**The Economic and Social Benefits of Widening Participation: Rhetoric or Reality?**

Nick Adnett,

Institute for Education Policy Research, Staffordshire University, UK.

E-Mail:- n.j.adnett@staffs.ac.uk

**Abstract**

This Chapter critically reviews the evidence concerning the economic and social benefits to individuals and the nation from widening participation to higher education in developed economies. The focus is on UK, though it is argued that much of the evidence from that country is transferable to similar countries. The initial analysis reveals the diversity of the groups constituting non-traditional entrants to higher education and the highly-stratified nature of the UK higher education market. The methodological problems in identifying and measuring the benefits of widening participation are examined. From the limited current evidence available it appears that the experiences and outcomes of non-traditional entrants differ markedly from those of most traditional entrant groups. In particular, the economic and social benefits received by non-traditional HE entrants seem to be lower and crucially dependent on the status of the particular higher education institution attended. Hence there is justification for the recent focus on achieving fair access to the most prestigious HE providers.

**Keywords**: widening participation; fair access; economic and social benefits.

*“If we want to see social progress and economic prosperity in an increasingly competitive global market, the principle we should, as a country, aim for is all those that have the ability, aptitude and potential to benefit from a university education have a fair chance to do so.”*

*(Social Mobility and Child Poverty Commission, 2013a, p.2)*

**Introduction**

In recent decades governments in most developed economies have favoured the expansion of higher education and the associated widening participation agenda. It has become common for governments to assert that maintaining competitiveness in the modern global knowledge-based economy requires a higher proportion of those entering the labour market to have completed higher education. Given that the participation rate of those from groups who have traditionally entered higher education has approached saturation point in many of these countries, then the achievement of the goal of increasing that rate relies on extending participation amongst those from non-traditional groups. More recently, the rhetoric accompanying the continued drive for the expansion of higher education has also contained an enhanced social mobility dimension. A recent US Treasury and Education Departments’ joint report asserted that “*Higher Education is a critical mechanism for individual socioeconomic advancement and an important driver of economic mobility. Moreover, a well-educated workforce is vital to our nation’s economic growth*” (Department of the Treasury, 2012, p.5). In the UK, the Social Mobility and Child Poverty Commission (SMCPC) has voiced the concern that British society is becoming wealthier but not fairer, with relatively high, by international standards, levels of child poverty and low social mobility (SMCPC, 2013a). Moreover, it fears that the slow recovery from the Global Financial Crisis has once again favoured the top part of society. Widening participation in higher education (HE) has been promoted as a key element in achieving a fairer society and a more socially balanced and extended recovery. In this paper we explore the evidence base for all of these claims.

In investigating these claimed benefits of widening participation, we focus on the UK Higher Education system. In doing so we build off two recent wide-ranging literature surveys of research on widening participation in the UK commissioned by the Higher Education Funding Council for England (HEFCE): Gorard et al. (2007) and Moore et al. (2013). However, in contrast to these surveys we focus not on barriers to non-traditional students’ entry to HE but on whether there are sufficient incentives for them to participate in HE. England and Wales are particularly interesting cases for researchers, since during the last two decades successive governments have followed a widening participation agenda, whilst at the same time transferring much of the costs of higher education from taxpayers to students and their families. However, as developed countries adopt similar strategies to compete in the globalised knowledge economy their HE systems and policies have begun to converge. Indeed, Bowles et al.’s (2013 para. 1.4) review of research on widening participation in Australia, Ireland, the Netherlands, Norway, South Africa and the US concludes: “*Despite structural, socio-cultural and economic differences between the case study nations and England, there are clear similarities in the way in which the education systems are organised and the factors which have been identified as inhibiting or facilitating educational attainment and progression to HE. Many of the systemic factors linked to participation in HE are, therefore, also shared*.”

This chapter makes four main contributions to the theory, evidence and policy related to widening participation. Firstly, it points out the current weakness of the evidence base concerning the extent of the economic and social benefits to the individual and society from widening participation. Secondly, it emphasis the diversity of individual non-traditional student groups and, given their different backgrounds, attainments and post-graduation experiences, stresses the danger of treating them as a homogenous group. Thirdly, given those weaknesses and diversity we argue that the efficiency and effectiveness of current widening participation policies, still predominantly aimed at senior secondary school students, needs to be re-evaluated. Finally, given the apparent importance of the choice of which course(s) and higher education institution to attend, it is argued that the promotion of fair access to ‘high dividend’ courses and institutions needs to become even more prominent in debates about widening participation.

The arguments presented in this chapter are organised as follows. In the next section the term ‘non-traditional participants in higher education’ is unpicked and the heterogeneity of this group established. In the same section the diversity of higher education providers is noted and the highly-stratified nature of the UK higher education market established. This is followed by an examination of the potential economic and social benefits accruing from widening participation in higher education. The methodological problems in identifying and measuring the benefits of widening participation are then addressed. In particular, the difficulties in identifying ‘marginal’ entrants and evaluating their post-entry benefits are investigated. The next two sections review the available evidence on the economic and social benefits to the individual participant and country as a whole, again focusing on UK studies. In reviewing evidence on the economic incentives for under-represented student groups to enter UK HE, this section builds off an earlier review by Adnett and Slack (2007). In the concluding section the main findings of the chapter are brought together and their implications for policy and future research examined.

**Defining Widening Participation and Understanding the HE ‘Market’**

Our starting point is that the groups which have traditionally low participation rates in HE are diverse and it is unlikely that they would each receive similar economic and social benefits from entering and completing HE. Similarly the providers of HE are also diverse and the UK’s HE market is a segmented one with an established and stable hierarchy. Hence it is likely that the economic and social benefits accessible to students will in part be determined by where their higher education institution (HEI) sits in that hierarchy.

Widening participation is a widely used but ill-defined concept and has been used to encompass a diverse range of target groups. The UK’s Department for Business, Innovation and Skills provides the following definition:

“*Under-represented groups across higher education include students from less advantaged backgrounds, students with disabilities, students from some minority ethnic groups, and care leavers. The government also wants to support those who which to study part-time in higher education, and mature students*.” (Department for Business, Innovation and Skills, 2011 para.1.5)

We can further illustrate this heterogeneity if we take the first of these target groups as an example. ‘Less advantaged backgrounds’ has at times been interpreted by UK governments and HEIs as encompassing potential students from: lower socio-economic groups; low income households; low participation neighbourhoods; first generation entrants and more widely all those from state schools (the latter comprising 93% of the total UK population!). Thus even within a single target group, individuals are likely to have diverse economic and social characteristics, and a wide range of identities, experiences and backgrounds (Moore et al., 2013).

We now turn to consider the diversity of HE providers in the UK. As the Office for Fair Access (OFFA) (2010) and the Independent Reviewer of Social Mobility and Child Poverty (2012) have reported, the intake to the most academically selective UK HEIs, members of the Russell Group of universities, is typically more socially advantaged than would be expected given the social profile of those achieving the required entry grades. Indeed, the SMCPC’s (2013a) analysis suggests that the intake into most academically selective universities in the UK became less socially representative in the decade from 2002. The possible causes of these persisting inequalities have been much debated (summarised in Boliver, 2013), but our concern in this chapter is with the consequences rather than the causes. As Brown (2014) cogently argues, the widening participation debate and government policy in the UK has too often focused on student recruitment, to the neglect of a consideration of student outcomes. It is to those outcomes that our analysis now turns.

**The Potential Economic and Social Benefits of Widening Participation**

Governments, providers and researchers have claimed that there is a wide range of potential economic and social benefits accruing from attending an HEI and completing tertiary level qualifications. These potential benefits can be analysed at the national, exchequer or individual level and here we concentrate upon the first and last of these levels (see Million Plus, 2013 for an analysis at the exchequer level).

Economists have argued that an increasing proportion of graduates in the national labour force results in faster productivity growth and hence faster economic growth. The former results not only from the benefits of a more knowledgeable workforce, the effect of augmented human capital but also from, as New Growth Theory emphasises, the crucial role of the faster innovation and technology transfer resulting from a more educated workforce. In addition, it has been claimed that a more educated workforce leads to a higher labour force participation rate and lower unemployment, which again directly raises economic growth (Machin and Vignoles, 2005). Moreover, a more educated workforce is likely to be more occupationally and geographically mobile and reduces labour market mismatch resulting from the decline in low-skilled employment opportunities. Moreover, it has been claimed that graduates are not only more likely to receive further training, they also create spillover effects whereby the productivity of their fellow workers is enhanced by imitation and leading by example (Million Plus, 2013).

At the individual level from the viewpoint of human capital theory (Becker, 1975), these anticipated economic benefits take the form of augmented lifetime earnings of graduates (the ‘graduate premium’). This earning premium comprises of higher wages, reduced spells of unemployment and increased participation in the labour market. In part these benefits reflect the perceived role of HE in fostering productivity-related characteristics such as greater self-confidence and self-esteem, rather than the direct returns to greater knowledge. An alternative interpretation provided by the signalling approach is that HE merely acts as a screening device for employers to identify the more able applicants, since the less able find it too expensive in time, effort and money to gain the entry qualifications required by HEIs. Indeed Ireland et al. (2009), incorporating a signalling dimension in their analysis, take this argument a stage further to suggest that an increase in the relative size of the college cohort is likely to reduce the ability differential between graduates and non-graduates and hence reduce and/or reallocate the graduate premium.

These claimed economic benefits from widening participation in HE have been associated with perceived social benefits. In the UK social mobility appears to have fallen in recent decades (Blanden et al. 2005) and it has been claimed that countries with higher social mobility grow faster given the evolution of the knowledge-based economies (Hassler and Vicente Roriguez-Mora, 1998, Sutton Trust, 2010). Wider participation in HE has been claimed to disrupt cycles of deprivation and promote increased social cohesion, promote better health, reduce crime and increase community engagement (Million Plus, 2013).

**Methodological Problems in Identifying the Benefits of Widening Participation**

Much of the earliest ‘evidence’, and even some of the recent, used to support widening participation in HE merely assumed that the average benefits received by past participants would apply to additional marginal participants. This is likely to be an erroneous assumption for three main reasons. Firstly, the size of the graduate premium declines if the supply of graduates increases without a corresponding increase in the labour market’s demand for these students. Secondly, as noted above, the social, educational and economic characteristics of students from non-traditional HE participating groups differ from those of traditional participating groups. It is likely that these characteristics will not only affect their probabilities of completing HE and obtaining a ‘good’ degree but also disadvantage graduates from these backgrounds in the labour market relative to traditional students groups. Thirdly, as Ireland et al. (2009) argue, as the participation rate increases the actual and perceived ability gap between graduates and non-graduates is likely to fall and this would reduce the overall graduate premium. However, as employers adjust their hiring practices to favour those with ‘good’ degrees and/or from higher ranking universities, the degree of dispersion of that graduate premium will become greater.

Given the diversity of non-traditional entrant groups into higher education equating the marginal returns from widening participation to the average returns to current or previous students is unlikely to be appropriate. Similarly, attempts to measure the marginal returns to graduate level qualifications (as in London Economics, 2011) are unlikely to provide relevant estimates to the returns available to those from non-traditional student groups. Moreover, estimation of those returns becomes more difficult when it is recognised that the distribution of the latter students across institutions and courses differs from those of traditional entrants groups. Further complications arise because of likely differences between traditional and non-traditional students in: completion rates, the classification of the degrees obtained, probabilities of entering post-graduate study and post-graduation labour market participation rates. Taken together these problems make econometric studies, and quantitative studies in general, problematic without exceptionally detailed individual level data and a corresponding narrowing of the research question to be addressed. Whilst at the same time these issues mean that qualitative studies are unlikely to produce generalizable findings about the extent of the benefits of HE participation for non-traditional student groups.

A final concern relates to the neglect of costs in any analysis of the benefits of widening HE participation. Clearly there are costs to the individual and the exchequer resulting from increased participation: lost earnings, leisure time and tax revenues; reduced labour market participation in the short-term and increased government expenditure. These need to be set against any benefits in any assessment of the net benefits.

Having raised these methodological concerns, we now critically appraise recent UK evidence on the extent of the economic and social benefits from widening participation in HE.

**Recent Evidence on the Economic Benefits of Widening Participation in the UK**

The development of the global knowledge-based economy has been associated with persistent high private and public economic returns to investments in higher education, notwithstanding the rapid expansion of the latter (Jones and Romer, 2009). Recent technological progress appears to be education and skill-biased and this change in the relative demand for educated labour has seen large and persisting premiums for graduates (Machin, 2004), indeed evidence from many countries indicates that the economic returns to tertiary education are higher than those for other levels of schooling (Montenegro and Patrinos, 2014). However, notwithstanding the popularity of the championing of higher education as crucial to the nurturing and sustaining of the modern knowledge-based economy, the empirical evidence in support remains rather fragile at the country level. Economists have frequently found it difficult to uncover robust evidence that measures of a country’s human capital stock or flows, including those for higher education, make a significant contribution to the explanation of cross-country differences in growth (Stevens and Weale, 2004, Pritchett, 2006). Hence the focus of this section is on evidence related to individual benefits.

We initially concentrate our analysis of the benefits to individual HE participants by reviewing recent evidence on HE outcomes, in particular the relative performance on non-traditional student groups in terms of retention and attainment. The recent funding changes in England and Wales have led to an increasing number of students living at home, now around a quarter (HEFCE, 2009a), and combining ‘full-time’ study with part-time working (up to 70% in a survey reported in Leese, 2010). Students from low socio-economic groups are more likely to be working part-time and living at home (HEFCE, 2009a, Moore et al., 2013) and have higher drop-out rates, whether this group is defined in terms of income or location-based measures (OFFA, 2014). Similarly, both disabled and mature students have significantly higher non-continuation rates (HEFCE, 2013), as do Black entrants to HE in the UK (ECU, 2011). Interestingly, Black Caribbean (but not Black African) and disabled students both report lower levels of satisfaction with their HE study in the annual National Student Survey than do students as a whole (HEFCE, 1014a). Part-time students, whose number halved in England between 2010-1 and 2013-4 (HEFCE, 2014b), have much lower completion rates. For part-time students on low intensity study awards the completion rates were one-sixth of those on full-time courses (HEFCE, 2009b). Moore et al. (2013, p. 47) conclude that the reasons why individuals leave HE early are “multiple and complex”. UK research suggests that ‘personal/financial reasons’ predominate, though around a third of early leavers cite course or institution reasons (Rose-Adams, 2012), though both of these factors appear to more severely impact on non-traditional entrants.

For those non-traditional entrants who do complete their undergraduate studies there remains a significant attainment gap. Most groups of non-traditional participants are significantly less likely to obtain a ‘good’ degree, defined as achieving a first or upper second class degree. For example, Black students are only a third as likely as White ones to obtain such a degree (Richardson, 2008). Further analysis by HEFCE (2014c) found that 72% of White students who entered with grades BBB achieved a ‘good’ degree compared to 56% of Asian and 52% of Black students. Similarly, students from low participation (’disadvantaged’) locations who do complete their studies do less well at university than similarly qualified entrants from high participation neighbourhoods (HEFCE, 2014c). The ‘knock-on’ effects of these attainment gaps on the probability of undertaking post-graduate study and obtaining graduate-level employment are large (Machin et al., 2009). The latter effects are important given the evidence of large and increasing returns to both a ‘good’ undergraduate degree (Ireland et al., 2009 and Feng and Graetz, 2013) and post-graduate study (London Economics, 2011). In addition, students from under-represented groups are less likely to participate in extra-curricular activities (Purcell et al., 2012). This failure to invest in cultural capital appears to be punished by employers of graduates who value ‘well-rounded’ HE experience when recruiting (Hinchcliffe and Jolly, 2011).

Students from under-represented groups disproportionately attend the less prestigious HEI’s (SMCPC, 2013b), for students from low income households this is partly due to their greater tendency to study at a local university (Gibbons and Vignoles, 2009). Even those who obtain ‘good’ degrees in high prestige institutions face extra difficulties in entering the most favoured graduate employments. They are less likely to have the ‘right’ economic and social networks or be able to gain experience by working unpaid, whilst the leading graduate employers actively market their vacancies at only 20 universities, predominantly those who are members of the Russell Group (SMCPC, 2013b). Hence, students from less advantaged groups are less likely to obtain graduate level jobs than those from more advantaged groups (ODPM, 2013). One consequence of such employer behaviour is that there appears to be a large and rising premium from attending a Russell Group Institution. Hussain et al. (2009) estimate that other things being equal, a graduate from an HEI in the top quartile of research ranking will earn between 10 and 16 per cent higher wages than one who attended an HEI in the lowest quartile.

The result of the interaction of these factors is that the different groups of non-traditional graduates tend to earn less than those graduates from over-represented groups. For example, Black graduates earned on average 5.3% less than White graduates 6 months after completing their studies and the largest income gap was between graduates from state and independent school backgrounds (Machin et al., 2009). Overall, it appears that the rising employers’ demand for university graduates in the UK has at least matched the increasing supply and that overall the graduate premium remains high (Walker and Zhu, 2011), though Bratti et al. (2008) found that it had fallen for women, reducing their previously much higher rate of return. However, Dearden et al. (2008) found that male lifetime earnings were more dispersed for graduates than non-graduates suggesting that those returns to university study had become more uncertain. However, an undergraduate degree increases the likelihood of an individual being employed over their working life by 3 percentage points compared possession of ‘A’ Levels. Though there is no authoritative evidence on the effect of graduation on either the incidence of unemployment or labour market participation of those graduating from non-traditional student groups.

Taking these findings on individual economic returns together suggests that marginal entrants to HE from under-represented groups are on average likely to receive higher lifetime earnings if they graduate. However, these returns are uncertain and are likely to be, on average, significantly lower than those received by over-represented student groups. We now turn to consider the evidence on social benefits, which given their nature, have been much more difficult to quantify.

**Recent evidence on the social benefits of widening participation**

The UK’s Government’s 2011 White Paper *Opening Doors, Breaking Barriers: A Strategy for Social Mobility* heralded a renewed concern about the country’s relatively low level of social mobility. Indeed Blanden et al. (2005) suggest that social mobility had been falling in the UK finding that adult earning were being more strongly related to parental income over time. Through the adoption of some heroic assumptions, the Sutton Trust (2010) estimated that increasing UK’s social mobility level to that of best European practice (Finland) and raising educational attainment of the lowest achievers to the current average level would boost its economy by up to £140 billion a year by 2050 (equivalent to 4 per cent of GDP). The 2011 White Paper also heralded increased research into the determinants of the degree of social mobility, much of it commissioned by the Social Mobility and Child Poverty Commission.

Macmillan and Vignoles (2013) examined entry into the higher status and higher paid professions in the UK. Specifically they investigated the probabilities of graduates from different socio-economic backgrounds entering these professions. They found that immediately after graduation, socio-economic background did not appear to significantly affect the probability of a graduate entering the highest status occupations, apart from its indirect effect on the person’s academic attainment, degree subject, degree classification and university choice. An exception was that those who attended private schools were more likely to enter those occupations than those who had attended state schools with similar characteristics and levels of academic attainment. However, 3 years after graduation Macmillan and Vignoles found that in addition to the previous finding related to the type of school attended, those whose parents had higher status occupations and those who had lived in areas with high levels of HE participation were more likely to be in the highest status occupations. This effect was stronger for male graduates.

The current evidence suggests that the large socio-economic gap in the likelihood of entering the highest status gap appears to be the product of both an education experience and attainment effect, and a direct effect. The latter may reflect one or a combination of the following factors favouring high socio-economic groups: better preparation for entry into these occupations, better economic and social networks, discriminatory recruitment practices (such as word of mouth recruitment and unpaid internships), nepotism, different occupational choices/aspirations or unobserved differences in ability (i.e. separate from those observed through differences in attainment). The SMCPC’s State of the Nation 2013 Report (SMCPC: 2013b) reviews evidence that suggests that most of these may be contributory factors and its report *Elitist Britain* (2014) points out that 60% of management and professional vacancies are not advertised and are filled through networks.

**Conclusions**

Most of the vast quantitative evidence on the benefits of higher education participation to the individual and society is unable to isolate the economic and social benefits from widening participation. Similarly, most of the qualitative studies were not designed to make a comparison between the post-participation experiences of ‘traditional’ HE students and non-traditional marginal entrants. Hence the urgent need for well-designed research into the HE experiences and outcomes of the various groups constituting non-traditional participants in HE. From the limited current evidence it appears that these participants’ experiences and outcomes differ markedly from those of most traditional entrant groups. In particular, the economic and social benefits received by non-traditional HE entrants seem to be smaller and are crucially dependent on the particular higher education institution attended. Hence the most recent focus on achieving fair access to the most prestigious HE providers in the UK, rather than increasing access to HE in general.

Whilst there is limited evidence about the size and nature of the economic and social benefits from widening participation, these benefits still have to be compared to the costs of such provision in any evaluation exercise. Moreover, the effectiveness of current widening participation initiatives have to be compared to the effectiveness of alternative uses of these resources. There is evidence emerging that both early age interventions (Heckman, 2013) and those aimed at the graduate transmission into the labour market may be relatively more efficient in promoting social mobility than policies aimed at producing a more equitable distribution of Higher Education learning opportunities through initiatives aimed at school-leavers. In the UK there is also evidence that the period between Key Stage 2 and Key Stage 4 is crucial in determining whether high-achieving children from disadvantaged backgrounds remain on a high-achieving trajectory (Crawford et al., 2014). This suggests the importance of policy interventions in primary and early secondary schooling to support widening participation objectives.

Throughout this chapter we have focused on HE and on prestigious universities in particular, reflecting the bias of successive British governments. The latter may not be too surprising given that 59% of the Cabinet, 57% of the Permanent Secretaries (the top civil servants in the UK) and 24% of the Members of Parliament went to Cambridge or Oxford universities compared to less than 1% of the population as a whole (SMCPC, 2014). However, there is a further danger that policy debates about the means of promoting social mobility become too preoccupied with HE in general. We end therefore with a note of caution: “*For decades, public policy has been obsessed with higher education to the detriment of ‘the other 50 per cent’ more likely to go into vocational education*” (SMCPC, 2013b, p.3.)

**Author Bio**

Nick Adnett is Professor of Economics and a member of the Institute for Education Policy Research at Staffordshire University in the UK. He is the author of several books and over 50 journal articles on aspects of labour market and education policy. He was a member of the team which produced the first comprehensive review of research on widening participation in the UK for the Higher Education Funding Council for England in 2006.

**References**

Adnett, N. and Slack, K. (2007) Are there Economic Incentives for Non-Traditional Students to Enter HE? *Higher Education Quarterly*, 61(1): 23-36.

Becker, G. (1975) *Human Capital: A theoretical and empirical analysis with special reference to education*, 2nd Edition, New York: NBER

Blanden, J., Gregg, P. and Machin, S. (2005) Educational Inequality and Intergenerational Mobility, in Machin, S. and Vignoles, A. (eds) *What’s the Good of Education? The Economics of Education in the UK*, Princeton and Oxford: Princeton University Press.

Boliver, V. (2013) How Fair is Access to More Prestigious UK Universities? *British Journal of Sociology*, 64(2): 344-64.

Bowes, L., Thomas, L., Peck, L. and Nathwani, T. (2013) *International Research on the*

*Effectiveness of Widening Participation*, Bristol: HEFCE.

Bratti, M., Naylor, R. and Smith, J. (2008) Heterogeneities in the Returns to Degrees: Evidence from the British Cohort Study 1970, mimeo, University of Warwick

Brown, M. (2014) *Higher Education as a Tool of Social Mobility: reforming the delivery of H E*

*and measuring professional graduate output success*, London: CentreForum.

Crawford, C. Macmillan, L. and Vignoles, A. (2014) *Progress Made by High-attaining Children from Disadvantaged Backgrounds*, London: SMCPC.

Dearden, L., Fitzsimons, E., Goodman, A. and Kaplan, G. (2008) The effects of Higher

Education Funding Reforms on the Lifetime Earnings of Graduates, *Centre for the Economics of Education Discussion Paper* No. 78.

Department for Business, Innovation and Skills (BIS) (2011) *Guidance to the Director of Fair Access*, London: BIS.

Equality Challenge Unit (ECU) (2011) *Equality in Higher Education: Statistical Report 2012 Part 2 Students*, London: ECU.

Feng, A. and Graetz, G. (2013) The Effects of Degree Class on Labour Market Outcomes, *Centre for Economic Policy Discussion Paper* No.1221.

Gibbons, S. and Vignoles, A. (2009) Access, Choice and Participation in Higher Education,

*Centre for the Economics of Education Discussion Paper* No. 101. Gorard, S., May, H., Slack, K., Smith, E. and Adnett, N. (2007) *Overcoming the Barriers to Higher Education*, Stoke-on-Trent: Trentham Books.

Hassler, J. and Vicente Rogriguez-Mora J. (1998) IQ, Social Mobility and Growth, *Centre for Economic Policy Research (CEPR) Discussion Paper* No. 1827.

Heckman, J. (2013) *Giving Kid’s a Fair Chance: A strategy that works*, Cambridge MA: MIT Press.

Higher Education Funding Council for England (HEFCE) (2009a) *Patterns in Higher Education: Living at Home, 2009/20*, Bristol: HEFCE.

Higher Education Funding Council for England (HEFCE) (2009b) *Part-time First Degree Study: Entry and Completion*, *2009/18,* Bristol: HEFCE

Higher Education Funding Council for England (HEFCE) (2013) *Non-Continuation Rates at English HEIs: Trends for entrant 2005-06 to 2010-11*, *2013/07,* Bristol: HEFCE.

Higher Education Funding Council for England (HEFCE) (2014a) *UK Review of the Provision of Information about HE: National Student Survey results and trends 2005-13, 2014/13* Bristol: HEFCE.

Higher Education Funding Council for England (HEFCE) (2014b) *Higher Education in England: Analysis of latest shifts and trends, 2014/08.* Bristol: HEFCE.

Higher Education Funding Council for England (HEFCE) (2014c) *Differences in Degree Outcomes: Key findings, 2014/03.* Bristol: HEFCE.

Hinchcliffe, G. and Jolley, A. (2011) Graduate Identity and Employability, *British Educational Research Journal*, 37(4): 563-84.

HM Government (2011) *Opening Doors, Breaking Barriers: A Strategy for Social Mobility,* London: Cabinet Office*.*

Hussain, I., McNally, S. and Telhaj, S. (2009) University Quality and Graduate Wages in the UK. *Centre for the Economics of Education Discussion Paper* No. 99.

Independent Reviewer of Social Mobility and Child Poverty (2012) *University Challenge: How Higher Education Can Advance Social Mobility*, London: Cabinet Office

Ireland, N., Naylor, R., Smith, J. and Telhaj, S. (2009) Educational Returns, Ability Composition and Cohort Effects: Theory and evidence for cohorts of early-career UK graduates, *Centre for Economic Performance Discussion Paper* No. 939.

Jones, I and Romer, P. (2009) The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital, *National Bureau of Economic Research Working Paper* No. 15094.

Leese, M. (2010) Bridging the Gap: Supporting student transitions into higher education, *Journal of Further and Higher Education*, 34(2: 239-51.

London Economics (2011) The Returns to Higher Education Qualifications, *Department for Business, Innovation and Skills*, Research Paper No. 435.

Machin, S. (2004) Skill-biased Technical Change and Educational Outcomes, Chapter 5 of G. Johnes and J. Johnes (eds) *International Handbook of the Economics of Education,* Cheltenham: Edward Elgar.

Machin, S., Murphy, S. and Soobedar, Z. (2009) *Differences in Labour Market Gains from Higher Education Participation*, London: National Equality Panel.

Machin, S. and Vignoles, A. (2005) *What’s the Good of Education? The Economics of Education in the UK*, Princeton and Oxford: Princeton University Press.

Macmillan, L. and Vignoles, A. (2013) *Mapping the Occupational Destinations of New Graduates,* London: Social Mobility and Child Poverty Commission.

Million Plus (2013) *What’s the Value of a UK Degree?* London: Million Plus/London Economics.

Montenegro, C, and Patrinos, H. (2014) Comparable Estimates of Returns to Schooling Around the World, *World Bank Policy Research Working Paper* No. 7020.

Moore, J., Sanders, J. and Higham, L. (2013) *Literature Review on Research into Widening Participation to Higher Education*, Bristol: HEFCE.

ODPM (Office of the Deputy Prime-Minister) (2013) Social Mobility Indicators, 1st July 2014. Available: www.gov.uk/government/publications/social-mobility-indicators/social-mobility-indicators, Last accessed: 20/08/2014

Office for Fair Access (OFFA) (2010) *What More Can be Done to Widen Access to Highly Selective Universities?* Bristol: OFFA.

Office for Fair Access (OFFA) (2014) *Interim Report: Do Bursaries have an effect on Retention Rates?* Bristol: OFFA.

Pritchett, L. (2006) Does Learning to Add Up Add Up? The returns to schooling in aggregate data, in E. Hanushek and F. Welch (eds.) *Handbook of the Economics of Education Volume 1*, Amsterdam: Elsevier.

Purcell, K., Elias, P., Atfield, G., Behle, H., Elison, R. and Luchinskaya, D. (2012) *Futuretrack Stage 4: Transitions into employment, further study and other outcomes*, Manchester: HECSU.

Richardson J. (2008) *Degree Attainment, Ethnicity and Gender: A literature review*, York: ECU/Higher Education Academy.

Rose-Adams, J. (2012) *Leaving University Early: A research report from the Back on Course project*, Milton Keynes: Back on Course/the Open University.

Social Mobility and Child Poverty Commission (2013a) *Higher Education: the Fair Access Challenge*, London: SMCPC.

Social Mobility and Child Poverty Commission (2013b) *State of the Nation 2013: Social mobility and child poverty in Great Britain*, Norwich: Her Majesty’s Stationary Office.

Social Mobility and Child Poverty Commission (2014) *Elitist Britain*, Norwich: Her Majesty’s Stationary Office.

Stevens, P. and Weale, M. (2004) Education and Economic Growth, Chapter 5 of G. Johnes and J. Johnes (eds.) *International Handbook of the Economics of Education,* Cheltenham: Edward Elgar.

Sutton Trust (2010) *The Mobility Manifesto*, London: The Sutton Trust.

US Department of the Treasury with the Department of Education (2012) *The Economics of Higher Education*, Washington D.C.: US Department of the Treasury.

Walker, I. and Zhu, Y (2011) Differences by Degree: Evidence of the net financial rates of return to undergraduate studies for England and Wales, *Economics of Education Review,* 30: 1177-86.