principal constraint faced by individual students concerns their families' **willingness and ability to pay**. This means that there are few who can afford to think about such options in lower income countries, and even for middle income countries, opportunities may be limited to children from well to do families. Countries such as Germany, France and Japan provide an interesting contrast here to the Anglophone countries, since they subsidize the higher education available to foreign students, and also give more scholarships. Availability of scholarships or financial support can influence student decisions.

94. From the previous discussion about subject interest, it appears that the rise in prices to close to the full costs of higher education is influencing students' choice of study. If it is free to study, they might choose any subject; when there are substantial costs associated with learning, they are more likely to think twice about pursuing subjects that would not directly enhance job prospects. Higher fees probably make students more conservative in their choice, with expressed preference for professional subjects over the others.

95. Language is another practical constraint for many students. Not all individuals can cope in English, and even fewer may be able to cope with other languages.

Three reinforcing trends to market orientation

96. The above discussion suggests that there are reinforcing trends at government, institutional and individual levels which are leading to a greater market orientation in higher education:

a. Regional and national governments increasingly see economic roles for universities and are imposing tighter accountability conditions on the use of public funds.
b. Institutions are having to compete for public funds or for better students, and are increasingly exploring other revenue options.

c. Individuals are increasingly expecting tertiary education to be an intrinsic part of their preparation for employment.

97. It is this market orientation that appears to be the new driver of international trends today – both in importing and exporting countries. However, the different capacities of exporting countries, most notably concerning language, appear to have compelled them to take different approaches. Large global markets have emerged around fee paying students. Smaller global markets appear to be emerging around high calibre students, with institutions and countries trying to attract them to enhance their reputation.

Consequences

98. In this section, the main consequences of these two types of market orientation will be discussed, first in the competition for fee-paying students, and second in the competition for high calibre students who can win meritocratic scholarships. For simplicity, this discussion is based on an assumption that the more students that can be recruited internationally, the better – for both importing and exporting countries. At the end of the section, whether more internationalism is indeed unambiguously better for all countries will be discussed.

Consequences of market orientation

99. One main consequence of a revenue generating orientation is that not all countries can participate in the rapid increases in internationalism. As far as importing countries are concerned, not all can have potential students who are able and willing to pay the full costs of international higher education. Indeed, the extent to which different countries represent attractive markets may vary significantly depending on the level of their economic development; their size and their accessibility to the English language.

100. Low income countries are unlikely to attract much interest from foreign institutions, simply because they will not have sufficient numbers of students who could afford international education. Some developing countries such as Malaysia or India may in turn become important destinations for students from these countries. In contrast, middle income and wealthier countries with sufficiently large populations who are able and willing to pay the full cost of education could be more attractive to foreign institutions. Indeed, Malaysia has explicitly made itself attractive as an importer, while articulating its desire to become a regional hub, thereby attracting foreign institutions with regional aspirations.

101. The size of a country can also affect its potential attractiveness as a market: in general the larger the country the more attractive the market. Large countries can attract more interest from foreign institutions even if their per capita levels of income are low, as in India or China. This is because their sheer size can ensure a certain size of potential students from middle income families.

102. Language of instruction is another factor that determines the relative attractiveness of a country as a potential market for foreign institutions. English

speaking countries or countries with student population who are interested in acquiring English language proficiency may be more attractive for foreign institutions.

103. The competition for highly calibre human resources provides important and different dynamics from revenue generation among exporting countries. However, this competition is unlikely to lead to significant and widely distributed additional benefits for several reasons. First, the number of beneficiaries from scholarships and other financial aid remains small in comparison with the total number of students. Even in Japan, which appears to have the largest proportion of government funded scholars, it is no more than 10% of the total number of overseas students who benefit.

104. Second, it is unlikely that open meritocratic scholarships will be enough to allow poorer and smaller countries their share, since they are likely to have fewer candidates who can compete internationally. Even if each exporting country has some economic and political reasons for distributing their scholarships differently, as indeed they do, it is unclear that such tacit approaches are sufficient to cover the need of all the lowest income countries in an equitable manner.

Is more internationalism always desirable?

105. Turning to the validity of the assumption that the more internationalism the better, the critical issue appears to be whether "the more" can lead to domestic capacity building of higher education systems in developing countries. If not, then increasing internationalism could be damaging to the countries concerned. The answer is ambiguous. Internationalism can lead to better capacity building because of institutional partnerships between foreign and domestic institutions. And a country with a weak higher education system may benefit by having its brightest and best receive high quality higher education overseas. On the other hand, the subject mix offered by overseas institutions may not reflect local and national needs: history, arts and natural sciences may be neglected while professional subjects are given unduly high levels of attention. Individual students obtaining degrees abroad may be helpful for those individuals concerned, but may not necessarily lead to institution building.

106. When developing countries open their markets to private higher education institutions, they often find a proliferation of institutions whose quality is suspect, or institutions with ambiguous names suggesting foreign affiliations when they actually have none. Even when local institutions are supposedly supported by foreign institutions, this in itself may not be sufficient, as QAA reports found in the late 1990s for the early overseas activities of UK institutions. It is not too surprising that the public perception and confidence in the quality of higher education suffers, resulting in heightened public policy needs for better quality assurance mechanisms.

107. When developing country institutions themselves begin to export higher education to their peers, in many cases this is unlikely to represent an improvement in quality opportunities.

Counter-market reactions

108. Although most new developments and interests are market-oriented, there are some developments that appear to be "counter market." Before discussing these

developments, it is worth noting that a counter-market ethos is in fact not new in higher education. Indeed, there has been a tradition of collaboration, openness and community within higher education. In international terms, such an ethos has perhaps been most evident in international development efforts and in the ethos of collaboration to help less developed universities worldwide. International development agencies have been one of the main sources of funding for scholarships and twinning arrangements, though the size of such arrangements appears to have declined if not in absolute terms, in relative terms, because of the lack of growth in funding. While the ethos of collaboration still exists in the background, increasingly tight funding conditions are making it ever harder for 'donor' universities to offer their provision without demanding payments for all associated costs.

109. Modern "counter-market" forces come from the culture of openness and the recent movement in favour of open source software development. One good example of this is the OpenCourseWare proposal of MIT, which is an institutional attempt to put as much of its syllabus and course materials as possible on the web at no cost to the public. Its announcement in 2001 created a great deal of interest around the world, since this was seen to be a move that stood squarely against the for-profit initiatives, particularly around e-learning, that were proliferating among higher education institutions at the time. MIT's move to make all learning materials freely accessible on the web offered the prospect that this could effectively undermine the increasing number of for profit ventures that were trying to make money on the basis of protected contents.

110. As of today, 500 of MIT's 2000 courses are on the web, with continued efforts to make all the rest available by 2008. The initiative has received favourable responses from academics around the globe, though it is still not clear that this will represent a trend. For one thing, there is still great variability among courses in terms of the depth and quality of the materials made available. Nor have there been other institutions publicly joining MIT's effort.

111. There are other initiatives with a similarly open and collaborative ethos. One example is the Open Knowledge Initiative (OKI) which is an attempt to develop an information platform for universities through open source. Yet another example is the resolve of scientists to make their publications accessible free of charge to all other scientists in the world.

112. It is too early to tell the overall impact of these initiatives. OpenCourseWare could change the costs of higher education at the margin. It might also create a powerful mechanism through which other institutions can learn from MIT about what can be taught and how. Open initiatives such as this could serve as a collaborative tool for others to learn, and may be more powerful than imperialism in their ultimate influence on curricular content. Nevertheless, it is unlikely that they will reverse the general trend towards the market orientation of international higher education.

Implications

113. The previous section argued that it was market-orientation that was underlying new developments in internationalism. The main implication was that not all countries could benefit from the new developments to the same degree, either as an

importer or exporter. In this section, the benefits and risks of internationalism will be reviewed and summarized in terms of the inputs, process and outputs of higher education. At the end of this section, some policy implications for the UK will be discussed.

Benefits and risks for inputs

114. The main benefits of internationalism in terms of inputs to the higher education system are twofold. First, internationalism is leading to increased access to higher education. For countries with inadequate domestic higher education systems, international options are increasingly available for students. For host countries, their campuses are becoming enriched by the presence of international students.

115. Second, there will be an increasingly international pool of candidates for teaching in higher education. They could have been trained abroad or could learn on the job through collaborations with foreign institutions. The internationalization of staff may be as pronounced in countries attracting foreign students as well as sending countries. It could be particularly significant in regions such as Europe where there is considerable student mobility across borders, with few constraints on labour mobility.

116. These benefits are likely to come with risks. Inequity may be an issue both at individual and national levels. This is because current international trends and developments are essentially market-based and are predicated upon students who are able to pay the full cost of education, and if not the full cost then a substantial part of the cost, including their living expenses. It is likely to lead to inequity in access, in which students from middle income families may have a greater choice, while students from poorer families may not.

117. Inequitable access is in fact an issue in many developing countries with or without internationalism, because wealthier families tend to be more capable of catering for the educational needs of their offspring, who will therefore have a higher probability of surviving through secondary education with good academic records than those from poorer families. The rise of fee-based international education is expected to bring an additional dimension to this already inequitable access.

118. Some may argue that equitable access could be ensured by instituting scholarships or student loan schemes. However, it is unlikely that these corrective measures can be made to be effective in the short to medium term in most developing countries[47]. If governments had resources to be able to provide sufficient scholarships in the first place, there would be unlikely to be the excess demand that feeds private sector development. And student loan schemes typically require either efficient banking or tax collection mechanisms in order to administer loan repayments – a capacity that is unlikely to exist in most developing countries.

119. At a national level, there may be a disparity between middle income, wealthier or large countries which will be able to capture the benefit of internationalism, and smaller and poorer countries, which may see little of the benefits without considerable effort on their part. East Asian economies may benefit, while the bulk of sub-Saharan

[47] The policy interest in introducing student loan schemes is on the rise in developing countries, but there is yet to be a successful such example.

Africa may not. Internationalism is unlikely to resolve the issues for the least developed countries, and may even provide biases against smaller countries.

120. One could argue that inequitable access has always been an issue. What is new is the rising cost of participating in international higher education, and the lack of mechanisms to provide for the poor on a global scale. For individuals, they have to cope with costs of travel as well as other costs such as those of instruction, accommodation and computers. Governments, in order to benefit from internationalism, may have to meet the higher costs of regulation or monitoring and quality assurance to ensure reasonable quality of higher education.

Benefits and risks for process

121. The principal consequence for process will be in the changing ethos of higher education. There will be greater cross-cultural awareness and an increase in multicultural campuses, with increasing professionalism in choosing what is taught and how it is taught. There will also be increasing and sustained international interactions at least between some communities, for instance between foreign source institutions and local partners. There may also be some developments in open initiatives, motivated by open-source culture. These developments could be helpful for countries and institutions which are trying to improve their own national higher education capacity.

122. Curricular content will become increasingly international. As campuses embrace more foreign students, there will be pressures for universities and teaching staff to revise curricular content to meet the needs of an increasingly international student body. This should help foster the new generation of students who have benefited from a multi-cultural environment that is more reflective of the world.

123. Against the benefits is a risk that market-orientation may jeopardize the traditional ethos of cooperation. There may be less willingness on the part of leading institutions to be open and helpful to less developed institutions. Even if they are willing to help, it may be increasingly difficult for institutions to make their faculty available for voluntary activities. It may prove harder and more expensive for late developers to catch up in building their own national higher education systems, with costs to be borne largely by parents and students rather than the governments. Intensive institutional development assistance of the kind that helped create India's Institutes of Technology in the 1960s may be expensive and hard to accomplish today.

Benefits and risks for outputs

124. There will be a rapid expansion in the trained labour force in professional subjects such as business and IT, which will be especially significant in some countries where institutions are particularly weak in these areas.

125. On the other hand the highly concentrated nature of students in these subjects/fields poses a risk. If transnational provision tends to focus on "safe" professional fields such as business while little is offered in other subjects, this could lead to an imbalance and a certain lack of diversity at national and global levels. Arts and science may be neglected at the cost of business and IT.

126. Such a lack of diversity could be an issue at the institutional level also. Institutions may begin to look more like each other, because it will be difficult for any of them to resist developing popular programs such as business studies or IT. The same may be true in research, if government funding is increasingly geared towards certain strategic fields. Every university may try to build high utility scientific research capacity such as biotechnology and information science rather than other sciences. When this happens for whole systems or globally, there could be a real issue with the lack of diversity in the science base.

127. Another risk arises from the fact that taught masters are more likely to be lucrative than research training, because of scale economies for institutions and willingness to pay on the part of prospective students. This may lead to imbalances in student numbers within graduate schools, as Australia has found. This could be counterproductive for both host and source countries, as it could jeopardize the development potential of future Silicon Valleys and their complementary clusters in other countries. The most highly trained immigrants, who could become a critical entrepreneurial resource, may become short in supply.

128. For host countries, if their universities increasingly focus on attracting students who are able to pay, rather than those who are simply competent, they could lose out on the opportunity to tap the international talent pool for scientific development.

129. For source countries such as India and Taiwan, American graduate education used to represent one major source of brain drain for their best graduates. Today, it is recognised that they are, in fact, the change agents who are linking developments in India or Hsinchu to Silicon Valley, by providing complementary technologies which in turn add to the further development of Silicon Valley itself. Both source countries as well as the host countries could benefit from the 'brain circulation' arising from top calibre foreign students. When the nature of graduate education changes, with a reduction in scientific research training, such potential may be significantly reduced.

130. Finally, but not least important, there is a risk that mushrooming transnational education could lead to opportunities for fly-by-night institutions to enter into the fray and lead to an erosion in the quality of education. Governments will need to invest more resources in establishing quality assurance mechanisms, principally to provide information to the public.

Implications for the UK

131. There are several policy implications for the UK. First, the lessons from Australia indicate that market-oriented internationalism is good for the expansion of activities that individual students are willing to pay for, but may be inadequate to support the scientific research training of high calibre international students in ways that both host and sending countries can benefit from.

132. Australia has recently decided to increase its investment in building its scientific research capacity – though critics believe that the change is not significant enough to increase the number of high calibre international research students. Similar dynamics apply in the UK, and the UK would do well to ensure that its international student base has not become distorted .

133. A second important lesson for the UK, as a country committed to international development assistance, is that market-led internationalism is unlikely to solve the problems of the least developed countries, and may indeed exacerbate it.

134. Third, domestic funding policies can create powerful incentives for institutions in their international activities. The lessons from Australia are particularly relevant to the UK, where similar policies provide positive incentives for universities to look for international students. While this has undoubtedly had benefits, the question that policy makers should ask is whether they intended to create an incentive for faster expansion of educational places for international students than for domestic students, and if so for how long.

135. Indeed, the UK situation is complicated further because of EU students. The current policy environment in the UK creates three classes of students each of whom brings different financial benefits to institutions: domestic and European undergraduate students who are subsidized; non-European overseas undergraduate students who are expected to pay full costs; and all graduate students including both domestic and foreign ones who are again expected to pay full costs, except for those who receive research scholarships and fellowships. The fact that European undergraduates "count" in the same way as domestic students is helpful in attracting European students who pay at the same subsidized level as domestic students. However, given the explicit government goal of expanding access for domestic students, institutions are unlikely to make the same level of effort in attracting Europeans as they do domestic students. Fortunately, the UK tends to attract more European students than it can handle, perhaps because of the use of English as a medium of instruction. However, it is possible that UK institutions are under-investing in developing a European orientation and/or in efforts to cater to the needs of European students. For instance, do international offices pay as much attention to problems faced by European students as they do to those of overseas students, given that they tend not to be proactive in European recruitment?

136. There is also a notable lack of information to guide policies in the UK. The only reliable quantitative data concern the international mobility of students. Neither staff mobility, nor transnational education is appropriately monitored to inform students, institutions and policy makers. Greater collaboration across countries in collecting and disseminating appropriate information would be needed if developments are to be monitored accurately. Even more acute is the shortage of qualitative information about the nature of change taking place in different modes of transnational education. One critical role of the government could be to provide funding to generate and disseminate such critical information in a manner that is user-friendly and accessible.