

**Institution:** Lancaster University

Unit of Assessment: 19, Business and Management Studies

**Title of case study:** Calculating the Value of Global Education Exports for UK Government.

# 1. Summary of the impact

Prior to 2004 there was no accurate way of determining the value of education to the UK economy. Moreover, education had not previously been considered as part of the economy in the same way as, for example, manufacturing. At this time the British Council commissioned Geraint Johnes to produce a methodology for evaluating the global value of all education exports. The Department of Business, Innovation and Skills used this on 2008-2010 data to calculate its worth at £14.1bn to the UK. BIS have re-used this methodology in subsequent years and estimated that by 2025 the UK value will increase to £26.6bn. The research has also been used in the ongoing debate on immigration and UK Border Agency policy for example the revoking of visas by London Metropolitan University in August 2012, which was widely publicised by national and international media. It has also been frequently cited in government papers and in Parliament.

# 2. Underpinning research

Professor Geraint Johnes' well-established expertise in the economics of education includes work on rates of return to education, performance indicators for educational institutions, the estimation of cost frontiers and the evaluation of efficiency in higher education. Being well versed in these two knowledge bases (education and economics) Johnes was asked by the British Council in 2004 to produce a methodology for evaluating the global value of all education exports in the UK.

## 'The global value of education and training exports to the UK economy' project:

This project represented an innovation for governmental organisations in that it brought together, via a steering group, representatives of several government bodies. In addition to the British Council, the Office for National Statistics, Department for Education, Department for Trade and Industry and the Department for Business Innovation and Skills (BIS) were all involved (current department names).

The research itself was summarised in the 2004 report 'The global value of education and training exports to the UK economy' available at <a href="http://gianlucasalvatori.nova100.ilsole24ore.com/files/global-value-of-education-and-training-exports-to-the-uk-economy.pdf">http://gianlucasalvatori.nova100.ilsole24ore.com/files/global-value-of-education-and-training-exports-to-the-uk-economy.pdf</a>, written by Johnes for the British Council. It summarises the project aims (below) and findings (see Section 4):

- Develop a methodology for the annual calculation of exports of education and training services from the UK and
- Demonstrate the practical application of this methodology by providing estimates for 2001-02

#### Research insight and challenges:

Previous studies of the estimates of education's contribution to UK exports were conducted by Bullivant 'The value of education and training exports to the UK economy' (1998) and Rylance-Watson and Associates (1999) 'UK Exports of Training Expertise'. Bullivant's approach was focused on industrial and commercial contracts and Rylance-Watson and Associates' findings were largely based on surveys of professional bodies. Both failed to reflect accurately the value of education exports. The BIS Economist on the steering group provides details of the impact of the project (see Section 4) but also clarified that the 'steering group was seeking to estimate the scale of UK education and training exports, going beyond the available data in the UK Balance of Payments statistics to identity and estimate other important sources of exports such as English Language teaching, income from research grants, as well as more obscure categories such as fees charged by examination boards and accreditation bodies'.

The project presented a number of challenges. First, the boundaries of what may be thought of as the 'education and training' sector need to be defined. In order to achieve this certain questions need to be addressed. To include the exported output of schools and universities is uncontroversial but should the



expenditure of overseas students on maintenance be included? Should exports of educational media (publications, broadcasts, equipment) be included? As an extreme example, should the skills that are embodied in workers who are employed (and producing goods and services for exports) in the full range of industries be included? To solve these problems, a total figure was produced but also disaggregated data for each category so that users could see clearly what was being included in various measures. So for example, someone who thought that broadcasts shouldn't be included didn't have to include them in the figures they used – they could just add up the categories they thought should be included. Secondly, while official or unofficial data are available from a wide variety of sources (e.g. HESA, UUK, Student Income and Expenditure Survey, the Learning and Skills Council's Individualised Learner Record, etc.) to support the calculation of many of the indicators used, special surveys had to be designed to collect data on, for example, postgraduate fees for EU students, and on the provision of private education in the further and higher education sectors.

The underpinning research gave Johnes a unique insight into sources of data covering secondary, further and higher education in the UK, and moreover provided an understanding of theoretical and conceptual issues of relevance to the 'global value' study.

### 3. References to the research

The body of published work in this area at that time included the following peer reviewed, international journal articles and books:

- 1. Johnes, G. (1993) 'The Economics of Education' Macmillan: Basingstoke
- 2. Izadi, H.; Johnes, G.; Ozcrochi, G. and Crouchley, R. (2002) 'Stochastic frontier estimation of a CES cost function: the case of higher education in Britain', *Economics of Education Review* 21(1): 63-72
- 3. Bradley, S.; Johnes, G. and Millington, J. (2001) 'The effect of competition on the efficiency of secondary schools in England', *European Journal of Operational Research* 135(3): 545-568
- 4. Johnes, G. (1999) 'The management of universities', Scottish Economic Society'/Royal Bank of Scotland Annual Lecture, *Scottish Journal of Political Economy* 46(5): 505-522
- 5. Johnes, G. (1997) 'Costs and industrial structure in contemporary British higher education', *Economic Journal* 107(May): 727-737
- Johnes, G. and Johnes, J. (1993) 'Measuring the research performance of UK economics departments: an application of data envelopment analysis', Oxford Economic Papers 45(2): 332-347

# 4. Details of the impact

The significance and reach of the impact of this research is evidenced by the changes in policy recommended by several UK government departments, citations of the methodology in government white papers and frequent mention of the research in parliamentary discussions. The Accounts Coordinator for Programmes and Projects at the British Council corroborates that what 'the report did was to set a benchmark as this work had not been previously done. So education can be treated as a part of the UK economy just as manufacturing.'

#### Publication of the project results:

The research findings were first published in 2004 when the Department for Education and Skills produced a strategic paper entitled <u>'Putting the world into world-class education'</u>, drawing on the work of Johnes and by The Times Education Higher <u>'UK market worth £10 billion'</u>, citing Johnes analysis of income generated by overseas students and the purchase of goods and services whilst in education. The Higher Education Adviser at the British Council corroborates that 'this headline figure was quoted by several government departments and Ministers and at many British Council events and in publications'.

The Economist at BIS, who was on the project steering group, corroborates that 'Johnes work was very helpful to this group in establishing a credible estimate of the scale of UK exports of education

## Impact case study (REF3b)



and training that was useful for the British Council in making its case for the importance of education and training and helped UK Trade and Investment (UKTI) in its prioritisation between sectors.' The study has since been updated twice, both heavily citing the 2004 study and the methodology developed at Lancaster.

As time passed and inflation and student numbers increased BIS decided to update the figures, using Johnes' methodology, to produce more timely values. The first update was in 2007 by Pamela Lenton at the British Council entitled 'Global value: the value of UK education and training exports, an update' and Johnes was invited to conduct the 2007 revision of the study (see corroborating e-mail from British Council). In 2011 the work was updated again in BIS Research Paper 46 by Gavan Conlon, Annabel Litchfield and Greg Sadlier (prepared by London Economics) entitled 'Estimating the value to the UK of education exports' and Johnes was again invited to review the work.

# Impact on UK government policy and strategy:

The work has been cited in a variety of government documents, including a BIS Economics Paper (8) in 2010, 'UK trade performance: patterns in UK and global trade growth'.

The research findings have also been referred to frequently in parliament, most recently by the Minister for State for Universities and Science, Rt Hon David Willetts MP: 'Research published by BIS estimates the total value of education exports to the UK at £14.1 billion (in 2008/09) and forecasts that total UK education exports could rise to £17.6 billion in 2015 and £26.6 billion by 2025' (on 5<sup>th</sup> December 2011). This estimate was obtained using Johnes' methodology and was again employed by BIS for their 'International Education: Global Growth and Prosperity' report in July 2013. In a section of a speech to Universities UK in September 2012 entitled 'Industrial strategy and education exports', Willetts emphasised the role of education as a 'great British export industry'.

#### Student visa debate:

The work done by BIS, using Johnes' methodology, has also served as input into the debate on student visas, with the million+ group of universities using this as <u>evidence</u> to support its argument that international students should not be treated as migrants. The million+ group has used the studies as evidence on numerous other occasions – for example, its then chair, Les Ebdon, cited the work in his <u>evidence</u> to the BIS Committee on 29<sup>th</sup> March, 2011. The data produced by these exercises have been reported to parliament on several occasions, providing evidence of the value of education exports to the UK. The updates to the original research have also been used in this debate by Graham Able and Fraser White in their report, <u>'Education: a Great British Export?'</u> (March 2012). Potential beneficiaries therefore include – as well as government – universities and overseas students themselves, whose ability mutually to benefit from trade is determined by the availability of visas. The debate on student visas is ongoing at the time of writing, so the extent of benefit is currently unclear.

NUS president Liam Burns, for example, cited the potential cost of stripping a university of its ability to recruit students, given the value of higher education as an export industry, when interviewed on the <a href="Today programme on Radio 4">Today programme on Radio 4</a> on 30<sup>th</sup> August, 2012 in relation to the <a href="revoking of London Metropolitan University's licence">revoking of London Metropolitan University's licence</a> to authorise visas.

London Economics have also provided <u>evidence</u> to the BIS Committee, using Johnes' methodology, on the likely impacts of changes in undergraduate tuition fees, and this has included an assessment of the impact on educational exports.

# Ongoing impact:

Following the work on 'the global value' project, Johnes was invited to participate in a Vision2020 steering group called with members from the British Council, academics and representatives from Australia to discuss the forecasting of overseas student numbers. The work related indirectly to the 'global value' project as it entailed forecasting some of the data used in that project. Johnes was subsequently a very active participant in this group.

Other work in the area of the economics of education has likewise had an impact. For example, work

## Impact case study (REF3b)



on cost structures and mergers in higher education has had input into the Welsh Assembly Government's deliberations on the future shape of higher education in North Wales. Johnes served on the 'Webb Review' of higher education and a report with the findings from the review was submitted to the minister in June 2013. It is, however, too early to evaluate the impact of this work.

## 5. Sources to corroborate the impact

### Statements:

- 1. Economist, Europe Trade and International Directorate, Department for Business, Innovation & Skills corroborates the aims and achievements of the (educational exports) steering group and the credibility of the estimate put forward using Johnes' calculations.
- 2. Higher Education Advisor, British Council corroborates the re-use of the methodology in the 2007 and 2011 publications and the government and media use of the initial 2004 findings.
- 3. Account Coordinator, Programmes and Projects, Middle East and North Africa Group, British Council Development and Training Services corroborates that the work brought together different government departments to work on the problem and that it set a benchmark for treating education as part of the economy.

#### Media:

- 4. 'Education exports are currently worth more than £14bn a year and could rise to £27bn by 2025, it was estimated.' 22<sup>nd</sup> January, 2013 <a href="http://www.bbc.co.uk/news/education-21141145">http://www.bbc.co.uk/news/education-21141145</a>
- 5. Transcript of David Willetts' speech at University UK conference, citing the value of education exports, 13<sup>th</sup> September, 2012 <a href="http://news.bis.gov.uk/Press-Releases/A-world-without-boundaries-David-Willetts-speech-at-UUK-conference-Keele-University-13-September-2012-68007.aspx">http://news.bis.gov.uk/Press-Releases/A-world-without-boundaries-David-Willetts-speech-at-UUK-conference-Keele-University-13-September-2012-68007.aspx</a>
- 6. HM Government report, 'International Education', corroborating that UK exports were worth an estimated £17.5bn in 2011 and the UK was the second most popular destination for UK students <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/225562/international-education-industrial-strategy-infographics.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/225562/international-education-industrial-strategy-infographics.pdf</a>

# Invitations to extend research:

- 7. Invitation to conduct the 2007 revision of the study (e-mail from the British Council, 12<sup>th</sup> September, 2005) and invitation to participate in the London Economics bid for the 2011 revision (email from London Economics, 15<sup>th</sup> September, 2010), available upon request.
- 8. Invitation to join the technical steering group of the Vision2020 project (email from the British Council, 28<sup>th</sup> April, 2003), available upon request.