

Is UK transnational education 'one of Britain's great growth industries of the future'?

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Against the backdrop of unprecedented growth in the global demand for higher education, the UK government has recognised that there is a huge potential market beyond conventional 'export education', if its universities can find ways of providing 'transnational education' (TNE) to the millions of foreign students unable or unwilling to travel to the UK. This paper tests the thesis that TNE represents 'one of Britain's great growth industries of the future'. For TNE to flourish, three conditions need to be satisfied, namely: that there is already a strong base of UK TNE activity and expertise on which to build; second, that there will be continuing growth in demand for UK TNE; and, finally, that UK universities have the capability and willingness to expand supply to meet any future growth in demand. It finds little evidence to support the thesis that TNE is, in fact, likely to be a great growth industry and highlights the dangers for policymakers of setting objectives in the absence of a strong evidence base about current capabilities and future market trends.

Keywords: Transnational education, internationalisation, export education, offshore education, international branch campus, twinning, franchising, validation, higher education policy

Introduction

'An academic revolution has taken place in higher education in the past half century marked by transformations unprecedented in scope and diversity' (Altbach *et al.*, 2009:i)

Most dramatic amongst these transformations has been massification, what Trow (1962) dubbed the 'democratization of higher education', which has increased enrolments worldwide from 51m in 1980 to 178m by 2010, an annual rate of growth of 4.2 per cent *per annum* (UNESCO, 1998, 2013).

UK universities have been major beneficiaries of this growth in global demand for higher education. As economic growth and underdeveloped local higher education sectors ‘pushed’ increasing numbers of students from developing countries to look overseas for study opportunities, UK universities enjoyed strong ‘pull’ characteristics – instruction in English, a global reputation for quality and a widely recognised qualifications framework. By 2011/12, there were 435,000 foreign students studying at UK universities, or 17.5% of all enrolments (HESA, undated).

In the last 15 years, UK universities have begun to recognise there is a large potential market beyond conventional ‘export education’, if they can find ways of providing ‘transnational education’ (TNE) to the millions of foreign students unable or unwilling to travel to the UK (Doorbar and Bateman, 2008). The present UK government has identified TNE as a major growth opportunity for universities. Speaking in 2012, the UK Minister for Universities and Science set out his vision:

‘Demand for higher education is growing worldwide... Increasingly, emerging economies want to educate their students at home, and the UK – a global pioneer in developing educational facilities – is well placed to help... This is one of Britain’s great growth industries of the future’ (Willetts, 2012).

This paper tests the thesis that TNE represents ‘one of Britain’s great growth industries of the future’. For TNE to flourish, three conditions need to be satisfied, namely: that there is already a strong base of UK TNE activity and expertise on which to build; second, that there will be continuing growth in demand for UK TNE; and, finally, that UK universities have the capability and willingness to expand supply to meet any future growth in demand.

The structure of the paper is as follows. The literature review provides an overview of TNE and the main studies which have explored the scale of the market, the demand for TNE and the supply of TNE. Against this background, the paper then seeks to address the question, ‘Is TNE one of Britain’s great growth industries of the future?’, by tackling three interrelated research questions:

What do the official data reveal about the present scale and financial importance to UK universities of TNE? (‘the status quo’)

What are the forecast trends in the main drivers of the demand for UK TNE? (‘the outlook for demand’)

What are the attitudes of senior decision-makers across a range of UK universities and agencies towards an expansion of TNE? ('the outlook for supply')

The method section sets out the approach by which the data to answer each of these questions are gathered, which are summarised in the results section. Finally these data are analysed to provide a set of conclusions, which have significant implications for UK policymakers and universities.

Literature review

What is transnational education?

TNE involves students remaining in their home country while studying at a foreign university. This form of higher education ranges from distance-learning through franchising to a partner institution in the host country, to an international branch campus (IBC), including:

'all types of higher education study programmes, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based' (Council of Europe 2002).

The General Agreement on Trade in Services (GATS) distinguishes four modes by which a service provider can, in principle, deliver services to a foreign citizen: Mode 1 (cross border supply); Mode 2 (consumption abroad); Mode 3 (commercial presence abroad); and Mode 4 (presence of natural persons abroad). In the context of higher education, these four GATS modes can be broadly interpreted as (see World Trade Organization, undated; Knight, 2003):

Mode 1 (programme mobility): universities supplying educational services across borders directly to students in their home countries, via distance-learning, so that 'there is no physical movement of the sellers or consumers, but the service itself travels' (Tilak, 2011: 33-34). Historically, distance-learning was carried out using correspondence courses. Since the advent of the internet in the early 1990s, correspondence courses have been steadily replaced by on-line provision.

Mode 2 (student mobility): students consuming the education services by moving to the country of the university. Over the last two

decades, international student mobility has been the dominant mode of service provision. 4.1m students studied on the campus of a foreign university in 2010 (OECD, 2012) and such ‘export education’ is a major source of invisible export earnings for countries like Australia, New Zealand and the UK (Altbach and Knight, 2007).

Mode 3 (institutional mobility): universities supplying educational services to students in their home countries through an in-country service provider. This in-country presence may range from a local college, which offers a university’s degrees on a franchised or validated basis (see below), to the university establishing an IBC to teach students in a foreign market.

Mode 4 (staff mobility): universities sending staff abroad for short periods to deliver educational services to students in their home countries. This form of mobility, known as fly-in, fly-out (FIFO) in industries like mining where it is commonplace, involves staff going to the students, but unlike Mode 3, the staff members fly in for short periods and the universities have no permanent, physical presence in-country (Seah and Edwards 2006).

Within mode 3 provision, there is a plethora of arrangements, which vary in the degree of alignment of the syllabus between the locally-delivered and home campus award and the control that the university can exercise over the in-country delivery (Quality Assurance Agency, 2010; British Council, 2012a). Most notable are:

Validation – the foreign partner develops and delivers its own programme and its degree is ‘validated’ by the university, allowing the partner to offer the programme as if it were a degree of the awarding university.

Franchise – the foreign partner is authorised to deliver the university’s degree on its behalf and the degree title, syllabus, teaching materials and assessment are all closely aligned with that of the ‘mother’ degree on the home campus.

International branch campus – a foreign satellite campus, wholly or partly owned by the university, which delivers and awards its degrees.

Estimating the market for TNE

It is difficult to estimate the scale of the present global market for TNE,

because so few home or host governments collect official statistics on TNE enrolments (Garrett and Verbik, 2004; Altbach, 2007). In a study of the growth of TNE for UNECSO, Martin (2007: 21) noted that ‘in many countries, data on transnational provision was not readily available’.

The Observatory on Borderless Higher Education regularly undertakes surveys of TNE (eg, Garrett, 2002, 2004; Garrett and Verbik, 2003a, 2003b; Larsen *et al* 2004; Verbik and Merkley, 2006; Lawton and Katsomitros, 2012), but these have primarily been limited to IBCs rather than TNE more broadly. Bennell and Pearce (2002) provided an early estimate of the growth of UK TNE by drawing together data from different surveys (see also Humfrey, 2009).

Naidoo (2009) attempted to estimate the scale of the global market, lamenting the ‘dearth of comprehensive statistics evaluating the real magnitude of this new phenomenon in the international higher education landscape’ (p326). All these surveys are dogged by partial coverage, the reluctance of universities to reveal commercially sensitive information and shifting forms of TNE in response to changing national regulation and technological innovation (Adam, 2001; Knight, 2005; Lane and Kinser, 2012).

The best known study of the future growth of TNE was carried out for the British Council by Bohm *et al* (2004). The study concluded that ‘the demand [for UK TNE] is expected to grow very considerably: from an estimated 190,000 in 2003 to almost 350,000 in 2010 and then to 800,000 by 2020’ (p46).

The drivers of demand for transnational education

There is a large literature exploring the factors that drive the demand by students for a foreign education, which can be satisfied by studying abroad or TNE. One of the widely used approaches is the ‘push-pull’ model (eg, Lee and Tan, 1984; McMahan, 1992; Mazzarol and Soutar, 2002; Li and Bray, 2007; Cantwell *et al*, 2009), derived from the so-called ‘gravity model’ (Tinbergen, 1962) of international trade. The push-pull model divides the drivers of demand between ‘push’ factors which drive students to look abroad for study opportunities and ‘pull’ factors, which attract international students to study in certain countries. The push factors are themselves split between the factors that drive the demand for higher education *per se* and those which drive the demand for higher education in another country. Higher education is a ‘superior’ good and graduates enjoy a significant ‘lifetime earnings premium’ relative to those of the same ability who leave education after secondary school (Mincer, 1974; Psacharopoulos, 1994; OECD, 2012). This

earning premium has been enhanced by the emergence of a global knowledge economy, where a ‘portable’ higher education qualification opens up new employment prospects. At its simplest, therefore, the two primary drivers of demand for higher education in any given country are:

the rate of growth of *per capita* gross domestic product (purchasing power of buyers); and

the rate of growth of the population in the 20-24 year age range (number of potential buyers).

There is a range of secondary factors, notably cultural attitudes to higher education and the distribution of income, which drive the demand for higher education (eg Marginson, 2010, 2011). Nevertheless, in the medium term, cultural and income distribution can be regarded as stable and the demand for higher education is dominated by income and population (Bohm et al., 2004; British Council, 2012a).

The link between the demand for higher education *per se* and the demand for higher education abroad is a function of the second set of push factors, namely the perceived quality and the physical capacity of the domestic higher education system. Potential students seeking higher education will look for study abroad or TNE if they are unwilling (because of relatively poor quality) or unable (because they cannot find a place) to access a university at home. The lower the quality and/or capacity of the domestic higher education sector, the higher the demand for study abroad and TNE.

TNE is cheaper than study abroad, because students can avoid the need for air travel and (normally) the higher cost of living overseas by enrolling in a programme in their home country. The tuition fees are also typically much lower for TNE programmes, enabling TNE to reach students who could not afford to study abroad, as well as those unwilling to travel for cultural reasons. In many TNE markets, only the wealthiest have the financial means to study abroad, so that TNE can potentially access a much bigger market.

The supply of TNE by universities

There is a much more limited literature exploring the reasons why universities seek to engage in TNE. The general view is that, particularly in countries like the UK and Australia where domestic tuition fees are regulated and enrolments capped, universities see TNE as a way of growing and diversifying revenue (Hatakenaka, 2004; Drew *et al*,

2006). Garrett (2004) concluded that ‘income generation is the dominant motivation, and other rationales remain under-articulated’ (p6). A survey of UK universities by Drew *et al* (2008) found that ‘traditional international recruitment to the UK is seen as “fading” and TNE is a way of making up shortfalls in income’ (p15). A study for UNESCO by Tilak (2011) concluded that ‘narrow economic considerations seem to be the main objectives of present and emerging forms of internationalization of higher education’ (p26).

Other commentators have taken a wider view and emphasised that, apart from financial goals, there may be reputational or academic objectives for TNE (eg Kwan, 2005; McBurnie and Ziguras, 2009; Wilkins and Huisman, 2012). One survey reviewing the literature concludes that an important motivation for universities establishing IBCs is to raise their international profile (Shams and Huisman, 2012). Offsetting potential reputational gain, however, is ‘need to manage reputational risk should a venture fail or disappoint expectations’ (Grant, 2013:18). A study by Edwards *et al* (2010) of institutional audits by the Australian Universities Quality Agency (AUQA) identified a range of risks, including reputational risk, conflicts of interest and poor quality teaching. The British Council (2012a) reported numerous obstacles to TNE, including ‘security issues, legislative barriers and...corruption’ (p45). Fear of these risks and conservative management practices may limit the responsiveness of universities to TNE opportunities.

Method

This study uses mixed methods to address the three interrelated research questions:

The status quo: what does the official data reveal about the present scale and financial importance to UK universities of TNE?

The outlook for demand: what are the forecast trends in the main drivers of the demand for UK TNE?

The outlook for supply: what are the attitudes of senior decision-makers across a range of UK universities towards the expansion of TNE?

To assess the status quo, the study reviews the official data provided by the Higher Education Statistics Agency (HESA). It examines the limitations and the integrity of the data in providing a guide to the state of the present market in terms of student enrolments. This examination

involved telephone and face-to-face interviews about the data and the way it was reported and published with a group of users and experts (see Table 1).

TABLE 1
Experts and users of Higher Education Statistics Agency data

1	Data analyst	Post-92 university
2.	International Manager	Post-92 university
3	Statistician	British Council (Education Intelligence)
4	Statistician	British Council (Services for International Education Marketing)
5	Statistician	Higher Education Statistics Agency

To assess the outlook for demand, the main drivers of the demand for TNE identified in the literature, namely macroeconomic and demographic factors on the one hand and the capacity and quality of the higher education sector on the other, were considered in terms of recent developments and likely trajectories over the next decades.

To assess the outlook for supply, the approach taken was to investigate the attitudes of key decision-makers at a range of institutions and agencies to the expansion of TNE (see Table 2). Semi-structured interviews (60-90 minutes each) using open questions were carried out with 11 senior managers working on TNE partnerships at a range of universities from the different ‘mission groups’ and national agencies on condition of anonymity and confidentiality. A loose structure was deliberately chosen, to give participants the greatest scope for revealing their intentions and concerns and to avoid influencing the views

TABLE 2
Participants in study of the outlook for supply

A	Pro-Vice-Chancellor	Russell Group university 1
B	International Director	Russell Group university 1
C	Dean	94 Group university 1
D	International Manager	94 Group university 2
E	Pro-Vice-Chancellor	University Alliance university 1
F	International Director	University Alliance university 2
G	Associate Dean (International)	University Alliance university 3
H	Dean	Million+ university
I	Director	British Council
J	Senior Manager	UK Higher Education International Unit
K	Senior Manager	Northern Consortium UK

The UK Higher Education International Unit is an agency jointly funded by UK universities and colleges and government to promote and support the international activities of UK higher education institutions. The Northern Consortium UK is a company owned by 11 universities in northern England which runs pathway courses around the world and manages IBCs on behalf of its members.

expressed. ‘The goal is to learn “what is going on here?”’ (Schutt, 2006: 12). The interviews were transcribed and coded to identify the common themes and the relationships between themes which were reported by participants (Miles and Huberman, 1994). The end result was a small set of generalisations about the key drivers which either positively support the expansion of TNE activities or negatively retard TNE activities

Results

Assessing the status quo

Prior to 2007/08, data on TNE students was collected by HESA, ‘but submission of this part of the collection was optional for institutions... [from 2007/08] they decided to use their powers under legislation to make that aggregate collection mandatory. In consequence, from 2007/08 it was possible to publish information on offshore provision’ (HESA, undated).

Figure 1 shows that the number of students ‘studying wholly overseas’ with UK higher education institutions has grown by 190% in just five years, to 571,010 by 2011/12. International (non-UK) enrolments on campus also grew by 27% over the same period, to reach 435,230 by 2011/12. The faster growth of TNE numbers meant that since 2009/10, there have been more students studying for UK degrees wholly overseas than on UK campuses, a development belatedly recognised by the educational media (eg Ratcliffe, 2013).

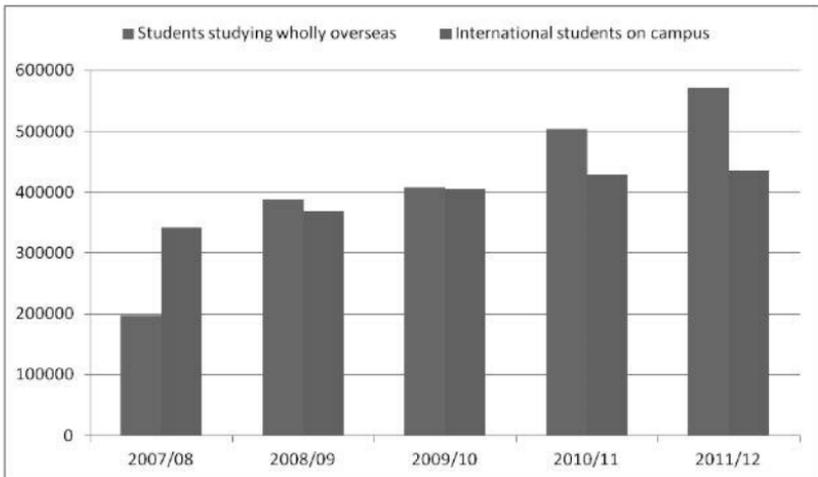


Figure 1. International students on-campus vs studying wholly overseas

TABLE 3
Top 10 TNE markets for UK HEIs, 2010/11

	PG (research)	PG (taught)	First degree	Other UG	Total
1 Malaysia	245	3,570	52,950	1,350	58,115
2 Singapore	65	3,530	41,755	1,515	46,865
3 China	135	3,290	32,195	140	35,760
4 Pakistan	10	250	33,695	945	34,905
5 Hong Kong	170	6,085	22,865	335	29,455
6 Nigeria	85	3,795	18,475	70	22,425
7 Ghana	15	990	14,700	50	15,755
8 Ireland	110	3,105	11,630	375	15,215
9 Trinidad and Tobago	25	2,780	9,680	900	13,385
10 Greece	90	4,065	7,175	185	11,515
Total	950	31,460	245,120	5,865	283,395

Source: HESA (undated)

Table 3 illustrates the level of provision for the top 10 TNE markets for UK higher education institutions (HEIs). It shows that the TNE market is dominated by undergraduate (UG) bachelor's degrees (245,120 students), compared with 31,460 postgraduate (PG) taught

TABLE 4
Transnational education by type of delivery

	2007/08	2008/09	2009/10	2010/11
Students registered at a UK HEI:				
- Overseas campus	7,120	9,885	11,410	12,305
- Distance, flexible and distributed learning	100,345	112,345	114,985	113,065
- Other, including collaborative provision	59,895	68,595	74,360	86,630
Students studying for an award of a UK HEI:				
- Overseas partner	29,240	197,185	207,790	291,575
- Other	70	35	50	125
Total	196,670	388,045	408,595	503,700

Source: HESA (undated)

students and only 950 postgraduate research (MPhil and PhD) students. It also reveals the relative importance of Asia as a target market, with the top five countries (Malaysia, Singapore, China, Pakistan and Hong Kong) accounting for 205,100 students.

Table 4 provides a breakdown of TNE students by type of delivery. It shows strong growth in all forms of TNE delivery, but an explosive growth in students studying with ‘overseas partner institutions’, which has risen from just 29,240 in 2007/08 to reach 291,575 by 2010/11.

Two important caveats

There are two important caveats in interpreting the data on UK TNE. The first is the ‘Oxford Brookes effect’. In 2008/09, Oxford Brookes University altered the way it reported a collaborative arrangement with the Association of Chartered Certified Accountants (ACCA) which dated back to 1999. The ACCA is ‘the global body for professional accountants with 154,000 members and 432,000 students in over 170 countries’ (ACCA, undated).

Under this arrangement, online students around the world who enrol on the final three ACCA papers are automatically registered as students at Oxford Brookes University for ten years. When they have completed the ACCA qualification, they may opt to write and submit a ‘Research and Analysis Project’ to Oxford Brookes University and, if they pass, receive a BSc (Hons) in Applied Accounting. The fee for submission of the project is £135 (Oxford Brookes University, 2012].

Since 2008/09, these students have been returned to HESA as students studying for the award of a UK HEI through an overseas partner institution. Table 5 shows that, adjusted for the ‘Oxford Brookes effect’, TNE numbers have grown since 2007/08, but at a much less

TABLE 5
Transnational education adjusted for the ‘Oxford Brookes effect’

	2007/08	2008/09	2009/10	2010/11
Oxford Brookes University	870	163,295	162,045	239,945
UK HEIs without Oxford Brookes:				
Overseas campus	7,120	9,885	11,410	12,305
Distance, flexible and distributed learning	100,345	112,345	114,985	113,065
Other students registered at HEI	59,895	68,595	74,360	86,630
Overseas partner organisation	28,370	33,890	45,745	51,630
Other students studying overseas for HEI's award	70	35	50	125
Total	195,800	224,750	246,550	263,755

Source: HESA (undated)

dramatic rate. By 2010/11, the adjusted TNE enrolments were just half the ‘headline’ numbers.

The second caveat is that HESA returns relate to headcount rather than full-time equivalent (FTE) students. There is no data on what proportion of students studying wholly overseas are part-time, but it is reasonable to assume that the Oxford Brookes/ACCA students and those studying by distance, flexible and distributed learning are working students who study part-time (British Council, 2012b). In 2010/11, these two categories accounted for 70% of the total students studying wholly overseas.

In contrast, only 15% of the international students studying in the UK are part-time (see Table 6). Moreover, a feature of many TNE programmes is their flexibility, which allows registered students periods of extended inactivity provided they complete the qualification within, say, eight or ten years. This further reduces the FTE value of TNE students. It clearly overstates the importance of TNE to compare the headcount of (predominantly part-time, often inactive) students studying wholly overseas with (overwhelmingly full-time) international students studying in the UK.

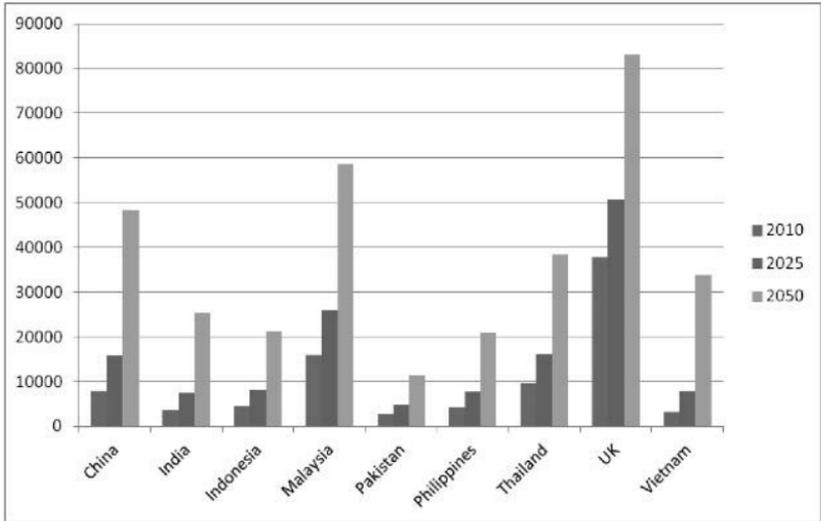
TABLE 6
Student headcount in UK and studying wholly overseas

	2007/08	2008/09	2009/10	2010/11	2011/12
Full-time in UK	1,480,385	1,540,035	1,632,160	1,677,345	1,721,400
- of which international	278,410	305,885	339,700	365,045	376,590
Part-time in UK	825,720	856,020	861,260	823,955	775,240
- of which international	63,380	63,085	66,100	63,180	58,645
Wholly overseas	196,670	388,135	408,685	503,795	571,010

Source: HESA (undated)

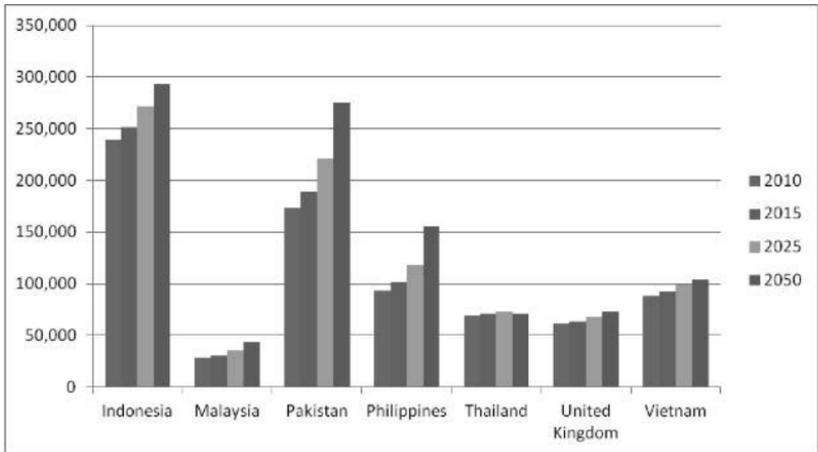
The outlook for demand

As noted in the literature review, the demand for TNE is driven by four main push factors – *per capita* GDP growth, population growth in the 20-24 year age range and the perceived capacity and quality of higher education in the host countries – with the UK’s market share influenced by a range of pull factors. The largest markets for TNE are in South and East Asia and, as Figure 2 shows, over the next 40 years, several (China, Malaysia, Thailand and Vietnam) are projected to reach *per capita* GDP levels comparable with that of UK in 2010 (US\$37,700), while India, Indonesia and The Philippines will reach levels comparable with that of Portugal in 2010 (US\$24,700).



Source: Calculated from Hawksworth and Cookson (2008), Central Intelligence Agency (undated)

Figure 2. Pre capita gross domestic product, US\$, PPP (constant prices)



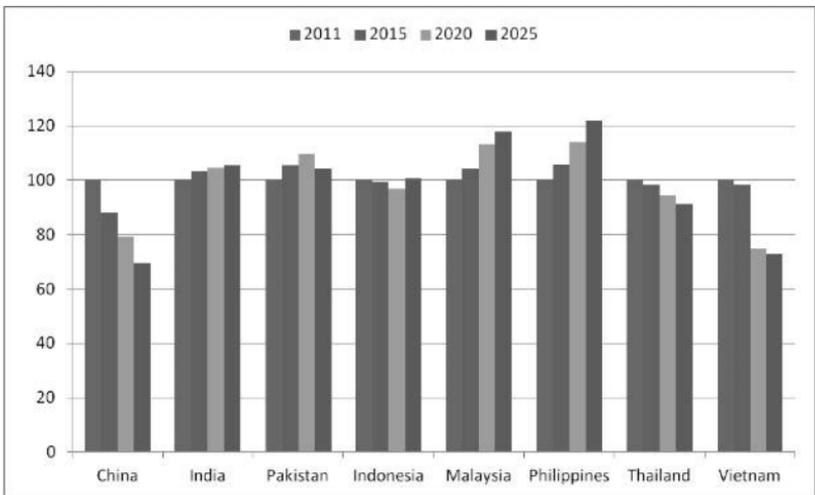
Source: Calculated from United Nations Population Division (2011)

Figure 3. Population forecasts 2010-50 ('000s): medium-fertility variant

The population of China and India is projected to grow to 1.6bn and 1.5bn respectively by 2050. Figure 3 shows that for a range of second

tier Asian countries, population growth will also be rapid, with Indonesia and Pakistan approaching 300m and Vietnam and the Philippines both exceeding 100m.

As Asian populations grow, however, they are also ageing as birth and mortality rates decline, most notably in China due to the impact of the 1978 ‘one child policy’. Figure 4 shows the forecast impact of the steepening population pyramid on selected economies over time. In China, the ageing population will have a marked impact on the population of undergraduate university age, which will decline sharply, while in India, Pakistan and Indonesia, the growth in the 20-24 year old population will be minimal.



Source: Calculated from United Nations Population Division (2011)

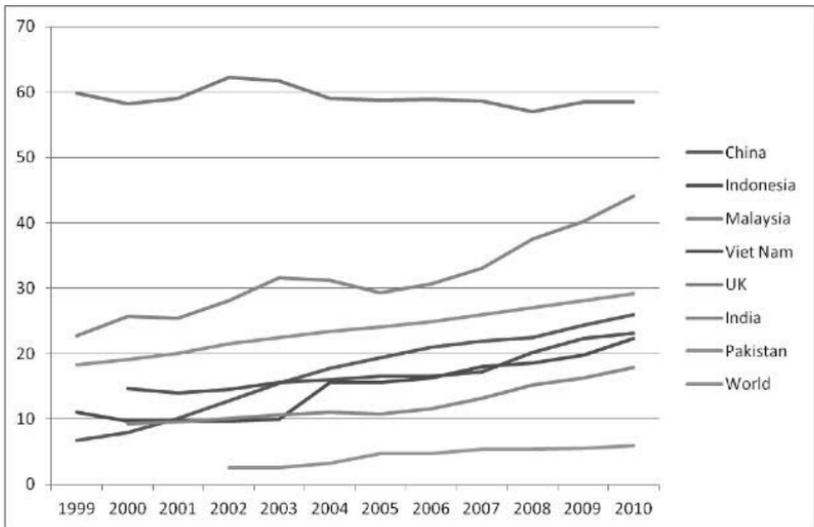
Figure 4. Tertiary age population (20-24 years), 2011 = 100

A recent study by the British Council (2012a) predicted that continuing (but slowing) growth in per capita gross domestic product would more than offset the negative demographic trends, with demand for higher education continuing to grow in Asia, but at a much slower rate of 1.4% per annum over the next 12 years, compared to 5-6% per annum over the last two decades.

The two other factors which push students towards TNE are the capacity and perceived quality of the domestic higher education sector. Here there have been significant developments which are likely to adversely affect the demand for UK TNE. First, there has been a

significant investment in capacity in all the largest markets for TNE. As Figure 5 shows, participation rates across all the main Asian economies have grown sharply over the last decade.

The growth in China has been particularly dramatic. The Ministry of Education of the People’s Republic of China reports that, in 2000, the number of undergraduates was 5.6m, with a further 0.3m postgraduates. By 2010, the figures were 22.3m and 1.5m respectively, representing increases of approximately 300% in undergraduate and 450% in postgraduate enrolments over a 10 year period (Ministry of Education of the People’s Republic of China, undated).



Source: UNESCO (2013)

Figure 5. Gross entry rates in higher education

At the same time, almost all Asian governments have developed policies aimed at increasing the quality of their higher education systems, through a combination of public investment in building an elite tier of ‘world-class’ research universities and, across the system, putting in place more rigorous systems of quality assurance.

China launched its ‘Project 211’ in 1995, which concentrates funding for postgraduate education and research laboratories on the top 113 of its 2,358 universities. South Korea’s ‘KoreaBrain21’ focuses public funding on 10 world class, research-oriented universities. Thailand’s ‘Second 15-Year Long Range Plan on Higher Education’ similarly

focuses resources on nine national research universities. Malaysia's 'National Higher Education Strategic Plan 2011-15' has created six 'Research Universities' and 20 world class Centres of Excellence (CoE). Taiwan has a new 'Development Plan for World-Class Universities and Research Centers of Excellence'.

In parallel to the drive to create 'world-class universities' has been an emphasis on building national systems of quality assurance to improve standards across the sector. A study by the British Council (Ilieva, 2011) which ranked the national quality assurance regimes of a number of countries for rigour on a scale of 1 to 10 found that Hong Kong ranked the same as The Netherlands, while China outperformed the United States (see Table 7). Although Singapore did not rank highly for the rigour of its national system, the Private Education Act of 2009 established the Council on Private Education to regulate private providers of higher education. Since December 2009, over 650 of the country's 1,000 private providers have closed and only 328 have been licensed to continue operating (Wan, 2011).

Although the combination of economic growth and demographics points to continued growth in the demand for higher education in the

TABLE 7
Rankings of strength of quality assurance (score/10)

1	Australia	9.4
2	Germany	8.9
3	UK	8.3
4	France	7.8
5=	Hong Kong	7.2
5=	Netherlands	7.2
7	China	5.6
8=	Indonesia	5
8=	Malaysia	5
8=	United States	5
11	Russia	4.4
12	South Korea	3.9
13=	Thailand	3.3
13=	UAE	3.3
15=	Nigeria	2.8
15=	Singapore	2.8

Source: Ilieva (2011)

main Asian markets, developments in the capacity and quality of domestic higher education suggest that the demand for UK TNE in the region may weaken in the years ahead. The widespread reference to international university league tables across Asia, which were pioneered by Shanghai Jiaotong University in 2004, has led to a more sophisticated understanding of the relative quality of UK universities and an appreciation of the growing number of Asian universities in the world's top 200.

UK providers of TNE may also be impacted by the increasing emphasis on tighter quality assurance regimes. In many countries, these apply equally to public and private providers, including those that offer franchised and validated UK degrees. The 650 Singaporean providers that have closed since 2009 include colleges which offered UK validated degrees. More rigorous quality assurance regimes may reduce the scope for TNE by, at best, making it more expensive for UK universities to deliver educational services and, at worst, excluding them altogether from certain foreign markets.

The outlook for supply

The analysis of the interview data revealed a number of key themes reported by participants across the four university mission groups about the way that their universities were approaching TNE and by participants from the industry groups about their views of developments across the sector. These themes could be broadly viewed as predominantly positive or negative towards the expansion of TNE, although within each theme there were opposing views.

Positive theme 1: Broaden the market for UK higher education

There was a general recognition that modes 1 and 3, and to a limited extent mode 4, TNE allow UK universities to broaden their market and reach students that would otherwise be unwilling or unable to travel to the UK to study. Participant J noted that there 'never will be more than a tiny minority [of students] who can go overseas... There is going to be an increasing need for TNE because of the growing numbers going into higher education'.

Participant I argued that the benefits of TNE go beyond educating new markets of internationally immobile students, noting that 'TNE is also becoming a core recruitment tool, with 2+1, etc... some big universities have the majority of their international students coming from TNE programmes'. Participant B agreed, noting that 'our strategic plan specifies the number of students we want through partnerships. [This is...] our fastest growing area of international activity'. Participant

J added that while ‘none of these [TNE] deals bring in high financial returns, the big win is that some of these students convert to postgraduate [students studying in the UK]’.

Participant I pointed out that some TNE activities also serve international students beyond the host country: ‘in Malaysia, there are a small number of boutique campuses that have a much better reputation than the franchised degrees. A lot of the students are international students. If you go to North Africa and Middle East, a lot of people are picking up Malaysia as a serious alternative to the UK to take UK programmes’. However, he added a cautionary note that ‘it could be cannibalising the UK market’.

Positive theme 2: Build a global brand for UK universities

A number of participants stressed that universities were focusing on TNE for wider positional gains. Participant I claimed that ‘a lot of VCs have accepted that TNE is part of the university’s mission. Motivations are about reputation, putting a flag in the ground, showing long-term commitment to a market.’ Participant J agreed that ‘any good research university needs to be globally connected... [TNE] hits the soft power agenda’, adding that ‘the Russell Group are in it for the long haul’.

Explaining the rationale for establishing the university’s first joint venture in SE Asia, participant D recalled that ‘at the time, we weren’t doing very much internationally and this was a way to increase our profile overseas’. Several of the participants argued that for universities outside major cities like London and Manchester, TNE was a way of raising the university’s profile in the host country. Participant B likened the value of a successful TNE presence in Asia to having the city’s football team promoted to the Premier League in terms of the impact on regular international student recruitment.

Positive theme 3: UK government is driving TNE across all ministries

Most of the participants acknowledged that TNE was likely to gain from the way that government was attempting to drive expansion across a number of fronts, including the British Council, the new Education UK unit and the ‘HEGlobal’ initiative. Participant I was convinced that government support had been critical in encouraging university engagement in TNE: ‘key ministers like Willetts see TNE as a key part of export education, which doesn’t need international students coming here. They see TNE as a good thing’.

Participant B observed that the government drive had aligned the various agencies to support TNE, with ‘the British Council, the International Unit of UUK [Universities UK], UKTI [UK Trade &

Investment], the new BIS [Department for Business, Innovation & Skills] unit, Education UK, they are all trying to get us to do TNE'. Participant I also added that the government's focus on TNE 'has implications for institutions like the QAA [Quality Assurance Agency], whose guidelines have supported the development of TNE. QAA has helped improve the quality of UK TNE.'

Participant F was more pessimistic about the impact of government policy setting, recalling that 'the end of PMI2 [Prime Minister's Initiative 2] was a shame, that did so much towards promoting TNE... When PMI2 finished, there was nothing in its place. The current government's approach has been so clouded by the UKBA [UK Border Agency] and tit-for-tat visa silliness. Willett's view is not a policy, he is just pointing out the market opportunity'.

Negative theme 1: Risk aversion

The participants from Russell and 94 Group universities (A-D) reported that they did not engage, as a matter of policy, in franchising and validating offshore provision because of the reputational risk. Participant B noted that 'the closest we ever had to a franchised programme was with [a university in North Africa], where 'the majority of staff teaching the modules were moonlighting from [a local university].' This programme was closed because of the reputational risk it posed to the home university.

Participant I observed that 'a lot of TNE was franchises and validated centres, there have been lots of issues and there has been a reduction in these projects. They are very one sided'. Participant C went further, claiming that 'franchising is a dead duck, given its past history'.

Participant G from the University Alliance group reported that 'we have closed a lot of programmes... 10 years ago we had [franchised and validated] programmes in Spain, Norway, Germany, Hong Kong, Italy, they were all closed'. He claimed that, after a prominent post-92 university was 'clobbered in a collaborative audit, our VC got cold feet and ordered a lot of them to be closed. It was a knee jerk reaction to being caught by the QAA.'

Most participants agreed that distance-learning and IBCs reduced the risk of reputational damage, but that their universities were deterred by the high costs and the associated financial risks. Participant C described the costs of developing high-quality online courses as prohibitively high, noting that his university had pulled out of an online development project because of escalating costs. Several of the participants cited high profile cases of failed IBCs, including UNSW Asia and George Mason University.

Negative theme 2: Some TNE activities are not scalable

There was a strong consensus amongst the university participants that the present forms of TNE are not scalable, which may severely limit a supply-side response to growing demand for TNE. While several participants noted that the advent of the ‘massive open online courses’ (MOOCs) may open up new delivery channels, the general view was that the current forms depended on academic staff travelling to support programme delivery and management spending time dealing with overseas partners. Participant D commented that ‘most [academics] do not understand or care... that is the general attitude to international activities, they want to concentrate on their research’.

Staff unwillingness to engage in TNE was reported as being greatest in the Russell and 94 Group universities, where pressure to ‘publish or perish’ means that staff cannot afford to be distracted from their research. Participant C noted that staff were increasingly uninterested in travelling to support TNE provision, claiming that: ‘people see [TNE] as a pain in the arse’, with the result that TNE ‘attrition rates have spiralled and recruitment fell off a cliff.’

Participant J also identified another source of supply-side inelasticity, in terms of the UK’s ability to ensure quality as TNE expanded: ‘the QAA is so overstretched, how can we ensure that quality is maintained?’. Several of the participants were concerned that their universities lacked the institutional capacity to manage a major expansion in TNE activity which required staff to moderate and quality assure teaching and administrative processes at a foreign partner.

Participant E noted that in many TNE partners, the administrative processes were all conducted in the language of the host country, so ‘our capacity to monitor the programme is limited’. Because guaranteeing the quality of a UK degree is so fundamental to the viability of TNE as a business model, this obstacle to the scalability of TNE is particularly serious.

Negative theme 3: Some forms of TNE are not sustainable

Most of the participants recognised that the increasing capacity and quality of higher education in today’s TNE markets was likely to gradually squeeze out franchising and validating degrees. Malaysia was repeatedly cited as an example, where former private colleges which relied on UK universities to award their degrees like Sunway and Taylor’s have now been upgraded to private universities.

Participant K commented that ‘you’ll only be in it [TNE] until the country is doing its own accounting degrees... [This] is not a sustainable model, you’re just plugging the gap until their own sector fills it.’

Participant C was more forthright: ‘what we are doing is training the next cohort of university lecturers for China. That’s the equivalent of the Chinese coming over and buying the blueprints from Jaguar.’

Participant K reported concerns about the sustainability of TNE in China: ‘because of the fall in the birth rate and the vast expansion of university places, the Chinese universities are struggling to fill places. All the time, the Chinese government is changing the rules, restricting the fees we can charge. We don’t know if this market will be sustainable in China’.

Negative theme 4: No pot of gold

None of the participants believed that TNE was profitable in the medium term. Participant B was blunt: ‘if it’s about making money, there are more interesting things to do – you’ll never make money in the medium term’. Participant H noted that ‘we don’t know how much is coming in from overseas endeavours... [but] it’s a very long time to make a return, most hearsay is that they are just breaking even’. Participant E concurred: ‘have we made money? If we take the full costs into account, we probably don’t’.

The participants all distinguished between the revenue streams from TNE, which were generally modest, and the costs, which were invariably underestimated, so making the activities relatively unprofitable. Speaking about a major new TNE partnership, participant F observed that ‘the total revenue stream is equivalent to 70 domestic students a year in [the home campus]. You could get 70 more students by leaving the clearing hotline open another half an hour’. Participant G said that business cases always appeared solid, but that there is ‘always a mismatch between promise and delivery... Projections in terms of numbers never materialise’.

On the cost side, participant G added that: ‘the costs of tutors, academic overheads, etc are not taken into account. If you included everything, you probably don’t make money’. Participant E concurred: ‘there has been a certain naïveté about the costing. The cost of management time is left out, but I spend significant amounts of my time on these contracts’. Participant B added that ‘we never price the risk of reputation and exit’.

Participant A explained why it can be so hard for IBCs to make surpluses: ‘universities take international students on a marginal cost basis, it helps them get to minimum efficient scale. If you set up overseas, the international enrolments have to cover all the costs. You probably need at least 6,000 students to reach minimum efficient scale and, in most cases, that’s never going to happen.’

Negative theme 5: internal resistance

Some of the participants observed that some staff were actively hostile to their institutions engaging in TNE, rather than simply be uninterested because of their research commitments. The case of the University of Warwick, where some academic staff had mounted a campaign to prevent investment in a Singapore campus on the grounds that the host government had a poor human rights record, was cited by several participants. They also reported that some staff felt it was unethical to use funds raised largely from tuition fees to invest in IBCs. Participant D explained that ‘what the hostile group say: it is not our core business, we shouldn’t be doing something that takes up resources that could be used elsewhere’, adding that one powerful opponent to TNE felt that ‘the quality of students in [the TNE programme] is lower than here, non-traditional students who’re not going to get firsts, this reflects badly on the [university]’.

Participant G argued that the internal resistance to TNE came from organisational units within the university with different strategic goals. Many business schools have international accreditations which preclude or discourage TNE or which insist on evaluating all programmes offered by the school. Participant G reported that ‘the dean of the business school... is at loggerheads with [the head of internationalisation]. There are all sorts of things which have been started up that the business school doesn’t want’.

Discussion

The status quo

Analysis of the official data suggests that the present scale and financial importance to UK universities of TNE has been widely overestimated by government, the media and the sector itself. Half of all TNE enrolments are ACCA students/graduates who are automatically registered with Oxford Brookes for ten years, whether they actively engage in writing a dissertation or not. The HESA data is, moreover, headcount. A cautious estimate suggests that at least 70% of TNE students are studying part-time, many of whom may be inactive at any point in time.

In terms of the financial significance of TNE, the Oxford Brookes effect immediately deflates the scale at a stroke. The 239,945 students registered in 2010/11 face submission fees of £135 (Oxford Brookes University, 2012, p42) if they choose to upgrade to a degree, so that they pay the university only 1.2% of the annual tuition fees paid by its 3,200 international students on campus. Put another way, more than 260,000 TNE students would need to submit dissertations each year for the university’s revenue to exceed its earnings from on-campus students.

Table 8 gives one illustration of the difficulty of finding evidence to support the contention that TNE is becoming a major source of revenue and profit. It compares four Million+ universities with almost identical campus-based student populations in the range 20,500-22,000 for 2010/11. Staffordshire University is the outlier, with over 11,000 TNE students, but has the lowest revenue of this peer group. This evidence is no sense conclusive, given the commercial secrecy that shrouds university's accounts with regard to TNE, but it is significant that no evidence of the benefits of TNE activity appears visible in Staffordshire University's HESA return.

TABLE 8
Rankings of strength of quality assurance (score/10)

	Total FTEs	TNE Headcount	Total income	Total expenditure	Surplus/(deficit) for the year
Anglia Ruskin University	21,765	2,955	£166,398	£153,624	£9,271
University of Bedfordshire	20,540	2,995	£124,456	£111,468	£12,988
The University of Huddersfield	21,180	1,800	£139,026	£123,571	£15,455
Staffordshire University	22,000	11,060	£123,337	£117,850	£5,487

Source: HESA (undated)

The outlook for demand

Analysis of the forecast trends in the main drivers of the demand for UK TNE paints a mixed picture. The analysis focuses on the main TNE markets in Asia, which currently dominate the demand for UK TNE. *Per capita* income growth is projected to slow, but remain buoyant across the region. Although population growth in the key 20-24 age range will slow, and become negative in China, on balance the macroeconomic and demographic factors will combine to ensure continuing, but much slower, growth in the demand for higher education across Asia.

On the other hand, in virtually all the main Asian markets, participation rates in domestic higher education are rising strongly, as incumbent universities expand enrolments and new institutions are established. At the same time, almost every government has ambitious plans to upgrade quality, both by investing public funds in creating an elite of 'world-class universities' and by strengthening quality assurance regimes to improve quality across the board. This latter trend not only threatens to choke off the demand from Asian students for UK TNE, but may lead to a more hostile operating environment for UK universities

and their local partners for all but the most highly-regarded institutions.

It is hard to avoid the conclusion that, in terms of the demand for UK TNE, slowing growth in the demand for higher education will be absorbed by an increasingly vibrant and high quality domestic higher education, slowly squeezing out UK universities. While high-status universities like Nottingham (China/Malaysia), Newcastle (Malaysia) and UCL (Qatar) may enjoy success with programmes welcomed and supported by host governments, the outlook is much less optimistic for the providers of franchised and validated degrees.

The outlook for supply

Analysis of the attitudes of senior decision-makers across a range of UK universities towards the expansion of TNE reveals a number of factors which may positively or negatively affect the supply-side response. On the positive side, there was a general consensus that universities are interested in expanding TNE as a means of reaching new markets. However, because the financial returns from foreign students who cannot afford a UK education are relatively low, there was greater interest in the scope for TNE activities in a country to stimulate increased conventional international students. There was some awareness of the risk of TNE cannibalising international enrolments from third country markets, as students in, say, Africa realise they could get a UK degree much more cheaply by studying in Malaysia.

Some universities are also attracted to TNE by the opportunity to create a stronger global brand and there are clear benefits in terms of attracting international students, staff and research and scholarship funding of being perceived as a 'global player'. However, achieving this outcome require universities to invest in branded IBCs and, as the official statistics show, these account for less than 0.5% of all TNE students. There is much less scope for universities to build global brands when they franchise or validate degrees at lower-status partner institutions.

It seems that universities have generally welcomed the government's encouragement for TNE and the subsequent alignment of the major agencies. However, there is a view that the government's words are empty exhortations, with none of the purposeful funding to support TNE that universities had enjoyed under the Prime Minister's Initiatives.

Set against these positive factors are a number of factors which are likely to inhibit a supply-side response. Universities are innately conservative and cautious. TNE exposes universities to considerable financial and reputational risk, not just in the event of failure but (in some cases) by association with foreign governments. Universities are

often unwilling to see a major expansion in TNE because of the opportunity cost of the time spent by academics and senior managers supporting and managing these partnerships. This is most marked in the research-intensive universities, which are the group most actively courted by host governments to set up IBCs.

Universities also fear that forms of TNE like franchising and validating degrees may not be a sustainable activity, as their partners are either upgraded to degree-awarding status, outcompeted by domestic rivals or fall foul of tightening quality assurance regimes. Paradoxically, the more successful a TNE partnership with a foreign partner, the more quickly the partner is likely to wean itself off the parent-child relationship. The Universities of Leicester, Nottingham and Southampton provide case studies closer to home: they were all once associate colleges of the University of London, offering external London degrees.

There is a general recognition that, distance-learning apart, the forms of TNE that require some form of physical in-country presence are not financially attractive. Although TNE increasingly involves new forms of collaboration, with private sector partners which provide physical in-country facilities and take a share of the financial risk, UK universities have not been traditionally entrepreneurial and none of the participants felt that they could justify a major increase in TNE on financial grounds. Finally, this message is not lost on academic staff and there are pockets of internal resistance in many universities to expanding TNE, partly because of the concern that it will divert resources from mainstream teaching and research.

Conclusions

The UK coalition government has invested considerable political capital in its belief that TNE is 'one of Britain's great growth industries of the future'. This study finds little evidence to support the thesis that TNE is, in fact, likely to be a great growth industry. Rather it finds that the present scale of the sector is overstated and distorted by the official data, demand conditions are likely to move against the UK in key TNE markets and there are compelling reasons for believing that many UK universities are unwilling or unable to respond to the demand that does exist. It highlights the dangers for policymakers of setting objectives in the absence of a strong evidence base about current capabilities and future market trends.

There are important caveats to this conclusion, not least the emergence of consortium-based MOOCs which may reduce the costs of developing and marketing online programmes and become the dominant

form of TNE. Nevertheless, this study illustrates the need for more rigorous research to understand the nature and scale of the present UK TNE market, future demand trends and the obstacles holding back a supply-side response from the UK higher education sector.

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References

- ACCA (undated) *Our history*, available from: <http://www.accaglobal.com/en/discover/about/history.html> [Accessed 19 February 2013]
- Adam, S (2001) *Transnational education project report and recommendations*, Confederation of European Union Rectors' Conferences, available from: http://www.sc.ehu.es/siwwebso/Bolonia/textos/AEES_EHEA/Malmoe_transnational_education_project.pdf [Accessed 9 March 2013]
- Altbach, P (2007) 'Twinning and branch campuses: the professorial obstacle', *International Higher Education*, 48:2-3
- Altbach, P, Reisberg, L and Rumbley, L (2009) *Trends in global higher education: tracking an academic revolution*. A Report Prepared for the UNESCO 2009 World Conference on Higher Education, available from: <http://unesdoc.unesco.org/images/0018/001831/183168e.pdf> [Accessed 20 December 2012]
- Altbach, P and Knight, J (2007) 'The internationalization of higher education: motives and realities' *Journal of Studies in International Education*, 11 (3-4):290-305
- Bohm A, Follari M, Hewett A, Jones J, Kemp N, Meares D, Pearce D and Van Cauter, K (2004) *Vision 2020. Forecasting international student mobility: a UK perspective*, London: British Council
- Bennell, P and Pearce, T (2003) 'The internationalisation of higher education: exporting education to developing and transitional economies', *International Journal of Educational Development*, 23(2):215-232
- British Council (2012a) *The shape of things to come: higher education global trends and emerging opportunities to 2020*, available from: <http://ihe.britishcouncil.org/news/shape-things-come-higher-education-global-trends-and-emerging-opportunities-2020> [Accessed 20 June 2012]
- British Council (2012b) *Portrait of an international student*, Manchester: British Council
- Cantwell, B, Luca, S and Lee, J (2009) 'Exploring the orientations of international students in Mexico: differences by region of origin', *Higher Education*, 57:335-354
- Central Intelligence Agency (undated) *The World Factbook*, available from: <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html> [Accessed 16 August 2013]
- Council of Europe (2002) *Code of good practice in the provision of transnational education*, Strasbourg: Council of Europe, available from:

- http://www.coe.int/t/dg4/highereducation/recognition/code%20of%20good%20practice_EN.asphttp://www.coe.int/t/dg4/highereducation/recognition/code%20of%20good%20practice_EN.asp [Accessed 14 July 2012]
- Doorbar, A and Bateman, C (2008) 'The growth of transnational higher education: the UK perspective' in Dunn L and Wallace M (eds) (2008) *Teaching in transnational higher education*, New York: Routledge
- Drew S, Tang N, Poole G, Willis B (2006) *Trans-national education – UK higher education institutions' response to increasing global demand: summary report*, Manchester: British Council
- Drew, S, McCaig, C, Marsden, D, Haughton, P, McBride, J, McBride, D, Willis, B and Wolstenholme, C (2008) *Trans-national education and higher education institutions: exploring patterns of HE institutional activity*, London: Department for Innovation, Universities and Skills
- Edwards, J, Crosling, G and Edwards, R (2010) 'Outsourcing university degrees: implications for quality control', *Journal of Higher Education Policy and Management*, 32(3):303-315
- Garrett, R (2002) *International branch campuses: scale and significance*, Redhill: Observatory on Borderless Higher Education, available from: http://www.obhe.ac.uk/documents/view_details?id=574 [Accessed 20 September 2012]
- Garrett, R (2004) *Transnational delivery by UK higher education, part 2: innovation and competitive advantage*. Redhill, Observatory on Borderless Higher Education, available from: www.obhe.ac.uk/documents/download?id=62 [Accessed 6 June 2012]
- Garrett, R and Verbik, L (2003a) *Transnational higher education, part 1: the major markets – Hong Kong and Singapore*, Redhill: Observatory on Borderless Higher Education, available from: http://www.obhe.ac.uk/documents/view_details?id=703 [Accessed 6 June 2012]
- Garrett, R and Verbik, L (2003b) *Transnational higher education, part 2: shifting markets and emerging trends*. Redhill, Observatory on Borderless Higher Education, available from: http://www.obhe.ac.uk/documents/view_details?id=706 [Accessed 6 June 2012].
- Garrett, G and Verbik, L (2004) *Transnational delivery by UK higher education, Part 1: data and missing data*, Redhill: Observatory on Borderless Higher Education, available from: http://www.obhe.ac.uk/documents/view_details?id=63 [Accessed 6 June 2012]
- Grant, C (2013) *Losing our chains? Contexts and ethics of university internationalisation*, Leadership Foundation for Higher Education
- Hatakenaka S (2004) *Internationalism in higher education: a review*, Oxford: Higher Education Policy Institute
- Hawthornthwaite, J and Cookson, G (2008) *The world in 2050 – Beyond the BRICs: a broader look at emerging market growth prospects*, PWC, available from: http://www.pwc.com/gx/en/world-2050/pdf/world_2050_brics.pdf [Accessed 28 February 2013]
- HESA (undated) *Statistics – Students and qualifiers at UK HE institutions*, available from: <http://www.hesa.ac.uk/content/view/1897/239/> [Accessed 3 March 2013].
- Humphrey, C (2009) *Transnational Education and the student experience: a PMI student experience project report*, UK Council for International Student Affairs,

- available from: http://www.ukcosa.org.uk/files/pdf/pmi/tne_report.pdf [Accessed 25 November 2012]
- Ilieva, J (2011) *Global Gauge: East Asia*, Hong Kong: British Council
- Knight, J (2003) *GATS, trade and higher education: perspective 2003 – where are we?* London: OBHE, available from: www.obhe.ac.uk/documents/download?id=698 [Accessed 6 October 2012]
- Knight, J (2005) *Borderless, offshore, transnational and crossborder education: definition and data dilemmas*, Redhill: Observatory on Borderless Education available from: http://www.obhe.ac.uk/documents/view_details?id=35> [Accessed 6 February 2012]
- Kwan K (2005) *Good practice: contract negotiation for transnational higher education*, Redhill: Observatory on Borderless Higher Education, available from: <http://www.obhe.ac.uk/products/reports/ftpdf/September2005.pdf> [Accessed 20 September 2012].
- Lane, J and Kinser, K (2012) 'International branch campuses: one definition to rule them all?', available from: <http://chronicle.com/blogs/worldwise/international-branch-campuses-one-definition-to-rule-them-all/29051> [Accessed 6 February 2013]
- Larsen, K, Momii, K and Vincent-Lancrin, S (2004) *Cross-border higher education: an analysis of current trends, policy strategies and future scenarios*, Redhill: The Observatory on Borderless Higher Education, available from: http://www.obhe.ac.uk/documents/view_details?id=49 [Accessed 19 October 2012]
- Lawton, W and Katsomitros, A (2012) *International branch campuses: data and developments*, Redhill: Observatory on Borderless Higher Education, www.obhe.ac.uk/documents/download?id=894 [Accessed 22 August 2012].
- Lee, K and Tan J (1984) 'The international flow of third level lesser developed country students to developed countries: antecedents and implications', *Higher Education*, 13:687–707
- Li, M and Bray M (2007) 'Cross-border flows of students for higher education: push–pull factors and motivations of mainland Chinese students in Hong Kong and Macau', *Higher Education*, 53:791–818
- Marginson, S (2010) 'Higher education in the global knowledge economy', *Procedia Social and Behavioral Sciences*, 2:6962–6980
- Marginson, S (2011) 'Higher education in East Asia and Singapore: rise of the Confucian Model', *Higher Education*, 61:587–611
- Martin, M (ed) (2007) *Cross-border higher education: regulation, quality assurance and impact*, Paris: UNESCO, available from: <http://unesdoc.unesco.org/images/0015/001538/153897e.pdf> [Accessed 6 June 2012]
- Mazzarol, T and Soutar, G (2002) "'Push–pull" factors influencing international student destination choice' *International Journal of Educational Management*, 16(2):82–90
- McBurnie, G and Ziguas, C (2009) 'Trends and future scenarios in programme and institution mobility across borders', in *Higher Education to 2030 Volume 2: Globalization*, Paris, OECD:89–108
- McMahon, M (1992) 'Higher education in a world market: an historical look at the global context of international study', *Higher Education*, 24(4):465–482

- Miles, M and Huberman, A (1994) *Qualitative data analysis: an expanded sourcebook*, London: Sage
- Mincer, J (1974) *Schooling, earnings and experience*, New York: Columbia University Press
- Ministry of Education of the People's Republic of China (undated) *Education statistics*, available from: <http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s4966/index.html> [Accessed 13 January 2013].
- Naidoo, V (2009) 'Transnational higher education: a stock take of current activity', *Journal of Studies in International Education*, 13:310-330
- OECD (2012) *Education at a glance 2012: highlights*, Paris: OECD, available from: <http://www.oecd.org/edu/highlights.pdf> [Accessed 30 October 2012].
- Oxford Brookes University (2012) *BSc (Hons) in Applied Accounting and Research and Analysis Project Information Pack*, available from: http://www.accaglobal.com/content/dam/acca/global/PDF-students/2012b/bscpack2012_13.pdf [Accessed 7 February 2013]
- Psacharopoulos, G (1994) 'Returns to investment in education: a global update', *World Development*, 22(9):1325-1343
- Quality Assurance Agency (2010) *Code of practice for the assurance of academic quality and standards in higher education: Collaborative provision and flexible and distributed learning*, available from: <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/collab2010.pdf> [Accessed: 1 March 2013]
- Ratcliffe, R (2013) 'Surge in students studying for UK degrees abroad', *The Guardian*, available from: <http://www.guardian.co.uk/education/2013/feb/15/surge-in-students-studying-for-uk-degrees-abroad> [Accessed 13 February 2013]
- Schutt, R (2006) *Investigating the social world*, Boston: University of Massachusetts
- Seah, W and Edwards, J (2006) 'Flying in, flying out: offshore teaching in higher education', *Australian Journal of Education*, 50(3):297-311
- Shams, F and Huisman, J (2012) 'Managing offshore branch campuses' *Journal of Studies in International Education*, 16(2):106-127
- Tilak, J (2011) *Trade in higher education: the role of the General Agreement on Trade in Services (GATS)*, Paris: UNESCO, available from: <http://unesdoc.unesco.org/images/0021/002149/214997e.pdf>> [Accessed 20 October 2012]
- Tinbergen, J (1962) *Shaping the world economy: suggestions for an international economic policy*, New York: Twentieth Century Fund
- Trow, M (1962) 'The democratization of higher education in America' *European Journal of Sociology*, 3: 231-262
- UNESCO (1998) *World statistical outlook on higher education 1980-1995. Working document World Conference on Higher Education in the Twenty-first Century: Vision and Action*. Paris: UNESCO, available from: <http://unesdoc.unesco.org/images/0011/001136/113601eo.pdf> [Accessed 12 January 2013]
- UNESCO (2013) *Table 3B: Enrolment by ISCED level*. Paris: UNESCO. Available from: <http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx> [Accessed 8 March 2013]

- United Nations Population Division (2011) *World population prospects, the 2010 revision*, available from: <http://esa.un.org/unpd/wpp/Excel-Data/population.htm> [Accessed 21 December 2012]
- Verbik, L and Merkley, C (2006) *The International Branch Campus – Models and Trends*, Redhill: Observatory on Borderless Higher Education, available from: http://www.obhe.ac.uk/documents/view_details?id=34 [Accessed 20 November 2012]
- Wan, L (2011) 'Over 600 private schools have closed', *The Straits Times*, available from: <http://www.creosis.com/index.php/event-news/108-over-600-private-schools-have-closed> [Accessed 20 February 2013]
- Wilkins, S and Huisman, J (2012) 'The international branch campus as transnational strategy in higher education' *Higher Education*, 64(5):627-645
- Willets, D (2012) *A world without boundaries* London: Department for Business Innovation and Skills, available from: <https://www.gov.uk/government/speeches/uuk-conference-a-world-without-boundaries> [Accessed 19 November 2012]
- World Trade Organization (undated) *Definition of services trade and modes of supply*, available from: http://www.wto.org/english/tratop_e/serv_e/cbt_course_e/c1s3p1_e.htm#boxa [Accessed 5 June 2012]