



## BIROn - Birkbeck Institutional Research Online

Callender, Claire (2016) Cost-sharing and student support. In: Scott, P. and Gallacher, J. and Parry, G. (eds.) *New Languages and Landscapes of Higher Education*. Oxford, UK: Oxford University Press, pp. 103-128. ISBN 9780198787082.

Downloaded from: <https://eprints.bbk.ac.uk/id/eprint/17923/>

*Usage Guidelines:*

Please refer to usage guidelines at <https://eprints.bbk.ac.uk/policies.html> or alternatively contact [lib-eprints@bbk.ac.uk](mailto:lib-eprints@bbk.ac.uk).

<fresh page>

5.

## Cost-sharing and Student Support

Claire Callender

### Introduction

Central to any higher education (HE) system is how it is funded and who pays for HE.<sup>1</sup> Perhaps of all aspects of HE this has become the most politicized, emotive, and contested. Across the globe, changes or proposed reforms in funding have led to the downfall of governments and mass student protests. The story of HE funding, how it has evolved and changed over time, is dominated by the prevailing political and ideological currents of a country and the moment, rather than by purely economic and pragmatic considerations. Funding policies are shaped largely by the ideological persuasions of politicians and legislators, the particular histories and cultures of a country. They involve choices about tuition fees and the levels, targets, and forms of financial aid. These choices tend to be less the result of rational cost–benefit analyses and more the result of negotiation among stakeholders with competing interests who hold varying levels of influence and power. However, policy debates about funding are underpinned by the thinking of economists. The language and key concepts used in these debates and in government documents advocating change rely primarily on those of economists. In turn, these debates raise far broader

---

<sup>1</sup> Thanks go to Kevin Dougherty, Gareth Parry, and Gareth Williams and for their comments on this chapter.

questions about HE such as the roles and responsibilities of individuals and the state in relation to HE, the purpose of HE, who are deemed the key beneficiaries of HE, equity, and whether HE is a private or public good.

In recent years many countries are moving from a financing system where the costs of funding HE are shouldered primarily by taxpayers, through government subsidy of higher education institutions (HEIs), to one where students pay a larger share of the costs. This cost-sharing approach, the focus of this chapter, is one of the most significant developments in HE funding. It seeks to alter the balance of public and private funding to HE. This policy shift helps explain the global spread of both tuition fees and student loans—the two most prominent forms of cost-sharing. In some countries, such changes occurred gradually, with small, incremental modifications to government policy and market forces. In others, the policy shifts have forced more rapid change, necessitating HEIs to make major adjustments as their sources of revenue shift. Students, too, and in some countries their families, have also had to make adjustments as they have been asked to bear a greater burden of the cost of financing their university sector (Heller and Callender 2013).

This chapter addresses the following key questions: What is cost-sharing in HE, and why and how has it become part of the HE policy landscape? What are the key cost-sharing policies? Have cost-sharing policies met their purported objectives and led to greater financial sustainability, equity, efficiency, and responsiveness of HE systems? It attempts to address these questions from a global perspective rather than relying on evidence from one particular country. It focuses exclusively on funding issues related directly to students, so excludes any consideration of, for instance, the public and private funding of research.

# What is Cost-Sharing in HE, and Why and How Has It Become Part of the HE Policy Landscape?

One way of financing HE is by sharing its costs. There are two sets of costs directly related to students: tuition and their living costs while studying. [Johnstone and Marcucci \(2010\)](#), key advocates of cost-sharing, assert that these costs can be viewed as being borne primarily by four parties: the government/state/taxpayers; students/graduates; students' families; and individual or institutional donors, or philanthropists. The policy challenges are deciding how these costs, and which costs, are divided between these four groups, and the appropriate balance of financial contributions from each group, including the share of private and public contributions. Next are choices about the policy instruments employed to distribute the costs, and their intended and unintended consequences. Essentially, these are ideological and political issues, as well as economic and pragmatic ones.

The sharing of higher education costs has a long history. Public and private funds have comingled since the establishment of Oxford and Cambridge in the twelfth and thirteenth centuries. The Crown and the state predominantly supported both universities. By the thirteenth century financial help for poor students was well developed in England and elsewhere in Europe. Students received support from the Crown, the church, local benefactors, their colleges, and their families. Not all Oxbridge students paid fees, and some had their fees remitted in return for undertaking college chores. Similarly, Harvard College founded in [1636](#), like Oxford and Cambridge before it, depended on English philanthropy and a mix of private and public funding. Harvard continued to receive subsidies from the Massachusetts legislature until the [1820s](#) ([Wilkinson 2005](#)).

During the post-Second World War period and until the [1973](#) economic crisis, as HE expanded, public expenditure on HE rose throughout Europe, Australasia, Canada, and in

many other developed economies. These systems and the costs of instruction were predominantly funded from the public purse, with limited contributions from students or their families. The exception was the US, but even here the federal and especially state governments played a major role in the funding of public universities and community colleges, which absorb the vast majority of US degree-credit students, and in the provision of financial aid to students in both the private and public university sectors. In the US, states' HE spending continued rising until the 2008 recession (Klein 2015). However, in many of these countries, students' living expenses were borne by students and their families (Britain was an exception).

The *policy shift* of cost-sharing whereby a *greater* share of the costs of tuition and, to a lesser extent, student maintenance are transferred onto the shoulders of students and their families and away from government and taxpayers, emerges in the 1980s. The shift is directly associated with profound changes in political attitudes towards public expenditure. The post-Second World War consensus concerning the role of the state in the funding of public services, including HE, accompanied by high-taxation policies to pay for these services, began to break down. This was partly based on the macroeconomic view that the fiscal and monetary policies needed to sustain high public expenditure have a damaging effect on national income, and partly on the microeconomic belief that direct subsidy of HEIs is a disincentive for improvements in efficiency (Williams 1992). In the UK, such thinking is marked by the election of the Thatcher Conservative government, which heralded the end of the post-war 'welfare capitalist consensus' (Chitty 2009: 31) and ushered in a revised version of classical market liberalism of the nineteenth century with its idealized notion of the market. Similarly, Ronald Regan's election in the US portended the end of highly progressive income and estate taxes and the dilution of other policies aimed at reducing social

inequalities. The shift was further strengthened by the collapse of the Soviet Union and state socialism in Eastern Europe.

With these developments come significant ideological changes in how HE is viewed and in attitudes towards the funding of HE among supranational institutions and governments across the globe (Altbach 1999). There is a move away from the consensus that HE is primarily a public good benefiting society as a whole, for instance, through the economic growth and greater labour market flexibility derived from graduates' skills and the higher taxes they pay, and other positive social externalities such as greater social cohesion, political stability, and crime and poverty reduction. In other words, individuals' efforts to educate themselves also benefit those around them. This emphasis on the social benefits and positive externalities justifies substantial government intervention. Consequently, society should, and did, bear most of the costs of HE.

However, encouraged, in part, by the World Bank (1986, 1994) HE instead becomes characterized primarily as a private good benefiting the individual more than society.<sup>2</sup> This reflected the Bank's economic and ideological stance—its 'celebration of human capital theory' and its promotion of the privatization of education and user charges in the public sector, especially in developing countries (Ball 2008: 32). Human capital theory views expenditure on education as an investment which earns a positive return for students in the form of greater earnings than would have been possible otherwise, once costs are deducted. Graduates, when compared with those without a university degree, tend to have increased productivity and higher lifetime earnings, less exposure to unemployment, plus greater prestige, status, and sociopolitical influence. The high private rates of return to HE provide

---

<sup>2</sup> The World Bank (1986) argued for a reallocation of public funding away from HE to primary education because of the high rates of return from HE, and for the introduction of tuition fees and student loans.

the economic evidence and rationale for charging more of the cost of HE to the beneficiaries, and are a justification for cost-sharing policies. With this new emphasis also comes economists' belief that there is a case on both efficiency and equity grounds for households to meet a significant part of the costs. In terms of equity, non-graduates (non-beneficiaries) who come from poorer backgrounds and do not reap the high financial returns of HE contribute towards what is already an advantaged group. So it was argued that more HE costs should be shouldered by those now seen as the main beneficiaries of HE—students and their families. 'Who benefits pays' became the mantra underpinning cost-sharing policies.

What is the optimum balance of public and private contributions to HE to match these public and private benefits? [McMahon \(2009\)](#) argues that the costs of HE should be shared, irrespective of who benefits the most. He suggests that the greatest efficiency comes when public investment makes up around half of the total funding. But, there is no agreement on what is the 'right' balance—ultimately, it is a political decision. Others question the validity of using graduates' earnings to calculate private returns because these earnings reflect a graduate's previous schooling, social background, and networks as much as HE outcomes. So these rates of return are not in fact measuring the returns to HE, casting doubt upon human capital theory underpinning them ([Marginson, 2013](#)). Even so, if HE signals higher ability to employers, this strengthens the case for graduates making a larger contribution to its costs, along with the fact that graduates do earn more.

The World Bank's promotion of the private rates of return of HE at the expense of the public returns is indicative of its economic and ideological influence in setting the HE policy agenda. This policy emphasis, which peppered official government reports on funding, illustrates economists' role in shaping the language of funding policies and the thinking informing them. It valorizes the private benefits of HE at the expense of its public and social benefits without questioning the private subsidy of public benefits. Moreover, despite

underestimating the return of education to society, the arguments in favour of cost-sharing as well as the popularization of human capital theory and the concept of education as an investment have not diminished.

The rise of cost-sharing policies since the 1980s also can be explained by other factors (Johnstone and Marcucci 2010). First, the expansion of HE, reflecting the rising social demand for HE and its growing importance in globalized knowledge-based economies. The Gross Tertiary Enrolment Ratio<sup>3</sup> between 1980 and 2013 increased from 12.2 per cent to 34 per cent worldwide, from 35 per cent to 74 per cent in developed countries, and from 5 per cent to 27 per cent in developing countries (UNESCO 2016). As Trow (1973: 1) argues, ‘In every advanced society the problems of HE are problems associated with growth.’ The problems of HE funding relate to increases in ‘the absolute size of systems and individual institutions. And ... changes in the proportion of the relevant age grade enrolled in institutions of HE’ (Trow 1973: 2). Exploring the relationship between expansion, equality, and quality, Trow poses the dilemma of how an expanding HE system can maintain its quality and be affordable: ‘No society, no matter how rich, can afford a system of HE for 20 or 30 percent of the age grade at the cost levels of the elite HE that it formally provided for 5 percent of the population’ (Trow 1973: 36). He suggests that either unit costs have to be levelled down, potentially at the expense of quality and standards, or expansion restricted at the expense of equity. Others see greater cost-sharing as a potential solution to these dilemmas—a means of increasing HE’s resources (McMahon 2009; Johnstone and Marcucci 2010).

A second factor explaining the ascendancy of cost-sharing policies is the rising costs of HE and per-student costs driven by its expansion, the growth of postgraduate education, and

---

<sup>3</sup> This measures total enrolment in tertiary education (ISCED 5 to 8) as a percentage of the total population of the five-year age group following on from secondary school-leaving.



the unmet, and ever-increasing, demand for HE (Heller 2011). But even without expansion or escalating demand, the costs of teaching and per-student costs are significant and constantly rising above inflation due to the labour-intensive and ‘productivity-immune’ (Johnstone and Marcucci 2010: 15) nature of HE. HE is a service industry, and its ‘product’ relies heavily on human interaction, demands a fixed amount of time with the consumer/student (reducing it would diminish quality), and is run by highly educated individuals commanding high reservation wages. These dynamics lead to rising wages and costs without any increase in outputs or productivity. Nor has the introduction of technology led to increased productivity and lower costs, unlike in other sectors. Rather, it has had the opposite effect: ‘technological change and innovation itself are major forces behind rising HE costs’ (Archibald and Feldman 2011: 16). In addition, competition within the HE sector has increased its costs, contrary to microeconomic theory. Competition within HE is driven by reputation and perceptions of quality, not by price—allowing universities to raise their prices. Universities, especially elite ones, to maintain their position in a global HE market, spend to enhance that position. To look better than their competitors, they end up in an arms race of spending to improve facilities, academic staff, students, research, and technology. This is fuelled by international rankings, particularly in elite universities where student demand outstrips supply—providing universities with little incentive to increase their efficiency, reduce costs, and get better substitution (Ehrenberg 2002). But, overall, increasing HE costs reflect the nature of the HE industry and the economic environment within which it operates rather than dysfunctional decision-making and inefficiencies within the sector (Archibald and Feldman 2011).

A third factor contributing to the rise of cost-sharing policies is faltering and falling government revenues and the inability, or unwillingness, of governments to meet HE’s increasing costs through public funds for economic, political, and/or ideological reasons.

How this is manifested differs considerably by country, but it leads to financial austerity, which has implications for the financial sustainability of HE and the sector's ability to provide high-quality courses and equitable access. As [Trow \(1973\)](#) and others ([Zumeta et al. 2012](#)) note, as national HE systems grow, they become 'an increasingly substantial competitor for public expenditures' ([Trow 1973: 4](#)); and the bigger the HE system, the more critical its relationship to the state, especially in Europe, where HE is primarily state-funded. This funding competition is ongoing, but when combined with macroeconomic factors, which lead to constraints on overall government revenues, particularly during periods of slow economic growth, the competition becomes more acute. It can be seen clearly throughout Europe and North America following the [2008](#) recession, which led to both falls in tax revenues and considerable cutbacks in public expenditure. Spending on HE competes with, and can be crowded out by, for instance, spending on compulsory education, health, welfare services, and national security.

Ultimately, political factors, which manifest in demands for funding of other services, restrict the funding available for HE. Politicians and policymakers decide how to spend government resources, reflecting their ideological leanings as well as financial considerations. Reducing HE public expenditure is just one choice. However, in zero-sum funding environments, HE is particularly at risk for three main reasons. First, expenditure on HE is often discretionary rather than mandatory, unlike other public services. Second, HE 'has a very small, predefined constituency relative to other spending areas' ([Delaney and Doyle 2007: 56](#)). Consequently, it is potentially a less politically contentious policy arena for cutbacks compared with, say, compulsory education. Thirdly, HE, compared with other policy areas, presents opportunities for cost-sharing. It can draw on other non-government sources of revenue, primarily tuition fees but also philanthropic giving. Tuition fees or user charges can be levied without undermining the level of service provided (although they might

impact on access), unlike other services. These, then, are some of the components in the political calculus behind augmenting or substituting public revenues with tuition fee income.

The final dynamic that helps explain the rise of cost-sharing is the failure of cost-side solutions alone to solve the problems of ‘diverging trajectories of costs and available public revenues’ (Johnstone and Marcucci 2010: 44). Examples of cost-side solutions include reductions in the academic workforce, their working hours, and wages; replacing expensive staff with cheaper junior or casualized, part-time staff; increasing teaching loads; raising staff–student ratios; expenditure cuts on libraries, equipment, and other facilities; and deferring costly buildings maintenance. The list is endless. More radical solutions include greater sector differentiation, mergers, and new forms of provision such as online degrees. In the long term, such cost-cutting measures may not lead to greater efficiencies, are likely to have negative impacts on the quality of provision and to change the nature of the HEIs, rendering them less attractive to staff and students. Most significantly, the gap between the ever-increasing costs of HE and available revenues is just too wide to close by expenditure cuts. Hence the need for additional, non-government sources of income to supplement insufficient, and often declining, government funds.

## What Are the Key Cost-Sharing Policies?

The main purpose of cost-sharing policies is to increase the total resources available to HE and, specifically, from non-governmental or private sources (McMahon, 2009; Johnstone and Marcucci 2010). The aim is to shift a greater share of the costs of both instruction and student maintenance from government and taxpayers to students and their families. Both these costs can be shared in various ways. Countries differ dramatically in how they have apportioned them between the government/state/taxpayers; students/graduates; students’ families; and

philanthropists, despite many countries having very similar HE goals. And, there are a variety of ways in which these costs can be met. In the case of tuition, public subsidies can be paid directly to HE institutions, benefiting all students equally, or through tuition fees, or a combination of both. Tuition fees can be paid directly by students' families or students can borrow money and repay pay it out of their post-graduation income, or a mix of both. Students' living costs can also be paid directly by students' families, by government grants, through student loans repaid later, or an amalgamation of all three. So cost-sharing can mean various combinations of ways of meeting these two types of costs.

Cost-sharing can be invoked and configured in numerous ways. The key policy tools for reducing the government's share of HE costs include changes to:

1. Tuition fees and administrative charges: their introduction/reintroduction or large increases. Administrative fees can include registration fees, examination fees, or obligatory contributions to student unions.
2. User fees: their introduction or increases, to recover the expenses of institutionally or government-provided, and formerly free or subsidized, student services such as housing, catering, and transport (e.g. in the 1990s in Russia and most of Eastern and Central Europe).
3. Direct grants, bursaries, scholarships and social security benefits to students for tuition and/or maintenance: their abolition, reduction, or freezing (e.g. Russia and many Eastern and Central European countries in the 1990s), and/or the narrowing of the eligibility criteria for this aid.
4. Student loans: their introduction to cover tuition fees and their increasing role in replacing student grants, especially for maintenance.
5. Government subsidies on student loans through changing cost-recovery strategies: their abolition or reduction. These subsidies vary depending on the design of student

loans systems. They can be achieved, for instance, by introducing or increasing student loan interest rates and the period of time interest is charged, lowering the income threshold when income-contingent loan repayments start, and abolishing debt forgiveness or increasing the period time before debt forgiveness takes effect (e.g. Australia in 2007, England in 2012).

6. Tax benefits and family allowances to cover education costs aimed at students' parents: their abolition, reduction, or freezing their value. These tax benefits (e.g. in Austria, Canada, and the US) and family allowances (e.g. in the Czech Republic, France, Germany, and about half of all European countries) tend to be available in those countries where students are considered financial dependants on their parents.
7. Block grants to HEIs: reduced or abolished.
8. Private HE: the development or expansion of unsubsidized or partially subsidized tuition dependent private sector in HE systems which historically have been dominated by a subsidized public sector (e.g. in Brazil, Indonesia, Japan, Korea, the Philippines, and other Latin American countries).

The first six policy tools can be applied to all HE students and their families, or to just some of them—practices differ between and within countries. All student financial aid policies, whether for tuition or maintenance, involve choices. They implicitly or explicitly have to address the following three questions: who should get the most support? (e.g. needy, virtuous, or able students); why help them? (e.g. to give the disadvantaged a break, to ease the burdens of the middle classes, to encourage effort or reward talent, to maintain recruitment and encourage retention); and who should provide the financial support? (philanthropists, universities from their general income and other students' tuition fees, the government via public funds, graduates through the loans they repay after university) (Wilkinson, 2005). The eligibility criteria for student support, therefore, are numerous and

can include, for instance, students' academic attainment, family household income, type of institution attended, qualification aim and level of study, mode and subject of study, and country of origin.

### *The Rise of Tuition Fees*

Tuition fees and administrative charges to cover instruction costs are by far the most common form of cost-sharing globally, and the focus of policy debates and ideological struggles. This private contribution to HE is justified by the high private rates of returns. Tuition fees supporters consider them the most attractive cost-sharing policy because fees can provide HE with an 'efficient and robust' income stream 'that is potentially sizeable, [and] continuous' (Johnstone and Marcucci 2010: 44). Moreover, tuition fees can be introduced 'without simultaneously adding new costs or diverting faculty from their core teaching responsibilities, which is generally not the case with supplementing revenues via grants and contracts or other forms of faculty entrepreneurship' (Johnstone and Marcucci 2010: 67). Higher tuition fees, argues the OECD (2015: 264) 'increase the resources available to educational institutions, support their efforts to maintain quality academic programmes and develop new ones, and can help institutions accommodate increases in student enrolment'. Some proponents of tuition fees also argue that because students have to pay them, students make better and more responsible enrolment decisions and are more likely to complete their studies.

Opponents of tuitions fees stress the considerable public benefits and positive externalities to HE which justify high public subsidies (Vossensteyn 2005). They argue that these require financial support, for instance, to sustain the highly educated workforce needed for growth and prosperity in globalized knowledge economies. Others suggest that the higher taxes graduates pay represent a user contribution which is part of a collective public investment and so fees are unnecessary (NUS 2014). Those against fees emphasize too the

social mission of universities and their contribution to the amelioration of social inequality. Specifically, that tuition fees may impede access to HE. International research has repeatedly demonstrated that ‘students from more disadvantaged backgrounds are more sensitive to net price changes’ (Santiago et al 2008: 182) than those from wealthier backgrounds. This equity argument is frequently used in those countries with low or no tuition. It also is the main reason for the provision of student financial support to defray these and other HE costs. Adversaries also claim that quality and well-considered enrolment decisions can be encouraged in other ways, such as through well-developed quality-assurance systems. Finally, they raise concerns that tuition fees, especially when introduced within the context of the marketization of HE, potentially turn HE into a consumer good—undermining the very essence of HE, students’ learning experiences, and the co-production of knowledge (Barnett 2013).

Tuition fees within the public HE sector can be found across the world’s continents (Marcucci 2013). They have a long history in the private HE sector and in the public sector in countries like the US. But many countries, especially in Europe, abandoned tuition fees following the Second World War. However, since the late 1980s tuition fees have become more widespread. They were introduced or reintroduced for instance in Australia in 1989, New Zealand 1990, Hungary 1994, England 1998, China 1998, and Austria 2001. Between 1995 and 2010, fourteen out of twenty-five OECD countries increased their tuition fees, and ten countries reformed them between 2010 and 2013/14 (OECD 2015).

As discussed, various forces have encouraged the rise of tuition fees. Yet, it is hard to identify the factors which explain their presence or absence, and the level of fees charged, within a particular country. Broadly, they are linked to a country’s history, politics, and ideology. More specifically, they tend to be associated with prevailing beliefs about the appropriate size of government, the proper extent of transfer payments, the acceptable level

of direct and indirect taxes, and the role of markets versus government regulation and steering. For instance, the US, England, Australia, and some Canadian provinces have relatively high public university tuition fees and tend to: embrace the privatization of public services generally; have more faith in markets; and endorse smaller governments and lower taxation. Japan and South Korea have similar characteristics but high levels of taxation. At the other end of the political/ideological spectrum, Nordic countries, with their strong welfare economies and acceptance of high levels of taxation, charge no tuition fees and provide help with students' living costs. Their approach reflects deeply rooted social values, such as social equity, the salient cultural value of free education, and the principle that access to tertiary education is a right, rather than a privilege. Most of the rest of Europe has low or no tuition fees<sup>4</sup> (except the Netherlands, Ireland, and Switzerland) and large governments, but provides students with limited help with their maintenance costs (Eurydice 2015). So among these European countries, there is still an element of cost-sharing, which is long-standing, because rarely do their HE funding systems cover all students' educational and living costs.

The average amount of tuition fees charged, ranging from \$0 to \$9,000<sup>5</sup> in England for a bachelor's degree or equivalent in 2013/14 (OECD 2015: Table B5.1a and Chart B5.2), not only varies between countries but also within countries depending on level of education, field of study, students' socio-economic background, students' academic attainment, mode of study, and domicile. Consequently, the proportion of students paying fees and how much they pay also varies across and within countries. Some of these tuition fee differences (e.g. field of

---

<sup>4</sup> Other countries, apart from Nordic countries, charging no or very low (under €100) fees include

Cyprus, Estonia, Germany, Greece, Poland, Scotland, the Slovak Republic, Slovenia, and Turkey.

<sup>5</sup> In 2012/13 tuition fees in England for new entrants rose from over \$4,000 to over \$12,500, but only students in their first year of study paid these higher fees, bringing the average to \$9,000. In future years this average will rise considerably.



study) are justified by the different educational costs associated with providing certain programmes of study and the higher rates of private returns associated with them (e.g. in Australia). In other countries, free education is enshrined in the law, but to meet the increasing demand without raising public expenditure, dual-track systems have developed. For example, in Russia the most academically able students attending prestigious public universities pay no fees, while those with lower prior academic attainment pay full-cost fees mostly at private universities or in the fee-paying tracks in public institutions. In essence, such dual-track fees act as government-sponsored merit-based scholarships, favouring the most advantaged.

### *Student Financial Support and the Rise of Student Loans*

Integral to the cost-sharing policy agenda is the increasing use of student loans both for tuition and maintenance. As suggested, one of the key arguments against tuition fees is their potential deterrent effect on HE participation. If countries put the burden for tuition and maintenance costs entirely on the shoulders of families, they risk attracting the wealthiest students but not the brightest, which means not making the most out of their country's talent, perpetuating inequalities, and impeding social mobility. International research has repeatedly demonstrated that raising fees without increasing loans and/or grants by the same value, or more, depresses participation, especially among those from lower socio-economic groups (Dearden et al. 2010). Thus, a robust system of student financial support is important for student outcomes and HE access. Also critical is the type of financial assistance—loans and/or grants—and the mix of that aid.

The central objective of government-sponsored student loan schemes around the world differs (Ziderman 2013). Where cost-sharing is the main purpose, loans generate more

income for the university sector by facilitating tuition fee increases and making fee hikes more politically and socially acceptable.

The disincentive effects [on participation] of up-front tuition fee increases may be offset also by the availability of loans for students that will cover these augmented costs. Loans enable student borrowers to avoid up-front payments for HE (whether for tuition fees or living expenses) by delaying payment, which will be rendered in manageable instalments out of enhanced earnings after graduation.

(Ziderman 2013: 34).

So loans, like tuition fees, are predicated on the high private returns of HE. They shift more of the costs of HE onto graduates. Loans have to be repaid by students and so are a private cost, unlike non-repayable grants (for tuition and/or living costs), which are a direct subsidy to students and funded 100 per cent by government. Loans, supporters argue, even if subsidized by government, are cheaper than grants and can help reduce public expenditure on HE. They potentially free up more government funds for student financial support so that more students can benefit from such aid, helping to increase overall access to HE.

Opponents of loans suggest that they are less effective than grants in encouraging access to HE among low-income students. They also highlight how loans may be less efficient than anticipated because of the type of loan and the costs of administering, financing, and servicing loans. As Ziderman (2013: 43), a loans supporter, argues:

Since a grant offers a stronger and more direct incentive for access than does a (partially) repayable loan, the apparent advantage of loans over grants is less clear-cut. This highlights a central conundrum in loan policy: at what level of built-in loan subsidy does a grant become a more cost-effective instrument for helping the poor than a subsidized loan (with hidden grants)?

The incentives and risks of investing in HE for both students and governments vary.

Adversaries of loans point to research suggesting that some potential students, particularly those from low socio-economic groups, are debt-averse and deterred from entering HE by the prospect of student loan debt (Callender and Jackson 2005). Thus, loans potentially perpetuate socio-economic inequalities in access to HE. Such arguments are often dismissed by economists who argue that debt aversion is irrational, given the high financial returns of HE, thus ignoring a social reality.

In theory, the risks students face can be mitigated by the student loans available, although we have limited empirical evidence to prove this definitively. Basically, there are two types of student loan repayment arrangements, with collections being determined in a set time period—‘mortgage-type’ loans (e.g. in the US, Thailand, and Canada)—or by the graduate’s income—‘income contingent loans’—the less a graduate earns, the less she repays (e.g. in England, Australia, New Zealand, and Hungary). These repayment arrangements have implications for the loan ‘repayment burden’—the proportion of a graduate’s income per period needed to repay their loan. The higher the repayment burden, the lower the graduate’s disposable income, which can cause financial hardship and affect graduates’ physical and emotional well-being (Gallup, Inc. 2014; Dwyer et al. 2011). In addition, greater repayment burdens increase the likelihood that graduates will not repay their loans because of low pay. For instance, in the US, student loan defaulters are much more likely to have low incomes (Dynarski 1994; Gross et al. 2009). By contrast, income-contingent loans are specifically designed to avoid high repayment burdens, with the proportion of a graduate’s income required to service their student loan debt capped by legislation (Chapman and Lounkaew 2010). Even so, levels of debt on graduation can still be high even with income-contingent loans, which has adverse effects on governments if large numbers of students are unable to repay their loans because of low-earnings (OECD 2014: Box 5.1).

Across OECD countries, most have introduced their loan systems since the late 1980s. Just as different countries' approach to tuition fees varies considerably, so does their use and the penetration of student loans for tuition, maintenance, or both. Also loan eligibility criteria, the type of loans available, and the terms and conditions attached to them, such as loan repayments, interest rates charged, and debt forgiveness, differ enormously (OECD 2015: Table B5.4). Again it is difficult to explain these variations. Loans are well developed in countries with high tuition fees (e.g. Australia, England, the US) and have high take-up rates, but they are also well established in Nordic countries that charge no tuition fees and are used to cover students' living costs. Loans in countries like England and the US are also available for the costs of both tuition and maintenance. Across the OECD in 2013/14, the value of loans ranged from \$1,458 per annum in Belgium to over \$10,000 in Norway and over \$16,000 (\$5,612 maintenance and \$10,824 tuition) in England, while the average among twenty countries exceeded \$4,000 (OECD 2015: B5.4). Generally, the larger the proportion of students with loans, the higher the average value of their loans.

As suggested, the increasing reliance on loans is, in part, associated with the rise in tuition fees, but as also discussed, loans and tuition fees do not always go hand in hand. Another recent development has been the substitution of loans for grants in meeting students' living costs as a means of reducing government expenditure. For instance, loans are replacing existing grants in countries like Canada, the Netherlands, England, and in the US since the late 1970s. Again, more of the costs of HE are being placed directly on the shoulders of students.

## Have Cost-Sharing Policies Met Their Purported Objectives?

The ascendancy of cost-sharing policies and the theoretical rationale underpinning them, as we have seen, is primarily informed by market-oriented neoliberal economics. In line with this thinking, in theory, cost-sharing should lead to greater financial sustainability, equity, efficiency, and responsiveness of HE systems (Greenaway and Haynes 2003). It is beyond the scope of this chapter to assess the achievement of these purported benefits in any detail, but it can point to some general trends and highlight the nature of the empirical questions that need to be addressed for a more thorough assessment.

### *Financial Sustainability*

The key aim of cost-sharing is to increase HE's total resources and its income from private sources so it no longer has to compete with other public services and demands on government spending. This reduced dependence on shrinking public resources is considered central to financial sustainability.

In theory, cost-sharing and tuition fees should make HE better off overall while the costs of HE to government should fall or remain stable. In turn, this raises the following empirical questions.

- Has cost-sharing led to a change in the share of HE's income from private and public sources and does a greater share now come from private sources?
- Has HEI's total income improved or remained the same as a result of cost-sharing?
- Has public expenditure on HE fallen and private expenditure risen?

There is plenty of evidence of decreases in governments' share of funding to HE relative to funding from private sources, as well as real falls in government funding overall and government per-student funding across Europe and the US (Geiger and Heller 2010). For example, among twenty OECD countries, the average share of public funding for tertiary institutions decreased from 68.8 per cent in 2000 to 64.5 per cent in 2012, primarily because

of changes in tuition fees. Conversely, between 2000 and 2012, the proportion of private funding for tertiary education increased in seventeen out of twenty-two OECD countries. The average private share was 30 per cent in 2012, but ranged from less than 5 per cent in Nordic countries to 70.7 per cent in Korea, largely reflecting the level of tuition fees charged (OECD 2015: Table B3.2b).

Between 2000 and 2012, private expenditure on educational institutions tended to rise faster than public expenditure. However, public investment in tertiary education also increased in most countries over this period, regardless of the changes in private spending, and so these HE systems were better off financially. In some countries, tuition fees just offset the loss in revenues from the falls in public funding, and so did not increase the sector's overall revenues. In Portugal and England the prime goal of tuition fee reforms was to bring about a net shift in the cost-sharing balance. The 2012 changes in England, particularly, demonstrate a clear shift towards the private funding of HE—with liquidity and affordability constraints assuaged through loans, underpinned by government funding. So HE public funding has been almost entirely replaced by private financing through fees and loans. However, the public costs of financing these loans are very high, adding to national debt and the public contribution (McGettigan 2015). This raises the broader question of whether government-funded loans are classified as public or private funding. Practices vary in different countries, adding to the complexity of interpreting comparative OECD data.

## *Equity*

The equity assertion is aligned to cost-sharing's mantra of 'who benefits pays'. To recap, students reap a range of private individual benefits from their HE qualification, while those without such a qualification do not, despite the fact that they, and all taxpayers, contribute towards the costs of government-subsidized HE. Importantly, the main beneficiaries of HE,

those mostly likely to participate, are people from middle- and higher-income backgrounds. Thus, a tax is imposed on low-income individuals to privilege an already privileged group. In essence, public subsidies are being used to redistribute wealth from people who are less well off to those who are better off. This is considered unfair and inequitable (Glennester et al. 1995).

Government subsidies to HEIs and grants to students do result in most of the money benefiting students from already relatively privileged families. However, as suggested, this discourse ignores the public benefits and social positive externalities of HE, despite the fact that these may outweigh the costs of a mainly publicly funded system of HE due to the tax revenues and social contributions accrued from graduates (OECD 2015: Chart A7.3). For instance, research on the financial returns to HE in England shows that the private benefit of a degree, in terms of lifetime earnings net of tax and loan repayments, is large—in the order of £168k (£252k) for men (women) on average. The social benefit to the government is also large (of the order of £264k (£318k) from men (women) graduates—*far in excess of likely exchequer cost* (Walker and Zhu 2013: 5, italics added).

These high private financial returns to HE assumed in the equity argument need further scrutiny. On the one hand, Walker and Zhu's (2013) calculations reaffirm cost-sharing thinking and the high returns. On the other hand, they and others also provide evidence potentially undermining this premise, and point to rising inequality. Specifically, research highlights the substantial variation in graduate earnings across and within nations, which has increased over time, paralleled with rising 'over-education' (Green and Zhu 2010). There is mixed evidence on the extent to which the 'graduate premium' is holding up as HE expands, more graduates enter the labour market, and markets in graduate labour change. Studies measuring the private returns produce large variations in estimates, and contradictory trends with both growth and falls (Walker and Zhu 2013; Jenkins et al. 2012; Gregg et al. 2014).

Significantly, those least likely to reap high financial benefits and to gain ‘graduate jobs’ tend to come from lower socio-economic backgrounds and to have attended the least prestigious universities (Boliver 2011). These are also the graduates most likely to leave HE with the largest student loan debt, especially in countries with high tuition fees. For such graduates, the returns may be low—there may be no link between the cost of their degree and its later value in the labour market. Consequently, the extent of ensuing social mobility arising from HE—an implicit assumption within the cost-sharing debate—is unclear. Some studies suggest high levels that have not deteriorated over time (Gorard 2008; Goldthorpe 2012; Saunders 2012; OECD 2015: Chart 4.1); others, low levels (Blanden 2011; Jantti et al. 2006).

Another issue concerning the equity of provision and tuition fees is whether fee levels are set nationally or whether each university is able to set its own fees. This affects the extent of the variation in tuition fee charged by different HEIs within a country, and how high fees may inhibit or deter access to the most expensive and prestigious universities due to liquidity or affordability constraints.

The equity argument also poses other empirical questions including:

- Has cost-sharing had an impact on HE participation rates?
- Has the composition of the student body changed?
- Have students changed their behaviour to limit their HE costs?

Some argue that cost-sharing, far from creating greater equality, actually leads to inequality because tuition fees are a barrier to HE access, especially for poorer students. This is because tuition fees reduce the real, or perceived, rate of return for HE whereby individuals no longer want to invest in HE or because individuals face liquidity constraints and fees are unaffordable. These constraints are likely to have varying effects on different student groups. For example, US research suggests that students from lower socio-economic groups strongly react to the gross (sticker) price of tuition fees and not the net price after student support.



Hence, tuition increases—even with commensurate increases in financial aid—will discourage them. Consequently, even if the overall demand stays constant, there may still be an effect on the overall composition of the student body.

The general consensus in the research is that aggregate demand for HE amongst ‘traditional’-age students is relatively insensitive to increases in price at an aggregate level (Dynarski 1994). For instance, Orr et al’s, (2014) study of seven countries from the European Union and two from outside Europe (Austria, Canada, England, Finland, Germany, Hungary, Poland, Portugal, and South Korea) explored the relationship between tuition fee rises and their effects on aggregate demand and enrolment between 1995 and 2010. They conclude that among the case-study countries, participation rates continued to rise regardless of fee policies and only exceptionally large fee increases had any negative impact on participation.

Similarly, the OECD argues that there is

no strong cross-country relationship between levels of fees and participation in tertiary education. However, among countries with high tuition fees, student financial support systems that offer loans with income-contingent repayment combined with means-tested grants may help to promote access and equity while sharing the costs of HE between the state and students.

(OECD 2015: 263)

Yet, with all such studies, the full effects of tuition fee increases are unknown because we do not know what would have happened to enrolments in the absence of reforms. Indeed, establishing causality is a major methodological challenge when examining the impact of tuition fees and student support on HE participation.

Why is it that HE participation rates continue growing despite high and rapidly rising private costs? One reason maybe that young people’s other options are becoming more limited and less desirable. Indeed, it was for this reason that Trow (1973) classified HE

participation rates of 50 per cent and over as universal. The penalties attached to non-participation are too high. If young people do not enter tertiary education, the threat of poverty is much greater.

As income inequalities escalate, the cost of failing to secure a place in the top half of society rises, and so the perceived benefits of a university education rise in turn. If future UK society [and many others] is to have a few more princes and many more paupers, then the risk of taking on student debt may be less than the risk of not going to university.

(Dorling 2014)

The impact of cost-sharing on the total number of people participating in HE is just one part of the access story. As important is who enters, and whether the composition of the student body has changed over time. Comparable international data charting changes over time is unavailable. Orr et al's (2014) limited data and analysis suggest that fee reforms have no effect on the gender composition of the student body and little to no effect on the proportion of students drawn from lower socio-economic or ethnic-minority backgrounds (Orr et al. 2014:12). However, as evidenced in England, after the 2012 tuition fees hike, there have been falls in demand among older students and those studying part-time (Callender 2013). Moreover, as discussed, fee increases without equivalent increases in student aid tend to cause declines in participation, especially among poorer students. The deterrent impact of tuition fees on enrolment is about twice as strong as the attractive power of grants (Vossensteyn 2005), while grants have a stronger influence on participation than loans (Zideman 2013). Thus, any changes in tuition fee levels must be examined alongside student financial support in order to understand the impact of cost-sharing policies on both participation and study behaviour.

Students may change their behaviour to limit their HE costs and debt by taking particular decisions about how, what, and where to study (Callender 2006). For instance, they may switch from full-time to part-time study, choose cheaper or shorter courses or subjects of study with higher financial returns, decide to live at home rather than away, or engage in more paid term-time employment. Most such choices potentially have negative consequences or limit opportunities, creating further inequalities amongst the student body. There is some evidence of such changed behaviour in various countries, especially the US. For instance, increases in tuition fees have gradually driven low-income and ethnic-minority students away from four-year university programmes and instead towards less prestigious two-year colleges (Duffy and Goldberg 1998; Kinzie et al. 2004; McPherson et al. 1993). However, both the limited amount of research on the impact of cost-sharing on students' decisions and an absence of comparable international data make firm conclusions difficult to draw.

### *Efficiency and Responsiveness*

The final assumption informing cost-sharing is that it leads to greater producer responsiveness, which drives greater efficiency. As private funding increases, the HE sector is motivated to maximize its private revenue, which in turn increases its responsiveness to student demand and its efficiency. This is in contrast to direct public subsidies, which are considered a disincentive for improvements in efficiency. Again, these ideas are underpinned by economic thinking—the notion that tuition fees represent the price of a valuable commodity in high demand and so bring to HE some of the virtues of the market. Together, they make consumers more discerning while universities seek their place in the HE market. Markets, through competition and user choice, are assumed to improve quality. Theoretically, competition drives up teaching quality while driving down prices through efficiency gains. This, of course, raises the question as to whether HE is, or can ever, operate purely as a

market or quasi-market. It points to some of the negative consequences arising from attempts to create a HE market (Brown 2013).

This raises the following empirical questions:

- Are HEIs maximizing their revenue from private sources?
- Is HE provision becoming more diverse, in response to student demand?
- Has the quality of the student experience improved?

There is limited research on the impact of increasing shares of private funding on HE's responsiveness and a lack of readily comparable international data and indicators to assess its effects. To adequately address these questions demands detailed data on, for instance, whether HEIs are focusing on programmes that are popular or cheaper to deliver, whether the number of institutions and programmes have increased while staff–student ratios decreased, and whether HEIs are spending more on students.

Such assumptions may be overly simplistic. Institutional responsiveness to user demand is conditional on the attractiveness of these private revenues and whether increasing them has trade-off effects for the overall behaviour or prestige of HEIs. For instance, maximizing private contributions via expansion might, as Trow (1974) observed, lead to poorer-quality provision, or dilute the elite nature of some universities. The likelihood of HEIs increasing their efforts to attract new and more students will depend on the incentive structures which surround tuition fees which might favour other behaviours such as the maximization of public over private funding. Moreover, the ability of HEIs to diversify their provision by, for instance, increasing student numbers, changing programme provision, and dictating fee levels depends on high levels of institutional autonomy and a light-touch regulatory framework. Universities in many European countries have limited (but growing) autonomy, but their funding models are often designed to stimulate user responsiveness. Elsewhere, such as in England and the US, the policy thrust has been towards a deregulated HE quasi-market with

high levels of institutional autonomy but with growing and new forms of performance and accountability measures.

Orr et al's (2014) overview of these issues in nine, mainly European, countries produces little to support these benefits attributed to cost-sharing. They conclude that HEIs' behaviour is not necessarily affected by the availability of fee income; real responsiveness does not result from putting private funding into public university systems but comes from permitting new institutions both public and private to evolve; and the resources gained through new fee-derived income are not always invested in ways that would be expected to perceptibly improve the student experience.

## Conclusions

This chapter has argued that cost-sharing policies are now an entrenched feature of the global HE funding landscape, fuelling expansion. They seek to alter the balance of public and private contributions to HE so that more of HE's costs are borne by students. But cost-sharing is not simply a transfer of the costs of higher education to private consumers. There is more to cost sharing than a shift to fees, possibly underwritten by loans. And this is clear when we consider the two distinct types of HE costs—tuition and students' living expenses. These costs are often treated very differently, and cost-sharing can mean various combinations of ways of meeting the two types of costs. The ascendancy of sharing the costs of tuition in the 1980s is primarily associated with profound political and ideological shifts in attitudes towards public expenditure and the funding of HE. Specifically, HE was no longer viewed primarily as a public good benefiting all in society, but instead as a private good mostly benefiting the individual. 'Who benefits pays', based on popularized human capital theory and rates of return, became the new language of HE funding and the mantra reinforcing cost-

sharing policies. Other more pragmatic forces encouraging cost-sharing's rise were the expansion of HE, its rising costs, and declining government revenues, and the failure of cost solutions to meet these increasing costs.

There are numerous cost-sharing policies, but the most prominent and widespread are tuition fees and student loans. Economic thinking and concepts have helped inform their development, rationale, and design. However, as this chapter shows, the presence and absence of these policies, their scale and scope, level, reach, and form, within and across countries, can be attributed to the prevailing political and ideological currents of a country and the moment, and the particular histories and cultures of a country. The espoused virtues of cost-sharing policies in promoting financial sustainability, equity, and greater efficiency and sector responsiveness are similarly informed by economic reasoning. Yet, their overall effectiveness in delivering these is open to question. On the whole, cost-sharing has increased the total resource available to HE and prompted a shift in the share of income from public to private sources. However, as [Johnstone and Marcucci \(2010: 282\)](#) warn, 'Cost-sharing is no miracle cure.' They continue, 'our advocacy of cost-sharing is always an advocacy for its ability to supplement and augment government revenues, never to replace it' ([Johnstone and Marcucci 2010: 283](#)). In these times of austerity, there is a very real danger of such substitution. And all these policies may well be at the cost of more widely drawn notions of equity.

## References

Altbach, P. (1999) 'The Logic of Mass Higher Education', *Tertiary Education and Management*, 5( 2): 107–24.

Archibald, R. and Feldman, D. (2011) *Why Does College Cost So Much?*, New York: Oxford University Press.

Ball, S. (2008) *The Education Debate*, Bristol: Policy Press.

Barnett, R. (2013) 'The End of Mystery and the Perils of Explicitness', in C. Callender and P. Scott (eds.) *Browne and Beyond: Modernizing English Higher Education*, London: Institute of Education Press.

Blanden, J. (2011) 'Cross-National Rankings of Intergenerational Mobility: A Comparison of Approaches from Economics and Sociology', *Journal of Economic Surveys*, 27(1): 38–89.

Boliver, V. (2011) 'Expansion, Differentiation, and the Persistence of Social Class Inequalities in British Higher Education', *Higher Education*, 61(3): 229–42.

Brennan, J., Durazzi, N., and Séné, T. (2013) *Things We Know and Don't Know about the Wider Benefits of HE: A Review of the RECENT LITERATURE*, Research Paper No 133, London: Department for Business, Innovation and Skills.

Brown, R. and Carasso, H. (2013) *Everything for Sale? The Marketisation of UK Higher Education*, Abingdon: Routledge.

Callender, C. (2006) 'The Impact of Tuition Fees and Student Support on Access to Higher Education in Britain', in P. Teixeira, B. Johnstone, M. Rosa, and H. Vossensteyn (eds.) *Cost-sharing and Accessibility in Higher Education: A Fairer Deal?*, Netherlands: Springer, pp.105–32.

Callender, C. (2013) 'Part-Time Undergraduate Student Funding and Financial Support', in C. Callender and P. Scott (eds.) *Browne and Beyond: Modernizing English Higher Education*, London: Institute of Education Press, pp. 130–58.

Callender, C. and Jackson, J. (2005) 'Does Fear of Debt Deter Students from HE?', *Journal of Social Policy*, 34(4): 509–40.

Chapman, B. and Loukaew, K. (2010) 'Income Contingent Student Loans for Thailand: Alternatives Compared', *Economics of Education Review*, 29(5): 695–709.

Chitty, C. (2009) *Education Policy in Britain* (2nd edn), Basingstoke: Palgrave Macmillan.

Delaney, J. A. and Doyle, W. R. (2007) 'The Role of HE in State Budgets'. in K. Shaw and D. E. Heller (eds.) *State Postsecondary Education Research: New Methods to Inform Policy and Practice*, Sterling, VA: Stylus, pp. 55–76.

Dearden, L., Fitzsimons, E., and Wyness, G. (2010) *The Impact of HE Finance on University Participation in the UK*, BIS Research Paper Number 11. London: Department for Business, Innovation and Skills.

Dorling, D. (2014) 'Tuition Fees: A Bonanza for the 1%', *The Guardian*, 30 September, <http://www.theguardian.com/education/2014/sep/30/tuition-fees-bonanza-for-one-percent-danny-dorling>.

Duffy, E. A., and Goldberg, I. (1998) *College Admissions and Financial aid, 1955–1994*, Princeton, NJ: Princeton University Press.

Dwyer, R.E., McLoud, L., and Hodson, R. (2011) 'Youth Debt, Mastery, and Self-Esteem: Class-Stratified Effects of Indebtedness on Self-Concept', *Social Science Research* 40(3): 727–41.

Dynarski, M. (1994) 'Who Defaults on Student Loans? Findings from the National Postsecondary Student Aid Study', *Economics of Education Review*, 13(1): 55–68.

Ehrenberg, R. (2002) *Tuition Rising: Why College Costs So Much*, Cambridge, MA: Harvard University Press

Eurydice (2015) *National Student Fee and Support Systems in European HE 2015/16: Eurydice—Facts and Figures*, Brussels: European Commission. Available online at [http://eacea.ec.europa.eu/education/eurydice/documents/facts\\_and\\_figures/fees\\_support.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/fees_support.pdf), accessed 16 Aug. 2015.

Gallup, Inc. (2014) *Great Jobs, Great Lives: The 2014 Gallup-Purdue Index Report*, Washington DC: Gallup, Inc.



Geiger, R. L. and Heller, D. (2011) *Financial Trends in Higher Education: The United States*, University Park, PA: Center for the Study of Higher Education, Pennsylvania State University. Available online at <http://ed.psu.edu/virtualroleplay/cshe/working-papers/wp-6>, accessed 30 May 2015.

Glennester, H., Falkingham, J., and Barr, N. (1995) 'Education Funding, Equity and Lifecycle', in J. Falkingham and J. Hill (eds.) *The Dynamics of Welfare: The Welfare State and the Life Cycle*, Hemel Hempstead: Prentice-Hall/Harvester Wheatsheaf, pp. 150–66

Goldthorpe, J. (2012) 'Understanding—and Misunderstanding—Social Mobility in Britain: The Entry of the Economists, the Confusion of Politicians and the Limits of Educational Policy', University of Oxford Department of Social Policy and Intervention working paper 1/2012. Available online at [http://www.spi.ox.ac.uk/fileadmin/.../Goldthorpe\\_Social\\_Mob\\_paper.pdf](http://www.spi.ox.ac.uk/fileadmin/.../Goldthorpe_Social_Mob_paper.pdf).

Gorard, S. (2008) 'A Reconsideration of Rates of Social Mobility in Britain', *British Journal of Sociology of Education*, 29(3): 317–24.

Green, F. and Zhu, Y. (2010) 'Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education', *Oxford Economic Papers*, 62(4): 740–63.

Greenaway, D. and Haynes, M. (2003) 'Funding Higher Education in the UK: The Role of Fees and Loans', *The Economic Journal*, 113(485): F150–F166

Gregg, P., Machin, S., and Fernandez Salgado M. (2014) 'Real Wages and Unemployment in the Big Squeeze', *Economic Journal*, 124(576): 408–32.

Gross, J. P. K., Cekic, O., Hossler, D., and Hillman, N. (2009) 'What Matters in Student Loan Default: A Review of the Research Literature', *National Association of Student Financial Aid Administrators*, 39(1): 19–29.

Heller, D. (2011) *The States and Public HE Policy: Affordability, Access, and Accountability* (2nd edn), Baltimore, MD: Johns Hopkins University Press.

Heller, D. and Callender, C. (eds.) (2013) *Student Financing of HE: A Comparative Perspective, International Studies in Higher Education*, London: Routledge.

Jantti, M., Bratsberg, B., Roed, K., Raaum, O., Naylor, R., Osterbacka, E., Bjorklund, A., and Erikson, T. (2006) *American Exceptionalism in a New Light: A Comparison of Intergenerational Earnings Mobility in the Nordic countries, the United Kingdom and the United States*, IZA Discussion Paper 1938, Bonn: Institute for the Study of Labor.

Jenkins, S. P., Brandolini, A., Micklewright, J., and Nolan, B. (2012) *The Great Recession and the Distribution of Household Income*, Oxford: Oxford University Press.

Johnstone, D. B. and Marcucci, P. (2010) *Financing HE Worldwide: Who Pays? Who Should Pay?*, Baltimore, MD: Johns Hopkins University Press.

Kinzie, J., Palmer, M., Hayek, J., Hossler, D., Jacob, S. A., and Cumming, H. (2004) *Fifty Years of College Choice: Social, Political and Institutional Influences on the Decision-Making Process*, Indianapolis, IN: Lumina Foundation.

Klein, M. (2015) 'Settling a U.S. Senatorial Debate: Understanding Declines in State Higher Education Funding', *Journal of Education Finance*, 41(1): 1–29.

McGettigan, A. (2015) *The Accounting and Budgeting of Student Loans*, HE Policy Institute (HEPI) Report No. 75, Oxford: HEPI. Available online at <http://www.hepi.ac.uk/wp-content/uploads/2015/05/Accounting-and-Budgeting-FINAL.pdf>.

McMahon, W. (2009) *Higher Learning, Greater Good: The Private and Social Benefits of HE*, Baltimore, MD: Johns Hopkins University Press.

McPherson, P., Schapiro, M. O., and Winston, G. C. (1993) *Paying the Piper: Productivity, Incentives and Financing in US Higher Education*, Michigan: University of Michigan Press.

Marcucci, P. (2013) 'The Politics of Student Funding Policies from a Comparative Perspective', in D. Heller and C. Callender (eds.) *Student Financing of HE: A Comparative Perspective*, London: Routledge, pp. 9–31.

Marginson, S. (2013) 'The Impossibility of Capitalist Markets in Higher Education', *Journal of Education Policy*, 28(3): 353–70.

NUS (2014) A Roadmap for Free Education. Available online at <http://www.nus.org.uk/en/news/nus-launches-roadmap-for-free-education/>.

OECD (2014) *Education at a Glance*, Paris: OECD.

OECD (2015) *Education at a Glance*, Paris: OECD.

Orr, D., Wespel, J., and Usher, A. (2014) *Do Changes in Cost-Sharing Have an Impact on the Behaviour of Students and Higher Education Institutions? Evidence from Nine Case Studies, Volume I: Comparative Report*, European Commission, Luxembourg: Publications Office of the European Union.

Santiago, P., Tremblay, K., Basri, E, and Arnal, E. (2008) *Tertiary Education for the Knowledge Society, Volume 1*, Paris: OECD.

Saunders, P. (2012) *Social Mobility Delusions*, London: Civitas.

Trow, M. (1973). *Problems in the Transition from Elite to Mass Higher Education*, Berkley, CA: Carnegie Commission on Higher Education.

UNESCO (2016) Gross Tertiary Enrolment Ratio. Available online at <http://data.uis.unesco.org/index.aspx?queryid=142>, accessed 20 Jan. 2016.

Vossensteyn, J. J. (2005) 'Perceptions of Student Price-Responsiveness, A Behavioural Economics Exploration of the Relationships between Socio-Economic Status, Perceptions of Financial Incentives and Student Choice, Dissertation, University of Twente: Center for Higher Education Policy Studies.

Walker, I and Zhu, Y. (2013) *The Impact of University Degrees on the Lifecycle of Earnings: Some Further Analysis*, BIS Research paper number 112, London: Department for Business, Innovation and Skills.

Wilkinson, R. (2005) *Aiding Students, Buying Students: Financial Aid in America*, Nashville, TN: Vanderbilt University Press.

Williams, G. (1992) *Changing Patterns of Finance in Higher Education*, Buckingham: Open University Press

World Bank (1986) *Financing Education in Developing Countries: An Exploration of Policy Options*, Washington DC: The World Bank.

World Bank (1994) *Higher Education: The Lesson of Experience*, Washington DC: The World Bank.

Ziderman, A. (2013) 'Student Loan Schemes in Practice: A Global Perspective', in D. Heller and C. Callender (eds.) *Student Financing of Higher Education: A Comparative Perspective*, London: Routledge, pp. 32–60.

Zumeta, W., Callan, P., and Finney, J. (2012) *Financing American Higher Education in the era of globalization*, Cambridge, MA: Harvard Education Press.