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Policy Forum: Financing Higher Education—Lessons from England

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ABSTRACT

Starting from the objectives of quality (higher), access (wider), and size (larger), this article draws on economic theory and empirical evidence to develop a strategy for financing higher education. The recommended strategy has three essential elements: universities should be financed from a mixture of taxpayer support and tuition fees; students should have access to a well-designed system of student loans to cover fees and living costs; and policies should address constraints on participation, particularly those that arise earlier in the system. The article illustrates the strategy by describing the mostly successful reforms of higher education finance for undergraduates in England introduced by the Blair government in 2006. The last part of the article discusses the 2012 reforms, which are a step backward. The discussion focuses on two problems that are potentially relevant to the debate in Canada: fiscally expensive student loans, leading to a cap on student numbers; and a politically driven focus on the wrong policies for widening participation.

KEYWORDS: HIGHER EDUCATION ■ FINANCING ■ UNITED KINGDOM ■ POLICY ■ REFORMS

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INTRODUCTION

Higher education matters for many reasons, including the transmission of knowledge and skills, the promotion of core values, and the pursuit of knowledge for its own sake. More recently, it has come to matter also for national economic performance and for individual life chances. Thus, policy faces a railroad crash between two competing imperatives. Technological advances are driving up the demand for skills, creating a need for more resources to finance large, high-quality systems of higher education. But those demands face longer-term pressures on the public finances, including aging populations and spending on health, as well as pressures from an increasingly competitive global economy that limit a country's capacity to increase taxes.

In the face of that conflict, many countries are reforming their systems for financing higher education. To help inform the Canadian debate about policy choices, this article first lays out some general principles in pursuit of three specific objectives: quality (higher), participation (wider), and size (larger). The last, often overlooked, is important to ensure sufficient investment in skills, and also assists access. Drawing on those principles, I suggest lessons for policy design that may be relevant to the discussion in Canada, showing how it is possible to get things broadly right, as illustrated by reforms in England in 2006 under Tony Blair, but also easy to get things wrong, as illustrated by strategic errors in reforms adopted in 2012.

ANALYTICAL BACKDROP

Economic Theory

Lessons from economic theory can be summarized in terms of four propositions.[1]

1. Graduates should contribute to the cost of their degree.

Higher education creates social benefits above those to the individual, justifying continuing taxpayer subsidies. However, graduates also receive private benefits, so that it is both efficient and equitable that the beneficiaries bear some of the costs. However, students are credit-constrained, and hence should bear those costs when they can afford them, as graduates.

2. Well-designed student loans have core characteristics.

First, following from proposition 1, loans should have income-contingent repayments. Friedman[2] noted that borrowing to finance investment in human capital (in

1 Nicholas Barr, "Higher Education Funding" (2004) 20:2 *Oxford Review of Economic Policy* 264-83; and Nicholas Barr, *Economics of the Welfare State*, 5th ed. (Oxford and New York: Oxford University Press, 2012), at chapter 12.

2 Milton Friedman, "The Role of Government in Education," in Robert A. Solo, ed., *Economics and the Public Interest* (New Brunswick, NJ: Rutgers University Press, 1955), 123-44.

contrast with a home loan) offers no physical collateral. Thus, both lenders and borrowers face considerable risk, leading to suboptimal investment in human capital. Income-contingent repayments protect borrowers from excessive risk, and collection via the tax system reduces the risk to lenders of making an unsecured loan.

Income-contingent repayments can be implemented in different ways. In a pure system, the repayment rate of *x* percent is collected as a payroll deduction from current income alongside income tax. This is the system in Australia, New Zealand, and the United Kingdom. In the United Kingdom, for example, the formula from 2012 is 9 percent of income above £21,000 per year (as illustrated in table 1). A lagged system operates similarly, except that the formula applies to the graduate's last completed tax return, hence with an average lag of about 18 months. This is the system in Hungary and Sweden. In what is sometimes called a hybrid system, monthly repayments are fixed, as in a conventional loan, but are income-contingent at low levels of income. This, broadly, is the system in the Netherlands.

A second desirable feature is that loans should be large enough to cover fees and realistic living costs, thus addressing credit constraints and assisting access by making higher education free at the point of use.

Third, loans should charge an interest rate related to the government's cost of borrowing. In a conventional loan, subsidizing the interest rate helps low earners by reducing monthly repayments. But with income-contingent repayments, the only effect of a lower interest rate is to shorten the duration of repayment. The ill effects of an interest rate below the government's cost of borrowing include high costs; within a fixed budget, high costs lead to a shortage of places if student numbers are capped, and to reduced quality if they are not. In addition, in a system with income-contingent repayments, interest subsidies are badly targeted. Shen and Ziderman[3] provide an international perspective on these various ills.

3. Competition is beneficial.

A central conclusion of the economics of information is that the benefits of competition are contingent on consumers being well informed. Students (in contrast to schoolchildren or people with complex medical problems) are potentially well informed, and hence better able than planners to make choices. People from disadvantaged backgrounds are an important exception, with implications, discussed below, for the design of policies to widen participation.

4. Government has an important continuing role.

The argument for competition does not negate a continuing role for government.[4] The tasks of government include

3 Hua Shen and Adrian Ziderman, "Student Loans Repayment and Recovery: International Comparisons" (2009) 57:3 *Higher Education* 315-33.

4 Barr, *Economics of the Welfare State*, supra note 1, at section 12.4.5.

TABLE 1 Student Loan Repayments, Effective 2012

	Annual earnings			
	£21,000	£25,000	£30,000	£50,000
	pounds			
Income tax (monthly)	225	292	375	834
National insurance contributions (monthly)	137	177	227	365
Loan repayments (monthly)	nil	30	87.50	217.50

Note: Assumes that 2011-12 income tax and national insurance contribution rates remain the same in 2012-13.

- providing continuing taxpayer support to the sector;
- ensuring that there is a good loan system;
- adopting, encouraging, and mandating policies to widen participation;
- regulating the system—for example, ensuring that there is effective quality assurance;
- setting incentives by offering larger subsidies for subjects that the government wishes to encourage and larger subsidies for some students;
- redistributing within higher education; and
- financing research.

Evidence on Drivers of Participation

The evidence suggests that there are two strategic drivers of participation: credit constraints and constraints with earlier roots.[5]

The primary purpose of student loans is to assist consumption smoothing by addressing credit constraints. The United Kingdom has had income-contingent loans since 1998, but public discussion still confuses credit-card debt, which is unforgiving, with student loans, which are a payroll deduction like income tax (table 1).

Constraints with earlier roots arise in several ways, largely manifesting themselves in poor school grades. In England in 2002, when students from low-income backgrounds paid no fees, 81 percent of children from professional backgrounds went to university, compared with 15 percent for children from manual employment backgrounds.[6] However, about 90 percent of students with good high school graduation grades went to university, irrespective of their background. In other words, controlling for attainment, the socioeconomic gradient in participation largely disappears.[7]

5 Ibid., at section 12.4.4.

6 United Kingdom, House of Commons, Education and Skills Select Committee, *Post-16 Student Support*, sixth report of session 2001-2002, HC445 (London: Stationery Office, 2002), at 19.

7 For fuller discussion, see Haroon Chowdry, Claire Crawford, Lorraine Dearden, Alissa Goodman, and Anna Vignoles, *Widening Participation in Higher Education: Analysis Using Linked Administrative Data*, IFS Working Paper W10/04 (London: Institute for Fiscal Studies, May 2010) (www.ifs.org.uk/publications/4951).

Many commentators argue that debt aversion harms access, but studies are often flawed because they fail to control for attainment, and thus wrongly attribute to credit constraint problems that have their roots in the attainment constraint.

The Resulting Strategy

Theory and empirical evidence point to a strategy with three parts:

1. *Element 1—sources of university financing*: Universities should be financed from tuition fees (theoretical propositions 1 and 3) and taxation (proposition 1). Fees give universities more resources and, through competition, combined with quality assurance, help to improve the efficiency with which those resources are used. Since students generally cannot afford these costs, two further elements are required to achieve the three core policy objectives.
2. *Element 2—loans to address credit constraints*: Well-designed loans should make higher education free at the point of use (proposition 2), thus addressing problems of participation for well-informed students with good school attainment.
3. *Element 3—policies to address constraints with earlier roots*: Policies should focus in particular on lack of attainment, imperfect information, and low aspirations.

IT IS POSSIBLE TO GET THINGS RIGHT: THE 2006 REFORMS

The Reforms

The 2006 reforms, a major achievement of the Blair government, were based explicitly on the three-part strategy outlined above.[8]

1. *Fees*. In place of the previous fixed tuition charge of £1,000, universities could choose what fee to charge up to £3,000 per year.
2. *Loans*. In the previous system, income-contingent loans covered living costs but not fees. The 2006 reforms rectified this problem. The interest rate charged was equal to the rate of inflation, and thus the new loan program incorporated an interest subsidy for all graduates. Any loan that remains unpaid after 25 years is forgiven.
3. *Policies to widen participation*. The reforms restored tax-financed grants, required universities that charged £3,000 to provide students from lower-income backgrounds with financial assistance, and established an Office for Fair Access.

8 See Barr, "Higher Education Funding," supra note 1. In a comprehensive OECD study, Santiago et al. reach similar conclusions, including a regime with tuition fees, supported by well-designed loans and policies to widen participation: Paulo Santiago, Karine Tremblay, Ester Basri, and Elena Arnal, *Tertiary Education for the Knowledge Society*, vol. 1, *Special Features: Governance, Funding, Quality*, and vol. 2, *Special Features: Equity, Innovation, Labour Market, Internationalisation* (Paris: Organisation for Economic Co-operation and Development, 2008).

Crucially, other reforms tackled inequalities arising earlier in the system:

- Policies targeting early childhood provided child care and training for mothers on low incomes, made affordable child care more widely available, and increased the number of nursery school and preschool places.
- Increased emphasis on basic skills included a literacy hour and a numeracy hour in the school curriculum.
- Education maintenance allowances (EMAs) provided cash support for students from lower-income families from age 16, to encourage them to complete high school. The scheme included a weekly allowance plus periodic bonuses where recipients kept to the terms of a learning agreement with their school or college. Under the 2006 reforms, receipt of an EMA gave the student an automatic entitlement to a grant if he or she continued into higher education. Since anyone eligible for an EMA would almost certainly have been eligible for a grant, the offer had little practical significance, but it was important symbolically in indicating continued government commitment to widening participation. The thinking behind the Canadian learning passport is similar.[9]
- AimHigher sought to provide information to schoolchildren and raise their aspirations.

Outcomes

The reforms had beneficial effects. Tuition fees brought in significant additional resources, and the trend in applications continued upward (see table 2). With respect to access, the conclusions of a study by the Higher Education Funding Council for England (2010) are worth quoting:

> [T]here is no indication . . . that changes to HE [higher education] tuition fees or student support arrangements have been associated with material reductions in the overall HE participation rate. . . .
>
> Substantial, sustained and materially significant participation increases for the most disadvantaged areas across the 04:05 to 09:10 cohorts are found regardless of whether educational, occupational or income disadvantage is considered. *Typically, young people from the 09:10 cohort living in the most disadvantaged areas are around +30 per cent more likely to enter higher education than they were five years previously* (04:05 cohort).[10]

Remaining Tasks

The 2006 reforms were a major advance but left some stress points.

For fees, the stress point was the cap of £3,000. Almost all universities charged the maximum, so there was little price competition.

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9 For fuller discussion, see the other two articles in this Policy Forum.

10 Higher Education Funding Council for England, *Trends in Young Participation in Higher Education: Core Results for England*, Issues Paper 2010/03 (Bristol: HEFCE, January 2010) (www.hefce.ac.uk/pubs/hefce/2010/10_03/10_03.pdf), at paragraphs 23 and 28 (emphasis added).

TABLE 2 Applicants and Acceptances, 2005-2010

	2005	2006	2007	2008	2009	2010
			thousands			
No. of applicants	522	506	534	589	640	697
Accepted	405	391	413	457	482	487
Rejected	117	115	121	132	158	210
Year-over-year growth in applicants		−16	28	54	51	57
Year-over-year growth in places		−14	23	43	25	5

Source: Universities and Colleges Admissions Service, "Data Summary: Total UCAS Applications, Applicants and Accepted Applicants over Six Years," 2011 (www.ucas.com/about_us/stat_services/stats_online/data_tables/datasummary).

For loans, the major unfinished business was the interest subsidy.[11] Though not evident in 2006, the major ill effect was the cap on student numbers that arose when the cost of student loans collided with the economic crisis.

The Browne review[12] was set up with cross-party political support to address these issues, leading to reforms in 2012.

BUT IT IS ALSO EASY TO GET THINGS WRONG: THE 2012 REFORMS

Fiscally Incontinent Loans

The 2012 reforms made changes to the loan system.[13] The good news is the increase in the interest rate to reflect the government's long-run cost of borrowing, as follows:

- during student days, a real interest rate of 3 percent;
- for graduates with total income below £21,000 per year, a zero real interest rate;
- for graduates with total income between £21,000 and £42,000 per year, a rate of 2.2 percent rising gradually to 3 percent;
- for graduates with incomes above £42,000, a rate of 3 percent.

11 The government accepted the argument about interest subsidies but made the calculation that politically the change would be a step too far. That reading was clearly correct. At a time when the Blair government had a parliamentary majority of 160, the bill passed the crucial parliamentary hurdle by five votes.

12 United Kingdom, Independent Review of Higher Education Funding and Student Finance, *Securing a Sustainable Future for Higher Education: An Independent Review of Higher Education Funding and Student Finance* (London: Department for Business, Innovation and Skills, October 2010) (http://hereview.independent.gov.uk/hereview/).

13 For assessment of the reform package, see Nicholas Barr, "The Higher Education White Paper: The Good, the Bad, the Unspeakable—and the Next White Paper," *Social Policy and Administration* (forthcoming).

The arrangement directly addresses the problems of blanket interest subsidies. It avoids the mistake of a grace period (that is, no interest charges during student days). Though a grace period sounds intuitively like good policy, it means that *no* graduates, not even the highest earners, repay their loan in full, and it is very expensive. The rate structure also has a progressive element. Graduates with higher incomes pay slightly above the government's cost of borrowing and hence repay slightly more than they borrowed, covering part of the loss on low-earning graduates. The loan thus incorporates a social insurance element.[14]

Having made that brave and necessary decision, the government then threw away all the gains by raising the threshold at which loan repayments start. Under the 2006 arrangements, graduates repay 9 percent of income above £15,000 per year. From 2012, the repayment threshold is £21,000 *and* is indexed to earnings. Any loan balance that remains outstanding after 30 years will be forgiven. The reason for these changes was to give political cover to the Liberal Democrats in the coalition.

The resulting ill effects are profound. The change is expensive because it reduces monthly repayments by £540 per year (9 percent of £6,000). The same reduction applies for someone earning £21,000 and for someone earning £121,000. With lower monthly repayments, more graduates will not repay fully within 30 years. Amplifying the cost of the change, the higher threshold creates an upward bias in fees. The cost of non-repayment by graduates of a university falls not on the university but on taxpayers; thus, all universities face an incentive to charge higher fees. As a result, the average fees that universities announced were higher than the government had expected, an outcome that was both predictable and predicted.[15]

Alongside its expense, the higher threshold has distributional effects that are not as progressive as presented. Graduates earning below £21,000 benefit least, and anyone earning £15,000 or less does not benefit at all.

Bad though that sounds, the resulting problems are even worse. The high fiscal costs of non-repayment are a direct cause of a cap on student numbers to control public spending. Table 2 shows that between 2009 and 2010, applications rose by 57,000 but places rose by only 5,000. As a result, 210,000 students—30 percent of total applicants—were unable to find a place.

Why does the cap on student numbers matter? First, size is important because investment in skills is central to national economic competitiveness. Second, if there

14 For fuller discussion of combining student loans with social insurance, see Nicholas Barr, *Designing Student Loans To Protect Low Earners*, Research Note (London: Policy Exchange, October 2010) (www.policyexchange.org.uk/images/publications/pdfs/Student_loans.pdf).

15 Nicholas Barr and Neil Shephard, *Towards Setting Student Numbers Free* (London: London School of Economics, December 2010) (http://econ.lse.ac.uk/staff/nb/Barr_Setting_numbers_free_101217.pdf), at paragraph 22. Smith and Smith illustrate the point by considering a degree with £9,000 fees targeted at old age pensioners: Alasdair Smith and Iain Smith, "Saga Touts," *Times Higher Education*, December 2, 2010 (www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=414470).

is a shortage of places, the most disadvantaged are at greatest risk of being crowded out; thus, a numbers cap harms participation. Third, size is relevant also for quality: one of the arguments for variable fees is that they strengthen competitive incentives; however, competition does little to promote quality in a situation of excess demand.

In sum, the interest subsidy in the 2006 system makes loans fiscally expensive. The 2012 reforms rectify that problem, but loans continue to be fiscally expensive because of the large increase in the repayment threshold. Thus, the new system creates the same problem—the cap on student numbers—for the same reason—the high cost of loans. As a result, there is substantial excess demand for places. The reforms therefore have adverse effects for all three core objectives—quality, participation, and size.

The lesson for policy design is that fiscally expensive loans crowd out taxpayer support for universities, creating a shortage of places if student numbers are capped and compromising quality if they are not. Loan design is therefore not just a matter for policy nerds, but central to achieving the objectives of higher education policy.

The "Pub Economics" of Widening Participation

What I call "pub economics" refers to something that seems obviously right and everybody believes is right—but in fact is wrong. The argument that free higher education assists participation is such an argument. What hinders participation is not primarily price (that is, fees), which are addressed by student loans, but the range of other constraints with earlier roots, already mentioned, particularly a lack of prior attainment. The improvements in participation after 2006 were rooted in that understanding.

Changes in 2012 are deeply retrograde. To reduce public spending, the reforms abolish EMAs and AimHigher and make cuts early childhood programs—the very policies that address problems of participation at their source. Whether or not there was a case for reforming those policies, abolition is a major error.

A second problem, excessive focus on grants (that is, non-repayable support), to a significant extent targets resources at the wrong part of the problem. The error is not just an exercise in academic logic chopping. By failing to make a clear distinction between credit constraints and constraints with earlier roots, policy is based on the wrong diagnosis and thus leads to the wrong prescription.

Though politicians talk loudly about widening participation, their policy choices do not support their words.

CONCLUSION

The economics of higher education finance is relatively straightforward; the difficult part is the politics.

The lesson for policy is to resist well-intentioned but largely mistaken popular views about the determinants of participation. Fiscally expensive loans have the ill effects discussed above. And "free" higher education is, of course, a myth. "Free" is just another word for "someone else pays," so the question to ask is, "Who pays?"

Part of the case for public financing of health care or compulsory school education is that everyone uses them. Higher education is different: participation is a matter of choice—and it is mainly people from better-off backgrounds who participate. Thus, the taxes of poorer people, many of whom never even consider university, pay for the degrees of people mainly from better-off backgrounds. Beyond subsidies commensurate with external benefits, since when did it make sense to subsidize a superior good? Undue reliance on tax-financed higher education finances an activity consumed mainly by the better off, helping to maintain their position while simultaneously harming access for the broader population, by limiting the number of places and crowding out activities that genuinely widen participation.