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UK Higher Education in Recession

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Summary

Mass higher education (HE) in the UK is a relatively new phenomenon. Between 1960 and 1990, UK participation rates in HE increased gradually from around 5% to 20%, before a rapid expansion between 1990 and 1995 saw a jump to 32%. Since then initial participation has increased further reaching 45.5% in 2008/9 (DBIS 2010). In the prevailing policy narrative, the increase in student places is necessary for the UK's long-run economic success. However, there are a number of unresolved debates relating to the efficient size of the HE sector and the optimal use of resources. In this Issues Paper, two aspects of this debate are highlighted in the light of the current recession and period of recovery: the production process within HE and the use of graduates in the labour market.

Efficient use of resources in HE

The methods of teaching and study and the content and levels of attainment in university courses form the production process of HE. In 2009-10, government spending on HE in England totalled £7.8bn (HEFCE 2009): 1.6% of total central government spending and 9.1% of all education spending (HM Treasury 2009). With such large resources allocated to the sector, it is important to assess whether they are being well-spent. One issue is the number of hours devoted to supposedly 'full-time' study by students. There is some evidence (Lowe and Cook 2003. Bekhradnia et al 2006) that the average UK student spends around 26 hours per week on study activities, including class contact. Social studies, business and administrative studies and mass communications degrees report average study time of less than 23 hours per week. Moreover, there is a great deal of variation between institutions - the bottom end of the range for many subjects fell between

15 and 19 hours per week. There are potential problems with misreporting in this sort of research, which may mean that even less time is spent on study. One question that arises is whether a three-year degree course is the right length, or whether shorter, more intensive programmes could work just as well in terms of educational output, but at a lower cost.

Much of the expansion of HE has taken place outside traditional academic subjects. Chillas (2010:14) points universities, keen to attract 'new undergraduates, are willing to create and deliver occupationally relevant degrees'. One issue is whether an undergraduate course is the best way of producing all of the types of skills they presently do. To give an example, it seems sensible to say that academic study is an appropriate way for producing engineering skills or for teaching complex medical knowledge, but it may not necessarily be the case for hairdressing or nursing where alternative vocational paths exist or used to exist. At present there may be productive inefficiencies if the same skills could be produced more quickly or more cheaply, through a two-year vocational qualification or via an apprenticeship. Mason (1996) comments that one advantage of an increased number of graduates is that they compensate for the shortage of intermediate technical skills, but also notes that (from a social perspective) this represents a costly way of producing these skills.

Such concerns relate to the issue of how graduates are used within the labour market. It may be perfectly reasonable for universities to offer degrees in subjects that were traditionally taught through vocational training if these courses lead to recognisably higher skilled workers and firms create more jobs which fully employ







the skills and knowledge learned through the completion of a degree. Higher wages result from greater productivity in these jobs, which potentially justify the additional educational expense.

Can supply create its own demand in this way? One academic argument supporting this proposition is that there are costs imposed on a firm in creating a high skill, high quality vacancy that requires a graduate-level applicant. These costs may include additional capital expenditure and work reorganisation to make use of the extra skills. However, a shortage of graduates may mean that the firm fails to fill the vacancy and thus wastes the expense of creating the vacancy. As a result, the firm has an incentive not to invest in the first place. By increasing the number of potential suitable applicants for the job - through the expansion of the number of graduates - the possibility that the vacancy is unfilled decreases and the firm may decide it is worthwhile to invest in such jobs 1. Thus, the increase in supply creates its own demand.

However, if such costs do not exist, the increase in supply of graduates will have little effect on the types of iobs offered by firms. Moreover, there are numerous additional reasons why not using high skill, high quality production techniques is an optimal strategy for a firm (Finegold and Soskice 1988), even if graduate job creation were costly. Ultimately, this means that the jobs new graduates are applying for may fail to use the full extent of their degree training.

Testing whether supply creates its own demand is difficult, and policymakers are often confused by convenient evidence. Elias and Purcell (2004) in their categorisation of graduate jobs refer to occupations which now commonly require a degree for entry, but did not historically, as 'new graduate jobs' - a potentially tautological descriptor which captures whatever jobs the growing number of graduates end up doing, including jobs that do not require degree-level skills. If they do not, then there is the possibility that a degree is used purely as a tool to sort potential job applicants by ability for existing jobs. If this perspective is correct, then existing evidence that a larger number of graduates may have better employment prospects is misleading, as this comes at the expense of the employment prospects of non-graduates, rather than because firms have created more jobs to utilise the more highly trained labour. In addition, using degrees as a tool for sorting applications is socially expensive and suggests too many resources are going into producing graduates.

Believers in underutilisation and the notion that supply does not create its own demand need to provide supporting evidence. There are numerous studies on this issue. Mason (1996, 2002) concludes that a large minority of graduates are under-utilised within the labour market. In the steel industry there is evidence that new graduates were performing recently up-skilled jobs or new jobs that required higher skills (Mason, 1996). However, within the financial service sector, results were more varied, with many graduates employed in lower-level graduate jobs, sub-graduate level jobs and clerical work. Mason (2002) looks at the utilisation of graduates in a wider range of service sector firms. Evidence that the expanded number of graduates has led to firms upskilling work was patchy and in the cases where it was observed, it was often due to commercial necessity or the individual graduate taking the initiative.

Recession and recovery

Against this background, the recent global recession is likely to impact on the HE sector in two main ways. The first will be a significant increase in the demand for places at university. The sharp increase in university participation rates between 1989 and 1993 coincided with the last UK recession. This growth may partially have been attributed to increased unemployment, as young people turned to further study as a second-best alternative to work. A similar increase in demand for places has been seen during the past three years. According to the Universities & Colleges Admissions Service, the annual growth in applicants more than doubled between 2007 and 2010 (from 5.6% to 11.9%; UCAS 2010) along with increased staying-on rates for postgraduate study.

In the early 1990s, the increase in demand for university places was accommodated by a government that had set a target of increasing participation over that decade. Creating new places is costly, however. In England, students fund the first £3,145 of these costs, but the remainder of the annual cost of a place ranges between £4,000 and £16,000 depending on the requirements of the course (HEFCE, 2008), which is paid for by the Consequently, the present government's response to increasing numbers of applicants and the funding problems this creates has been to cap new places.

For some, this response is inadequate. There are those within the HE sector who see the avoidance of unemployment as a role for universities. On the consequences of limiting places in the face of this higher demand, the Vice Chancellor of Worcester University, Professor David Green, stated that, 'the Government will unwittingly consign a record number of 18-year-olds to the dole this autumn' (Woolcock and Sugden 2010). There are also many who have called on

¹ From the point of view of efficiency, the decision to go to university creates an external benefit to firms through the increased probability of filling high skill vacancies, which is not included in the private decision to invest in higher education, leading to an underinvestment in HE relative to the socially optimal level (Snower 1996) and a iustification for state intervention.

the government to further increase the number of university places as a way to return the UK to growth. The OECD (2009) has argued that more people in HE could improve the employment prospects of the young in an increasingly tough job market whilst others see universities as an engine of growth, both as producers of skilled labour and innovation.

A second impact of the recession is the general strain on public finances, which will clearly only increase if numbers of undergraduates grow and current funding arrangements remain as they are. In a recession, many businesses are forced by financial necessity to assess which part of their operations are inefficient and cut back, leaving just the most efficient parts once the recession is over – or, as Schumpeter eloquently put it, 'much dead wood disappears'. In the same way, the recession may have offered the government an opportunity to assess existing inefficiencies as it looks to rebalance the deficit. HE is not ring-fenced and may face cuts.

The recession has consequently placed two new pressures on the HE system. On the one hand, there is increasing demand for places and public calls for further expansion, whilst on the other, there are limits to public funding as departmental budgets are dramatically reduced. Assessments from the perspective of economic efficiency of existing production processes and labour market fortunes have not featured heavily in recent discussion, but there are good reasons why they should. For example, evidence that students are able to complete their course with much less time input than expected would suggest that some resources are being inefficiently allocated. This implies that cuts could be made to the sector, without affecting student numbers or final educational output, just time spent in HE. To give another example, evidence that firms do not make use of increased graduate numbers by up-skilling or redesigning jobs would suggest that there are limited benefits to increasing provision as a way to drive the economy out of a recession and help with recovery.

Existing evidence (and some unanswered questions)

On some of these issues, there is a growing body of useful evidence. On others, however, very little is known – to the extent that a casual observer might think that policymakers simply do not want to know. There are many studies which assess the use of graduates in the labour market. Using the 2006 Skills Survey, Green and Zhu (2010) suggest two dimensions along which graduate work can be classified: nominal qualification requirements and skill utilisation. It is possible that a graduate works in an occupation that does not explicitly require a degree for entry, but find they are able to use their skills once employed. Green and Zhu consequently

distinguish between the overqualified and the underutilised. It is graduates who are under-utilised and over-qualified who are of greatest concern, particularly if a portion of each cohort of new graduates systematically finds themselves in such occupations.

In other occupations, there may have been a process of retrospective graduatisation – where a degree is made necessary for entry based on an increased number of graduate applicants, rather than a change in the nature of the work. This is consistent with individuals who report being nominally qualified – as a degree becomes a requirement for entry – but underutilised as the work remains at a level previously suited to non-graduates.

Potentially, Green and Zhu's approach conceals additional concerns. Chillas (2010) found differences between older and new universities in terms of the employment of their graduates in 'traditional' and 'new' graduate jobs, looking specifically at the universities of Strathclyde and Glasgow Caledonian. She found a majority of Strathclyde graduates worked in professional occupations, whilst a majority of Glasgow Caledonian graduates found work in associate professional occupations. She suggests that collaboration between universities and employers has meant that the types of courses offered by newer institutions are closely designed towards the training needs of the occupations. This may have led to graduatisation of some jobs without an expansion of 'knowledge work' (p.14), as some occupations seek to locate their initial training requirements within the HE sector, rather than provide training themselves. This raises the issue of who should pay for these degrees. If the benefits are narrow and predominantly experienced by the employing firm, industry or occupation, then one could argue that business should help finance these courses.

Students from these courses may possibly report being both qualified and well-utilised, if employers demand a degree for entry and courses are tailored to produce the skills required in that job. This may represent no less an inefficient use of resources than the underqualified and underutilised category of workers. This is why examining inputs – the HE production process – is just as important as looking at the outputs. Unfortunately, very little time has been spent on this issue. A government report (HEFCE 2009) on the student experience in the UK discusses a single time-usage study (Bekhradnia *et al* 2006) and expresses little concern about the conclusions, neither does it tackle the potentially significant problem of misreporting.

A research agenda

The purpose of this Issues Paper has been to highlight some of the issues relating to the efficient size of the HE sector and the optimal use of resources. These issues were largely unresolved prior to the recent recession, and the downturn has introduced new pressures and concerns. Consequently, future research should be directed towards a number of important questions.

First, there needs to be a better understanding of whether a university course offers any particular advantage over other forms of entry into certain occupations, both currently in existence and potential. Other forms include vocational training and lower entry requirements followed by in-house training. Second, evidence about educational inputs and labour market outcomes should be brought together. Understanding the process of retrospective graduatisation, skill underutilisation or initial training's move from in-house to universities means knowing which inputs lead to which outcomes, and how these have changed over time. Third, concerns that some current undergraduate courses are inefficiently designed, particularly in terms of time usage, need to be addressed.

For some of these issues, existing data sources will be useful. For example, the Destination of Leavers from Higher Education longitudinal studies (2006, 2008) gives information about courses and institutions of study, employment, occupations, skill usage, further training and wages three years removed from the end of university. Moreover, the timing of the surveys would allow for an assessment of the early impact of the recession on recent graduates. For other issues, existing data are not presently available. Time studies of HE in the UK are rare, and we believe the generation of new data would be timely and beneficial. A new approach could build on existing work, but should pay special attention to the potential problem of misreporting.

References

Bekhradnia, B., Whitnall, C and Sastry, T. (2006) 'The academic experience of students in English universities', HEPI Report Summary 27. Oxford: HEPI.

Chillas, S. (2010) 'Work-readiness: what employers really want from graduate employees', Paper presented to the International Labour Process Conference, Rutgers University, New Jersey.

DBIS (2010) 'Participation rates in higher education: academic years 2006/07 to 2008/09 (provisional)', http://stats.berr.gov.uk/he/Participation_Rates_in_HE_2008-09.pdf.

Elias, P. and Purcell, K. (2004) 'SOC (HE): a classification of occupations for studying the graduate labour market', ESRU/WIER, Research paper no. 6.

Finegold, D. and Soskice, D. (1988) 'The failure of training in Britain: analysis and prescription', *Oxford Review of Economic Policy*, 4(3), 21-53.

Green, F. and Zhu, Y. (2010) 'Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education', *Oxford Economic Papers*, forthcoming.

HEFCE (2008) 'Funding higher education in England: how HEFCE allocates its funds', http://www.hefce.ac.uk/pubs/hefce/2008/08 33/08 33.pdf

HEFCE (2009) 'Diversity in the student learning experience and time devoted to study: a comparative analysis of the UK and European evidence', http://www.hefce.ac.uk/pubs/rdreports/2009/rd06_009/

HM Treasury (2009) *Public Expenditure Statistical Analyses*, July.

OECD (2009) Education at a Glance. Paris: OECD.

Lowe, H. and Cook, A. (2003) 'Mind the gap: are students prepared for higher education?' *Journal of Further and Higher Education*, 27(1), 53-76.

Mason, G. (1996) 'Graduate utilisation in British industry: the initial impact of mass higher education', *National Institute Economic Review* 156, 93-103.

Mason, G. (2002) 'High skills utilisation under mass higher education: graduate employment in service industries in Britain', *Journal of Education and Work* 15(4), 427-456.

Snower, D. (1996) 'The low-skill, bad-job trap', in Booth, A. and Snower, D. (eds.) *Acquiring Skills: Market Failures, Their Symptoms and Policy Responses*, Cambridge: CUP.

UCAS (2010) 'Variety of factors behind 11.6% rise in applications to UK higher education', media release, July 16th.

Woolcock, N. and Sugden, J. (2010) 'Top pupils squeezed out of university', *The Times*, July 16th, p. 3.

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