

Are graduates good value for money?

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The world has more graduates than ever before. In an era of mass expansion, the proportion of the population with degrees is at a historical high across many nations, both developed and developing. The world also has more newspaper and magazine articles, thinktank reports and academic papers than ever before questioning the value of that expansion.

In recent years, policymakers have been driven by a human capital theory approach to higher education expansion: their belief has been that as graduate numbers are grown, individual graduates with higher skill levels will boost national productivity and be rewarded with an “earnings premium”. And universities have been happy to expand to meet the demand for places on the basis that governments foot the bill, either through grants or student loans.

But that accord between governments and universities is fragmenting in some nations. Those with the most advanced income-contingent loans systems, England and Australia, have also removed student number controls to allow further expansion. But it is no coincidence that their governments are also most advanced in their desires to measure the employment outcomes of higher education via potentially intrusive and narrowly instrumental new metrics. This has met with an appalled reaction from many universities.

A case in point is England’s teaching excellence framework – an attempt, via quality proxies, to drive the market that failed to emerge when universities flocked to the £9,000 maximum fee when it was introduced in 2012. Jo Johnson, the universities and science minister, recently announced that data on graduate earnings by university and course will be included in future TEFs, and there have even been suggestions in newspaper reports that the government wants to set variable fee caps across different universities according to their graduate earnings.

Those policymakers seeking to measure the economic outcomes of higher study are often believers in the merits of

expansion. But their drive for metrics, to justify government investment and seek better productivity gain, emerges partly in response to pressure from those, often on the right, who never believed in expansion in the first place.

The merits of English expansion are likely to come into sharp focus in the [review of higher education funding](#) announced by Theresa May during the recent Conservative Party conference. In her speech, May herself sounded sceptical about expansion, noting that students in England “take on a huge amount of debt...and if we are honest, some don’t know what they get...in return”. But it is interesting that the conference also saw the launch of a book in which Nick Hillman, who was special adviser to David Willetts when the then minister for universities and science introduced the £9,000 fees regime, [called for](#) participation in UK higher education to rise from its current 49 per cent to 70 per cent.

One essential question to answer around all of this is why degrees have become necessary for entry into many jobs that never required them in the past. But it is also crucial to ask whether there is a better way to judge the value that governments derive from expanding higher education beyond a fluctuating “graduate earnings premium”.



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As the Organisation for Economic Cooperation and Development’s director for education and skills, Andreas Schleicher is a major influence on higher education policymakers in national governments. The latest edition of the OECD’s annual *Education at a Glance* report, published in September, shows continued “significant expansion of the higher education sector in much of the industrialised world and actually robust returns” in terms of earnings, says Schleicher.

“Across OECD countries, 25- to 64-year-old adults with a tertiary degree earn on average 56 per cent more than those with only upper secondary education,” the report says (it is important to bear in mind that tertiary education includes not just universities, but college and vocational education as well).

While the OECD finds a slight decline in average earnings returns overall between 2005 and 2015, Schleicher argues that this is actually evidence of returns for graduates holding up remarkably well in the face of massive higher expansion over that period. For him, it also refutes the argument that graduates, as the brightest people in their age groups, would have earned the same salaries without their university education. If such “sorting” were the only reason for the graduate premium, “you would have seen a massive decline [in returns] as you expand the [graduate] pool”, Schleicher says. “If supply [of graduates] is rising faster than demand, you would see a massive decline in the rate of return. None of this has happened.”

But sceptics will question the focus on average rates of return, which ignores the earnings variation between graduates of more and less prestigious institutions. It is also arguable that nations like the UK have the balance between vocational and higher education wrong.

Nursing has been something of a lightning rod for critics of so-called “credentialism”, or the emergence of the degree as a requirement in professions previously only requiring sub-degree qualifications. Since 2013, all registered nurses in the UK have been required to have a degree in a course approved by the Nursing and Midwifery Council. But in the same year, Sir Vince Cable, now leader of the UK’s Liberal Democrats and then the secretary of state responsible for universities, objected in a speech to the fact that in a “whole lot of fairly standard professions – not elite professions – a degree is a basic qualification”. He added: “The idea that in order to be a police officer or a nurse you have to have a degree: I mean, that is just qualification inflation.” Graduate nurses have also been a frequent target for newspaper columnists such as *The Sunday Telegraph*’s Allison Pearson.

Yet research provides a clear case for making degrees a requirement for nurses. In 2014, [a study](#) published in *The Lancet* looked at discharge data for 400,000 patients who underwent common surgeries in 300 hospitals in nine European nations. It found that every 10 per cent increase in a hospital’s number of nurses with a bachelor’s degree was associated with a 7 per cent decrease in the likelihood of an inpatient dying within 30 days of admission.

“I think that’s a pretty powerful argument,” says Anne Corrin, head of education at the Royal College of Nursing. The degree requirement, she says, reflects the fact that “the role of the nurse has changed” in recent years, now requiring the operation of “advanced-level technology” and the use of “critical thinking skills, leadership skills and advocacy skills”.

But not all nurses are registered nurses – so not all nurses treating patients in the NHS are required to have degrees. Registered nurses are “the leaders: the ones running services, working at board level, influencing policy, doing research... You do need a degree to take on those roles and do them professionally,” Corrin argues. The degree requirement puts the UK “in line with the rest of the world”, including the US and Australia, she adds. “We were quite slow to become an all-graduate profession.”

Roger Watson, professor of nursing at the [University of Hull](#), recently published [research in the *Journal of Advanced Nursing*](#), which also demonstrated a link between graduate nurses and improved patient outcomes. He was able to make clearer connections than the *Lancet* study by linking individual nurses with the individual patients for whom they cared (the study was conducted in Qatar, as hospitals there keep detailed electronic records on individual nurses and patients). The results indicate “a significant association between patient mortality and nurse gradueness”, the research finds, suggesting that, in an ideal world, about 70 per cent of a hospital’s nursing workforce should be educated to degree level.

Hostility to the idea of nurses being graduates is “straightforward prejudice”, says Watson, and is based on the fact that some people “don’t understand what nursing is about” today, and still assume that while nurses must be “nice” and “preferably female”, they “don’t need to be that clever”.



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Nursing is a special case, some might say. But if critics of graduate expansion can so badly misunderstand the nature of modern work and ignore the evidence of improved outcomes in nursing, perhaps they are doing the same regarding other higher education qualifications.

Nick Timothy, adviser to Theresa May until this year's general election, is reported to still be in regular contact with the prime minister despite her having been forced against her will to sack him following a disastrous election campaign earlier this year. In his regular [Daily Telegraph column](#), he recently recalled having his hair cut by a young [Southampton Solent University](#) graduate in football studies: "I doubted whether he thought his qualification was worth the debt that he will carry around his neck for 30 years."

For Timothy, those who choose the "wrong institutions and courses will see little benefit" from their studies, a situation that arises because successive governments and ministers have argued for the "mistaken assumption" that "more people with degrees means more economic growth: we need, therefore, more graduates".

Searching the Ucas website for football-related subjects starting in 2018 brings up 72 courses at UK universities. Solent's course bills itself as having enabled graduates to go on to careers in "coaching, football development, performance analysis, scouting and education roles at all levels of the sport".

Graham Baldwin, Southampton Solent's vice-chancellor, explains that the football studies degree has been running for more than 20 years. As football "has become a much bigger business", it has developed a need for "people who are more highly qualified, more professionally qualified and far more knowledgeable about the industry than people

would have been many years ago”, he says.

In terms of Solent’s football studies graduates, Baldwin says that “a lot of them are going into coaching and development, working at grassroots level. But a significant number also go and work for football clubs in the [English] Football League and we have many who are working in the Premier League.” That could be in administration roles or in sports science “undertaking the detailed analysis [of data on player performance] that takes place nowadays”, he adds.

In June, the government published the first full data in its Longitudinal Education Outcomes (LEO) project, which looks at graduate earnings six years after graduation by university and course (and which will provide the graduate earnings data for the TEF). The key reference point is the £20,800 median salary for 25- to 29-year-olds in work (graduates and non-graduates) in 2014-15. For the purposes of the project, the Solent football studies course is split across two subject codes: 67 per cent in business and administrative studies and 33 per cent in biological sciences (which includes a sport and exercise category). In the former, Solent graduates had a median salary of £24,600; in the latter, £23,800. Unless football studies is somehow wildly out of step with the other Solent courses in those subject groupings, it is delivering above-average earnings outcomes for its graduates.

But why not offer courses such as football studies in cheaper-to-provide further education, Timothy might counter. He was, after all, the driving force behind May’s pre-election announcement of a [review of UK tertiary education funding](#) – now turned into the review of university funding – which figures in higher education widely feared could recommend tipping the funding balance away from their sector.

Baldwin’s response is that students recognise that a university such as Solent, as distinct from a further education college, has “got the resources, the expertise and the connections, and we wrap the programme into a critical framework”. The university’s students receive a “broader graduate education focused in a specific industry”, meaning that they have the skills that employers want, “which is why they go and get professional and managerial jobs in great numbers”, he adds. Baldwin also points to the career flexibility that comes from having the broader skills that graduates acquire, as opposed to those who study a sub-degree course solely focused on a single occupation.

In August, *The Economist* produced a “British university ranking” based on a “value-added” measure of salary, derived from the LEO data (value-add being produced by comparing actual with expected salaries for graduates based on factors such as their universities’ geographic locations and their share of students from lower-income areas). The ranking was led by the [University of Portsmouth](#), Aston University and Newman University, a small Catholic institution in Birmingham. Solent was 12th, two places behind the [University of Oxford](#).

One person to welcome the Conservative manifesto’s promise of a tertiary education review was Baroness Wolf of Dulwich, a leading expert on vocational education and Sir Roy Griffiths professor of public sector management at [King’s College London](#). As a crossbench peer, she was a prominent critic of the Higher Education and Research Act, which created the new, market-style Office for Students regulator and paved the way for the TEF. She has called for an end to universities’ “dominance” of the UK’s tertiary sector, arguing for more non-university technical degree provision, akin to that offered in Germany and the Netherlands, to be delivered by institutions closer to local labour markets than are universities.

“At present, higher education policy is approached by government entirely in terms of wage returns,” she notes. But, unlike Schleicher, she thinks that it is “almost inevitable that returns will decline as expansion continues because returns are relative – a result of being compared to others – not absolute”.

She adds that it is “very clear that a good number of jobs now demand a degree that did not [do so] in the past, and where the job itself has not changed much. Moreover, [the UK’s] general productivity performance is currently very poor and certainly doesn’t show any evidence that having more graduates is raising productivity across the economy.”

For his part, Schleicher insists that there is “nothing in the data that suggests too many people are getting degrees” in the UK. Instead, he says, universities need to adapt more to mass expansion. They must become more responsive to the fact that their “clientele will be more diverse”, and take a “granular” approach to shaping their qualifications.



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How might universities find their way out of the “too many graduates” debate?

In a 2016 paper titled “Should governments of OECD countries worry about graduate underemployment?”, UCL Institute of Education researchers Francis Green and Golo Henseke conduct their own analysis of results from the OECD’s Survey of Adult Skills (PIAAC), producing figures on graduate underemployment (the presence of graduates in non-graduate jobs) across developed nations.

Underemployment varies from 11 per cent in Finland to 50 per cent in Japan, with anglophone countries such as the UK and US “at the upper end of the spectrum”, they find.

They conclude that there is a “legitimate concern with [graduate] underemployment, and do not join with other economists’ or policymakers’ sanguine view that it is sufficient to monitor the average rate of return [from] higher education”.

Green says that although the UK’s past graduate job expansion has kept pace with the increase in graduate numbers, “it does worry me looking 10 years into the future” given uncertainty over what the “fourth industrial

revolution” – the rise of robotics and artificial intelligence – may mean for labour markets. His work has found significant dissatisfaction among graduates in non-graduate jobs – who subsequently find it hard to move into graduate employment.

But given that PIAAC also includes questions about graduates’ and non-graduates’ health, volunteering work, “political efficacy” and levels of “social trust”, Green’s paper is able to draw some firm conclusions about the non-economic benefits of higher education, adding to the extensive and “robust” academic evidence that already exists.

Underemployed graduates “report higher social trust levels than matched non-graduates [who are in employment matching their skill level] in 20 out of 22 countries”, Green and Henseke find, giving rise to a conclusion that higher education “delivers external benefits *even for those who become underemployed*”.

“Universities are not just machines for turning out employable graduates,” says Green. Those “external benefits” – which might include economic effects, as in the case of reduced welfare or health spending required by graduates – are hard for governments to quantify. But “just because it’s hard to put a figure on these things doesn’t mean they are not valuable”, argues Green.

The OECD might be seen as one of the key influences driving higher education policymakers in the direction of instrumentalist measures of outcomes. Asked whether the organisation puts too much emphasis on earnings returns in its evaluation of higher education systems, Schleicher is surprisingly candid.

“I accept that criticism completely,” he replies. “It’s a very narrow, very limited, very instrumental view. We are only capturing a fraction of the outcomes.” Earnings “are a mix of supply and demand factors: you never know to what extent the high earnings – for example, in the US – simply reflect skill demand [from employers], as opposed to the quality of higher education”, he adds.

The solution, says Schleicher, is “measuring learning gain directly”. This would make it possible to “really look at the human qualities, the...social and emotional skills that people have [as a result of university study], rather than just the instrumental value,” he says. The OECD’s Assessment of Higher Education Learning Outcomes project was an attempt to do just that: measure the skills that graduates gain during their university study. But it was [blocked](#) from implementation after key nations, including the UK, failed to support it.

Expecting expansion of graduate numbers to deliver productivity boosts also ignores the bigger factors shaping economies and job creation, such as the level of government investment in infrastructure and research. In the UK, the argument that graduate growth has failed to deliver productivity gain often ignores the seismic influence of the 2008 financial crisis on the nation’s economy, for instance.

Are policymakers expecting too much from graduate growth in terms of economic effects? “I believe that they are,” says Green. “I am of the school of economic thought that believes that a purely supply-side policy is based on unrealistic assumptions about the way that markets and employers of graduate labour will react [to graduate expansion].”

In the UK, an industrial strategy supporting training for high-skilled labour, including in regional economies, will be key, he argues.

Green’s paper urges governments to “reorient the emphases surrounding the purposes of higher education, focusing it towards broader educational objectives, accepting that higher education has considerable value independent of resulting employment prospects”.

Perhaps one answer to graduate underemployment is offered by New Zealand, which abolished its system of uncontrolled numbers in 2002 and now allows expansion of university places only when there is evidence of demand from employers.

The debate on “graduates in non-graduate jobs” and the “graduate earnings premium” risks confining higher education to a diminished future, either of drastically reduced student numbers or of ever more intrusive and instrumental earnings metrics that fail to take account of university education’s true value. Finding an alternative way to explain to governments how graduates add economic and non-economic value to nations, hard though it is, may be the only way out.