Cost-Sharing and the Cost-Effectiveness of Grants and Loan Subsidies to Higher Education

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Introduction

In 1985, I was granted a three-month sabbatical: a reward for having survived five financially challenging and sometimes stressful years as president of the largest comprehensive college in the State University of New York system. More than a little of the stress had stemmed from my incessant sparring with the governor and the New York State Legislature over whether tuition fees—then approximately 15 percent of the underlying costs of instruction, but generously means-tested so that low income families were spared virtually any out-of pocket tuition-related expenses—should rise as our underlying institutional costs rose. The source of our rising per-student costs, as is the case in higher educational institutions everywhere, was almost entirely due to increases in faculty and staff compensation, which in the State University of New York was negotiated exclusively by the governor of the state rather than by the presidents of the system's colleges and universities or even by our State University of New York system trustees. But the governor-- in this instance supported politically by most of the New York State Legislature--refused to countenance even the modest increase that would have maintained our already low (by US standards) tuition fees at a constant percentage share of these increasing costs (for which the governor, in effect, was mainly responsible). Furthermore, neither the governor nor the state legislature had any intention of increasing the state taxpayer's contribution by enough even to maintain the state's current "share" of these underlying cost increases--much less by enough to make up for that part of the parent/student share that was now missing due to their refusal to increase tuition fees.

The end result was an annual reduction in our budget, manifested most seriously by reductions in the number of both faculty and support staff (including the termination of several tenured faculty in one relatively overstaffed department) and by the continual substitution of lower-cost part-time and adjunct faculty on the lines vacated by departing higher-cost regular faculty. We were becoming, by the narrow measure of costs per student, clearly *cheaper*, although in light of what I believe to have been some deterioration in the quality of our output, it was less clear that we were becoming more *efficient*, or more *productive*.

In the arena of student finances, the effective freeze on tuition fees, in light of the prevailing inflation, had the effect (probably unintentional) of actually *decreasing* the *real* cost of higher education to the family. For most families, this was undoubtedly a

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pleasant surprise as most of their other expenses were going up, although it had no discernable effect on the enrollment behavior of the students. But quite unexpectedly—and for the most part also unnoticed and even unacknowledged—this freeze on tuition fees also had the completely unintended consequence of actually *increasing* the cost of the State University of New York to the lowest income commuting students.[1] This anomalous consequence was due to the fact that the (then) very low New York State tuition fee had the effect of reducing their Federal means-tested grants, even though the New York State means-tested grants would have shielded them from having to bear any part of a tuition increase—but which increase would then have increased their federal grants. These experiences, more than any theory or taught lesson, brought home to me the degree to which governmental policy, both wittingly and unwittingly, can have the effect of shifting an essentially given (and inevitably increasing) per-student higher educational cost burden among parents, students, taxpayers, and institutions.

As I had been writing, lecturing and testifying about higher educational finance, and especially about student financial assistance (that is, grants and loans), for many years at the time of my serendipitous sabbatical, I decided to use this break from my presidential duties to study how the rising costs of higher education were being met elsewhere in the world. More specifically, I was interested in learning how these costs were shared (and perhaps even being shifted) among taxpayers, parents, students, and philanthropists in several European countries in which I assumed the underlying costs of undergraduate (or *first degree*) instruction as well as the underlying costs of student living were similar to each other and to the counterpart underlying costs in the United States. From this interest and opportunity emerged the first published study (Johnstone 1986) to employ the construct of *cost-sharing* to analyze in a comparative perspective those institutional and governmental policies that distribute the underlying instructional costs of higher education among the principal bearers of these costs.

Cost-Sharing In Higher Education

The construct of *cost-sharing*--as elaborated by Johnstone (1986, 1999, 2002, 2003, 2004b), and as treated or implied by many of the chapters in this volume from the Douro4 Seminar--posits that all of the costs of higher education, including the institutionally-borne plus the privately-borne costs of instruction as well as the costs of food, lodging and other expenses of student living, are borne by four principal parties:

1. *governments* or *taxpayers*: via direct or indirect taxation, including the taxation of business or deficit spending-induced inflation, both of which are passed on to the general taxpayer/consumer (see following paragraph and endnote);
2. *parents*: via savings, current income, or borrowing;

[1] This was an anomaly due to the then-cap on the federal means-tested grants of no more than one-half of the total cost of attendance. In light of the (then) very low State University of New York tuition fees, this meant that the federal means tested grant, at least for commuting students, was capped at less than its normal maximum, thus explaining why an increase in tuition fees—which the state grant would have covered entirely for these low income commuting students--would have “put money in the student’s pockets. Not surprisingly, the governor and legislators chose to not believe this!

3. *students*: via savings (generally limited), current earnings (generally part-time, either during the instructional terms or during the summer break), or borrowing; and / or

4. *philanthropists*: via *endowments* or current contributions.

Two other parties are sometimes viewed as contributing to, or bearing a portion of, the underlying costs of higher education: *businesses* and *universities* (or other higher educational institutions) themselves. However, the actual *incidence* of business or institutional contributions—that is, who or what is ultimately paying--is less clear. For example, a tax on business, whether on its value added or on its profits, can be viewed as no different from any other cost of production--necessarily recovered through the price of the product or service produced and thus also not fundamentally different from a sales or consumption tax paid directly by the general consumer/taxpayer. This is in no way to denigrate the usefulness, even the necessity, of taxation of businesses or enterprises (including taxes on the profits of professional services such as law firms or medical practices). Such taxes are generally easier both to impose and to collect (or harder to evade) than are taxes imposed directly on people, whether on their incomes, assets, or purchases. Taxes on business thus tend to hide, or at least diminish, the political visibility and apparent opportunity costs of the size of the public sector, including the extent of public transfer payments. (This may be viewed as a virtue or a liability depending on one's satisfaction or dissatisfaction with the current distribution of income and/or division of the economy between public and private sectors.)[2] It is unlikely that a modern industrialized economy could sustain a sufficient public sector without taxes on businesses. However, the notion, which is so dear to much of the political left, that a government can raise taxes only on business and thus impose the additional burden only on the wealthy or even only on the owners of the business is almost certainly a misconception. This is why the cost-sharing paradigm used in my works (e.g. Johnstone 1986, 1999, 2002, 2003, 2004b) stresses the four *direct* bearers of higher education costs as taxpayers, parents, students, and/or philanthropists, and incorporates those who ultimately pay the taxes levied on business, as well as the general consumer whose

[2] A vivid example experienced by this author of the political expediency—and of the hidden true incidence--of a tax on business was the occasion in the 1980's when the State of New York experienced one of its many serious shortfalls in tax revenue (and of course threatening the public universities) but was politically unable to raise any of the usual taxes under its jurisdiction. One of the "solutions" was to impose a hefty tax increase on the telephone company—then a privately held monopoly operating under the close state regulation of a public utility—and simultaneously letting it be known (at least to the telephone company) that the public commission regulating telephone rate increases would allow the company to raise its rates sufficient to recover the entire amount of this additional tax. Clearly, the telephone company thus became the collector of a state surtax on all telephone users—an incidence not unlike the probable incidence of most other tax increases that the state could have imposed directly, but with the political advantage of at least seeming to shift the blame for the increase from the governor and legislature to the telephone company. This is simply a narrow example of the phenomenon familiar to all of the 20th century Communist economies in which the enormous public sectors were financed mainly through some variant of value-added taxes that siphoned purchasing power from all of the state owned enterprises at each level of production, leaving very little at the end of the production processes to pay decent wages—but without the workers feeling directly taxed, as such.

purchasing power is confiscated by deficit spending-induced inflation, under the more general rubric of *taxpayers*.[3]

The case of colleges or universities themselves bearing a share of the costs of higher education is even more complex. Clearly, institutions of higher education can themselves give grants, generally on the basis of academic promise or on any other student attribute highly valued by the institution, including (particularly in the United States) ethnic minority status or athletic talent. However, as we are mainly interested in public institutions of higher education, such institutions can only provide such grants, or price discounts, as their predominant base of taxpayer support supplemented by tuition makes possible—in which the main bearers of the burden of costs remain taxpayers, parents, and/or students. In the case of privately supported (i.e. mainly tuition fee-dependent) institutions able to grant scholarships, or *price discounts*, these grants can be viewed in one of two very different ways depending on the institution's financial health and the depth of its applicant pool. In the case of an institution that is either wealthy enough or has such a deep and affluent applicant pool as to be able to charge a premium from those families able to pay (and in fact, those characteristics seem to apply to the same few fortunate institutions), such grants can be viewed less as *grants* in the eleemosynary sense of institutional philanthropy and more as *institutional expenditures* incurred to enhance even further the quality of the student body and therefore the value of the product--and thus not unlike any other institutional expenditure such as more or better faculty, equipment, or physical plant that might be incurred to maintain or enhance an already favorable market position. However, in the case of the majority of institutions that are neither so well endowed nor blessed with such deep and affluent applicant pools, institutional grants, particularly in private, tuition fee-dependent institutions, are more appropriately viewed as price discounts, designed to maximize net tuition revenue in the face of a limited pool of applicants willing and able to pay the full posted tuition fee, or sticker price Such discounts should thus be viewed not so much an institutional expenditure *per se* (with a true opportunity cost, or foregone alternative) as a case of profit-maximizing discriminatory pricing (Bowen and Breneman 1992).

For the above mentioned reasons, the cost-sharing paradigm seems most analytically useful when restricted to the four main bearers of higher educational costs: taxpayers (or consumers, who are essentially the same individuals), parents, students, and philanthropists—with the first three being by far the most significant to public institutions of higher education.

The Rationale[s] for Cost-Sharing

The rationales for cost-sharing, while politically and ideologically contested, emerge from well-accepted elements of economic and public finance theory (Woodhall 2003). The basic rationale for the student bearing at least a portion of the costs is that he or she is presumed to be a recipient of much of the benefits. These benefits may be in the form of higher lifetime earnings, which have been demonstrated empirically in countless

[3] Similar to the way that a tax on business can be recovered through higher prices and thus be borne ultimately not by the stockholder or management but by the general consumer, a public expenditure financed not by taxes but by *deficit spending*, and thus usually adding to a inflation and a reduction in the purchasing power of the currency, is also passed on to the general consumer--who is essentially the same entity as the general taxpayer.

studies, but may also be in a number of essentially non-monetary benefits such as higher status, access to jobs of greater prestige and desirability (even if not always of greater earnings), a greater array of "lifestyle options, and the like. If the greater lifetime earnings are not sufficient demonstration of the benefits, the sheer fact that both students and parents do in fact contribute great amounts of money everywhere—in the form of tuition fees where they are required, but also in the form of privately-borne living costs and instructional expenses, as well as the opportunity costs of foregone or deferred employment, where tuition fees are not yet required--constitute striking evidence of the perceived private benefits of higher education

In much of the world, the benefits that are assumed to redound to students-as-children seem to yield a considerable perceived private benefit as well to parents. In many countries and many cultures, this contribution may be considered a *benefit-as-obligation*: --a recognition of a continuing parental financial responsibility (with certain limitations) for students-as-dependent children. But leaving aside the contested issue of whether students (at least for their first degree) are properly considered to be financially dependent children or financially independent young adults, parents almost certainly derive personal satisfaction and status from the higher educational successes of their children. Throughout the world, as evidenced by the flourishing of tuition-supported (i.e. paid for mainly by parents) private higher education wherever public education is supply-constrained, parents are demonstrating the personal benefit to them of sharing the costs of their children's higher education.[4]

In much of Continental Europe as well as most of the developing and the so-called transitional (post communist) worlds, the direct instructional costs of higher education, are still paid for mainly by government; that is, tuition is still free. However, parents and or students perceive themselves to be bearing significant share of the costs in the forms of living expenses and the opportunity costs of foregone earnings. In such cases, a policy of cost-sharing, which implies a change to a greater portion of the cost burden borne by parents and/or students, requires a rationale for the shift: In essence, what has changed?

The principal rationales behind the shift of costs toward greater shares being paid for by parents and/or students are three: efficiency, equity, and necessity. The *efficiency* rationale assumes a greater efficiency when there is a charge, or a price, that reflects (even with a substantial taxpayer subsidy) at least some of the real costs and the trade-offs involved in the provision of higher education. In contrast, higher education that is free or *nearly free* to the student-family "consumer"--that is, entirely or mainly subsidized--can, by virtue of this degree of subsidization, be either be over-consumed (that is, more of it partaken of than is optimal either for the student or the society, or too much partaken of by students with insufficient capacity to benefit) or can be consumed with insufficient academic effort—presumably in all cases at least in part because there is too little cost incurred by either the student or his or her family and therefore too little foregone by the participation. Some tuition fee is thus assumed to induce both a harder

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[4] A clear indication of this is the case of Australia, where the tuition fees are designed to be paid for by students (*children*, for the purpose of this point) through the Higher Education Contribution Scheme (Chapter xx), but can also be paid up front, mainly by parents, with the nearly 20 percent who do so thus demonstrating the perceived value to, or benefit realized by, *parents*.

working student and one who is more perceptive and demanding as a higher educational consumer. Also, universities and other institutions of higher education, at least in theory, have an incentive to hold down their tuition fees in order to attract and retain the student (or the parent), thus presumably becoming more efficient (or at least less wasteful), and more inclined to provide what the student is likely to want (which is likely to be what potential employers want).

The *equity* rationale posits that higher education everywhere is partaken of disproportionately by the children of the well-to-do. This is not only because of their greater purchasing power, but because they have the advantages of greater *cultural capital* from family, secondary school, and peers, which in turn imparts not only knowledge itself, but academic ambition and the methods and habits of effective study. At the same time, the so-called *free* higher education is, of course, actually paid for by the average taxpayer/consumer, in large part by taxes and price increases that are either proportional, at best, or even regressive. Thus, the equity rationale construes totally free higher education as the average taxpayer subsidizing the well-to-do—arguably a perverse redistribution of income and status from the poor or the middle class to the wealthy.

The third and possibly the most compelling case for greater cost sharing in the transitional countries of the former Soviet Union and Eastern and Central Europe as well as much of the developing world, may be the much simpler-to-grasp--and also much less controversial—rationale of *necessity*: the sheer need of higher education for alternative (i.e., non-governmental) revenue. This necessity, in turn, emerges from the long and compelling queue of competing public needs (even in Europe) as well as the political pressure for tax relief. The increasing pressure on public revenues in Europe and the other highly industrialized nations is exacerbated by the effects of *globalization*, which increases the predilection, as well as the ability, of taxable individuals and enterprises to escape to lower tax venues. And as alternative or supplemental non-governmental revenue becomes increasingly imperative, a substantial portion of this non-tax revenue is going to have to come from parents and students in the form of tuition fees and other forms of cost-sharing.

Thus, the total elimination or avoidance of all potentially privately-borne costs of higher education--that is, an assumption of all of the expenses associated with higher education by the government, or taxpayer—is nowadays generally assumed to be neither appropriate or efficient nor equitable nor economically feasible. Totally free higher education, including free tuition, food, lodging, and pocket money, may have been common (even if not necessarily good policy) in some countries in the past when the higher education of a small elite was more politically acceptable, and especially in countries with command economies where governments were able to claim massive shares of a nation's total production without the working population feeling directly taxed.[5] But when the number of young adults legitimately aspiring to a higher education approaches or even exceeds one-half of the traditional university age cohort, and when governments are forced openly to tax (and public expenditures thus acquire transparent

[5] This description of totally taxpayer subsidized—without the massive shares of a country's output--probably in 2005 best fits the countries of Sub Saharan Africa, especially those with Marxist, or so-called African Socialist, economic legacies, although various forms of cost-sharing are encroaching rapidly. See Johnstone (2004c)

opportunity costs), and when public and private resources alike are allocated more and more according to markets—all of which are becoming increasingly the case in the advanced industrialized countries--such massive and rapidly increasing expenditures borne entirely by governments, or taxpayers, becomes all but impossible. In short, cost-sharing in some form can be found in virtually all countries in a complex stew of tuitions and other fees (or the absence thereof), differential pricing of institutions and academic programs, and across-the-board and targeted grants, including the effective grant components of student loans. All of this serves differing policy objectives that are not necessarily articulated, nor always even intended, and that are frequently ideologically and politically contested—to which topic we now turn.

Cost-Sharing as Policy

In its literal meaning, *cost-sharing* is merely a statement of economic fact: that the costs of higher education are shared among the four parties as described. In its more common usage, however, the term is used to signal a policy driven shift in the distribution of the cost burden. In a European context, where tuition fees have been small or more often non-existent, *cost-sharing* generally refers to an intended shift of at least some instructional costs from an overwhelming reliance on governments or taxpayers to being shared as well (or even more) by parents and students.

Thus, cost-sharing in Europe is most often thought of as the introduction of *tuition fees* to cover part of the costs of instruction, particularly in countries where there were heretofore no such fees and where all of the costs of instruction were presumed to be appropriately borne by the general taxpayer. The UK at the turn of the 21st century was the only European country with more than a nominal tuition fee, having introduced tuition fees in 1997--although Scotland in 1999, followed by England, Wales, and Northern Ireland with target dates in 2006, are to shift from *up-front* tuition fees--mainly borne by parents--to *deferred* fees--borne by students in the form of income contingent loans (see chapter xxx by Woodhall and Richards). The Netherlands and Portugal also have small (by North American standards) tuition fees, and Ireland and Italy have other fees that are commensurate with these relatively nominal tuition fees. In 2001, Austria became the first (and through 2004 the only) German-speaking country to introduce nominal tuition fees for all students (Marcucci and Johnstone 2003, chapter xx by Ziegele).

Where tuition fees have been quite accepted in the public sector, as in the United States and Canada, a shift in the direction of even greater cost-sharing can take the form of very sharp tuition increases: that is, considerably in excess of the increases in the costs of instruction, thus allowing and partially compensating for reductions in the shares borne by governments, or taxpayers. (It is noteworthy—as well as to the considerable distress of those of us in US public universities—that the political outrage toward tuition increases in US public higher education is almost entirely toward the fact that such increases so frequently exceed the percentage increase in the cost of living generally, even when the principal contributors towards steep increases are the failures of the state tax funds even to keep up with the rising underlying costs.)

Cost-sharing as policy can also take the form of introducing *user charges* to cover more of the costs of lodging, food, and other expenses of student living that may have hitherto been born substantially by governments (taxpayers) or tax-supported institutions. This is especially the case in the late 1990s in the *transitional*, or post-Communist, countries including Russia and the countries of Eastern and Central Europe. Most of Western Europe (i.e. excluding the formerly Communist countries of Eastern and Central Europe) has traditionally assumed living expenses to be the responsibility of other-than-the-taxpayer. However, there are significant differences both in the underlying rational for, as well as in the resulting policies and practices of, cost-sharing depending on whether these living expenses are assumed to be the responsibility primarily of parents, as in Germany, France, and most of Southern Europe, or primarily the responsibility of the students themselves, via universally-available loans as in Scandinavia (a policy issue to which we will return in Section 6, below).

Other smaller and less noticeable shifts in the prevailing patterns of cost-sharing—almost always in the direction of shifting burden from the taxpayer to the parent and/or student—may include:

- the elimination, diminution, or even the *erosion by freezing* of maintenance grants (as in the UK in the late 1990s, or most of Eastern and Central Europe since the collapse of the Communist regimes);
- the introduction of *non-instructional fees*, such as application, graduation, student services, technology, or access fees, with the advantage of not having to call them *tuition* fees (as in Ireland, Italy, and France, and the public universities of many US states);
- the charging of fees only to students who fall behind in their expected progress toward the degree (as in some of the German Lander);
- the restriction of *governmental sponsorship*, or *tuition-free* higher education, to an academic elite, thus preserving the pretense of free higher education while being able to charge tuition fees to students who fall below a certain cut-off on the official entrance exams (a practice common to many post-Communist countries); or
- an improvement in student loan recovery rates via an increase in the rate of interest or an improvement in collections (where student loans are integral to higher education financing, as in US and Canada).

The construct of cost-sharing in all of its many forms is thus a useful tool to examine how governmental (and to some degree, institutional) policies effect and alter the distribution of cost burdens and the consequences of such alternative policies both to the financial health of institutions and to the attainment of political and social goals of greater and more equitable higher educational participation and accessibility. At the same time, all countries shifting higher educational costs from governments and taxpayers to students and parents recognize the need to compensate in some way for these increasing privately-borne costs, including the student and/or parent share of the costs of instruction (i.e. whatever fees there may be for tuition, registration, books, or any other general or special aspect of the instructional program) as well as the student's and/or parent's share of food, lodging, travel, and all other living expenses that are not born by the government or by some sort of philanthropy. It is these private, parent and/or student-borne, expenses that may constitute financial barriers to higher education, particularly among students or potential students from lower income families, poorer secondary schools, ethnically and/or linguistically minority backgrounds, and cultural milieus less familiar with, or less supportive of, academic success—all characteristics associated in most countries with disproportionately low enrollment, persistence, and success in higher education. And while financial barriers only partly explain these nearly universal disparities, their lessening is a stated priority for most countries. Thus, we must turn to another policy paradigm—*alternative forms of governmental (taxpayer) subsidization*—to understand more completely the effect of cost-sharing on higher educational access, persistence, and success.

Governmental Subsidization and Student Financial Assistance

The total financial expenses associated with higher education may be considered as consisting of three types: (a) the costs of instruction (e.g. faculty and staff compensation and most equipment and utility costs) that are incurred mainly by the institutions of higher education; (b) those additional costs of instruction such as books and travel that are generally paid privately (as opposed to being paid to the college or university) but that are nonetheless integral to the student's instruction; and (c) the costs of student living, which cover food, lodging and all other expenses necessarily incurred in day-to-day living but which, for the most part, would be incurred whether the individual were enrolled as a student or were employed full-time--and which in either case vary substantially depending mainly on whether the young adult is living at home with parents or living independently.

This perspective gives us a way to consider those costs of higher education (including the costs of student living as well as the direct costs of instruction) that may be borne by governments, or taxpayers as of one or more of several quite different forms, including:

1. direct institutional support of public universities and other higher educational institutions that lessens or eliminates the need for privately-borne tuition fees;
2. direct subsidization (usually partial) of food, lodging, transportation and other expenses that similarly lessens (or in theory, could even eliminate) the need for parental or student-borne expense;
3. governmental subsidies in the form of *grants* (non-repayable) to partially cover either (or both) the student- or parent-borne costs of instruction (i.e. tuition fees) or the costs of student living;
4. direct and indirect governmental subsidization of *governmentally-sponsored student loan programs*. Such subsidies, or *effective grants*, may be in the form or forms of (a) the subsidization of interest, allowing the present value of the repayment stream to be less than the cost of money to the government or other lender; (b) various forms of repayment forgiveness, usually on the bases either of low earnings (e.g. as in income contingent loans) or in the form of workplace contingent repayment forgiveness, depending on the borrower's assumption either of a particular profession or willingness to practice in a particular venue; or (c) loan guarantees, with the taxpayer assuming the risks

of non-repayment thus further lowering the necessary "true" rate of interest to the borrower. The cost to the taxpayer of these forms of loan subsidization—or conversely, the value to the borrower of these *effective grants*--will be less than the value of the loan itself as the draw on governmental subsidies is both only partial and also in the future. (Stated another way, a given dollar amount of subsidization can support a greater dollar volume of repayable student loans than of non-repayable grants.)

5. indirect governmental subsidization via the extension of certain forms of child allowances to families of students (i.e. to which the families would otherwise no longer be entitled);
6. indirect so-called *tax expenditures* in the forms of e.g. exemption from taxation of interest earned on college savings accounts or the tax deductibility of certain tuition fee payments.

In theory--and especially when considered free from the *real world* complications of history, politics, and already established policies-- these governmental (taxpayer) subsidies can be considered as *trade offs*. In other words, the total amount of possible governmental expenditure is viewed at any point in time as given, presenting the policy maker with alternative expenditures within a dollar constraint: for example more institutional subsidization and lower tuition fees for all versus lower institutional subsidization, higher tuition fees, and more targeted assistance for some. Similarly, we can in theory consider the alternative of targeted *grants* for limited numbers of students, or a greater volume of *minimally subsidized student loans* reaching more students for the same governmental or taxpayer obligation (in the case of loans, measuring the effective grants as the discounted present values of the streams of repayment subsidies). In fact, there is a very large and complex mix of policies making up the support of institutions and the support of students (and families), involving tuition fees, direct grants, so-called tax expenditures, and various forms of loan subsidies. The focus of this chapter is on the theoretical cost-effectiveness of the two principal alternative forms of targeted governmental subsidization--grants and loan subsidies--which are frequently in pursuit of policy aims other than, or at least in addition to, the policy objective of lessening of disparities in participation. We turn, then to a consideration of the alternative purposes of these two targeted forms of governmental subsidization: grants, and subsidized student loans.

Policy Aims Of Grants And Loans

Governmentally devised and funded grants and loan subsidies, like other governmental expenditures, may be presumed to be given for some *public purpose or purposes* such as higher educational accessibility for low income youth, or the study of science and mathematics, or the encouragement of academic achievement or timely degree completion. Institutionally awarded and funded grants (or *price discounts)*, on the other hand, may be presumed to serve *institutional* purposes, such as maximizing institutional prestige or net revenue. The many purposes that may be advanced through different forms of financial assistance, both governmental and institutional, may be compatible or conflicting, intended or unintended.

For example, governmental, or taxpayer-supported, grants and loans subsidies (with which we are mainly concerned because of the public policy implications) can serve a variety of quite different public purposes including:

- “filling in” for the missing parental contributions (in countries in which parents have officially expected contributions) for those parents who are poor (as measured, e.g. by low incomes, few assets, and other large non-discretionary financial obligations, such as other dependent children or unusually high medical expenses);
- providing even larger grants (i.e. larger than simply “filling in” for an otherwise missing contribution) to low income or ethnic or linguistic minority or rural families in order to further encourage the children of such families to try higher education in order to reduce the persisting under-representation of such youth at all levels of enrollment, persistence, and degree completion;[6]
- rewarding high levels of secondary school academic achievement, possibly out of a belief that grants, or scholarships, or prizes encourage more of such socially desirable behavior; [7]
- rewarding high levels of academic achievement in the college or university—perhaps by requiring the maintenance of a certain level of academic achievement to keep the grant (or alternatively to keep the initial award of financial assistance a non-repayable grant rather than being converted to a repayable loan because of disappointing academic performance); or
- encouraging students to enter targeted fields of study that are deemed to be socially important—such as teaching, language study, social work, science, or military service.

Institutional grants or price discounts (which may be called *scholarships),* in contrast, serve not public or social but *institutional* purposes. For example, institutional scholarships or price discounts may be targeted to the most desirable applicants to the university or college—whether they be the most brilliant, or most athletic, or most desirable on whatever other characteristic the institution wishes to attract. This is especially characteristic of those prestigious US private institutions with very large endowments and large infusions of annual philanthropy that enable them to afford the high cost of financial aid. The “buying of an optimal student body” can also be exercised by a public institution, the leadership of which believes the expenditure required to “buy”

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[6] For example, it can be argued that some *additional* payments are needed to compensate either (or both): (a) for the low levels of higher educational aspiration and role modeling (i.e. low levels of so-called cultural capital) in very low income households; or (b) for what are probably the higher perceived opportunity costs to the low-income child and family, for whom employment after high school is a very real alternative (as opposed to the upper-middle class youth, for whom higher education is such a strong expectation for both the child and the family that the option of employment and earnings immediately after high school may not be given serious consideration).

[7] An alternative, more cynical, view in the US is that such so-called *merit* grants do not substantially affect the academic behavior of high-achieving secondary school students—who achieve at high levels mainly for other reasons—but are more satisfying for politicians to give out, or take credit for, than grants to low income children, who are more likely to be academically marginal.

the most desirable entering class in a fiercely competitive academic environment to be as legitimate as other expenditures on the various indicators of academic quality such as a low student teacher ratio, modern facilities, or the best faculty.[8] These kinds of grants are essentially discretionary institutional purchases, having real opportunity costs in that some other institutional expenditure is foregone. It may be presumed that the institution benefits by such discretionary expenditures, but it is difficult to impart any wider social benefit to the occasion of institution *A* luring a particularly desirable student away from institution *B* because of a more generous merit scholarship.[9]

These discretionary discounts are conceptually quite different from the kind of price discounting that is carried on especially in the US by the very many private colleges for which the price discounting, however garbed in the cloak of *scholarships*, is in fact the only way to fill the class and maximize total fee revenue. Such discounting, as discussed in section 2 above, is really differential pricing in which there is little or no effective opportunity cost involved because without the discount there would be no enrollment and no tuition at all.

Most of these aims can be discerned in the shaping of governmental policies toward tuition fees, grants, and loans, all within the formidable policy constraints of a country's history and traditions and also within the equally formidable limitation on total available governmental subsidization (or alternatively, the need for non-governmental revenue generation). Considering the major policy goal of access, or the removal of cost/price barriers to the participation of otherwise qualified youth from low income or other underrepresented populations, there are critical policy questions that need to be answered.

Policy Issues of Cost-Sharing and Governmental Subsidization

As cost-sharing in some form or forms may be found in virtually all of the advanced industrialized countries, frequently along with governmental subsidization via grants and sometimes the *effective grants* of student loan subsidization, policies must address at least the following seven issues:

First, *what, if any, is to be the officially expected parental contribution*? Is it to be for the cost of student living only, as in Germany, or for the cost of student living plus a portion of the costs of instruction via tuition fees, as in England and Wales (at least through 2004)? Or, as in Scandinavia, are parents officially expected to contribute neither to the costs of instruction (which are to be borne, rather, entirely by taxpayers) nor to the

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[8] In the US, such public university expenditures—usually for merit scholarships designed to lure top students away from elite private college or university competitors--are becoming more common as more and more US public universities succeed in amassing large private endowments. Such merit scholarships, which clearly serve institutional rather than public purposes, generally do not come from governmental, or state taxpayer, sources, although state politicians can decide that merit scholarships for their public universities are in their state's public interest (or in their own political interest) and establish state merit scholarships accordingly.

[9] In fact, at least in the US, where private colleges and universities are so wealthy and compete so fiercely for the best secondary school graduates (who are likely to come from privileged homes), the principal consequence of this "bidding war" in which institutions are forced to match competing offers, may be reductions in the otherwise very high expected parental contributions that upper middle class parent need to make to enroll their high achieving children in expensive private colleges and universities.

costs of student living (which are to be borne, rather, by students themselves via loans)? This is a very real issue in Europe, where a combination of tradition, culture, a generally longer university first degree and a somewhat older first-degree student body (i.e., than in the US or the UK), in addition to the much greater political power of organized student unions (relative to the United States) have combined to buttress a sense that the university student ought to be treated more as a young adult than as a financially dependent child. To the degree that parents are considered by the state to be financially responsible for their children, as in Germany, it is considered appropriate for living costs only.

The notion that a first degree college or university student is appropriately to be considered a financially dependent child is worth billions of dollars in the US in the form of parental contributions to the costs both of instruction (i.e. tuition fees) and of student living--dollars that would otherwise have to assume even greater cost burdens from either the taxpayer or the student or both. An officially-expected parental contribution creates political and technical complexities, such as how to deal with single parent families and what to expect/demand from a non-custodial parent, and the policies by which the student can become financially independent. Nonetheless, the financial stakes are significant, and a substantial diminution of the expected parental contribution—as appears as of 2005 to be happening in Britain—has consequences to the other parties of the cost-sharing paradigm.

Second--if there is to be an officially expected parental contribution: *At what levels of family income do such expected contributions begin and at what effective tax rate do the officially expected contributions increase as family incomes increase?* That is, what is the degree of burden, or the extent of the expected contribution per dollar of family income (after any means-tested grants or price discounts)? Or conversely, what is the relative *generosity* or *severity* of the means testing?

A third question—again necessary to answer if there is to be an officially expected parental contribution: *When, or under what circumstances, do the officially expected parental contributions officially end?* That is, when does, or when may, the student officially become financially independent of his or her parents and either expect the government to assist, or know that he or she is now expected to assume the cost burden without the officially-expected financial assistance from the parents? The age of the student almost has to enter prominently into the resolution of this question, as does the length of the first degree and the degree of separation of the first from subsequent degrees? (The importance of this question is affected in Europe by the Bologna-driven shift toward a three- or four-year Bachelors degree as the appropriate first degree).

A fourth question—again if there is to be an officially expected parental contribution with means testing: *How should assets and savings be incorporated into the determination of these family means and the determination of the ability of the family to contribute to the student's costs of higher education.* More specifically, what is to be the treatment of—and thus the incentives for and against--*parental savings* for the express purpose of spreading the costs burden over time? (That is, what is the degree to which savings are effectively *taxed* along with current income—or conversely *shielded* from the calculation of family means, thus constituting an incentive to save without fear of losing grants or other subsidies that are means-tested?)

Fifth, *what, if any, are the expected student contributions*, whether in the form of loans or term-time earnings? Are these contributions explicit and official--as in Scandinavia, where the student is to bear the expenses of student living through generally-available, governmentally-sponsored student loans? Or are they mainly implicit--as in most of the European Continent, where loans are either unavailable or insufficient, and where the part-time employment option is increasingly common, yet largely unrecognized? If loans are to be an explicit and official part of the cost-sharing, are limits to be imposed on the extent of allowable borrowing—even if these limits put certain universities or certain programs out financial reach, and even if the students appear willing to borrow additionally?

Sixth--if there are to be generally-available, governmentally-sponsored student loans: *What is to be the extent of governmental subsidization*, that is, the division of the amounts borrowed between a "*true loan*" (i.e. the discounted present value of the anticipated repayment stream) and the "*effective grant*" component of the loan (i.e. the present value of the stream of effective subsidies)? This question or issue is actually a subpart of the larger question about the total governmental subsidization. However, the degree to which loan subsidies can be hidden (e.g. as in the division of subsidies between in-school, grace period, and repayment period interest rates) as well as disguised further by the occurrence of loan subsidization in the future and the complexities of discounting these values to the present in order for understanding and comparison all make it important to raise the question of loan subsidization separately and more explicitly.[10]

Seventh—again if there are to be generally-available, governmentally-sponsored student loans: *What is to be the apportioning of the risk of loan default*, especially that portion of risk that is to be born by the government or taxpayer as opposed to that portion to be passed on to parents or other required cosignatories, or to be borne by the banks or other private lenders? Many governments, especially in the developing and the so-called transitional worlds are reluctant to guarantee student loans because of the very high likely rates of default. However, such high rates also make it virtually impossible for there to be any generally available student loans without a governmental assumption of risk. In effect, virtually all student loan programs in all countries that are truly *generally available*--that is, not available only to those students deemed to be low risk--require substantial participation of the government in the bearing of the risk of default.

Clearly, the establishment of tuition fees, grants, and loans call for a great many other policy decisions. These include e.g. whether tuition fees are to be established by the government or by the institution itself, or whether undergraduate tuition fees are to vary by institution or academic program or to be uniform, or how governmentally-sponsored student loans are to be repaid. In the matter of loan repayments, the government must determine whether the student loan obligations are to be repaid on a fixed or an income contingent repayment schedule, and in either case whether employers will be required to withhold the repayments along with income taxes and pension contributions or whether the repayments are to be made by the borrower to the lender as in other forms of debt.

[10] The concept of a *zero real* rate of interest—that is, pegging a variable annual interest to the officially calculated rate of inflation—is increasingly popular, as is practiced, for example, in Sweden, Australia, and the UK. However, it is important to note that this still constitutes a substantial subsidization, as the real cost of money, even to the government, in most years is likely to be in the range of 2-3 percent.

However, these are essentially *second order,* issues, based on, or presuming, answers (if only implicit) to the seven questions presented above. For example, once the pool of governmental subsidies is determined, and whether it is to be allocated in the form of grants or in the form of the *effective grants* of loan subsidization, the degrees of freedom remaining either in setting the interest rate on a conventional fixed schedule loan or in setting the percentage of earnings required for an income contingent loan are relatively few—and far less ultimately consequential than the more fundamental determinations of e.g. the permissible level of total governmental subsidization or whether the needed non-governmental revenue should come from parents or students.

The Politics of Cost-Sharing

Acknowledgement of the need and/or the appropriateness of some amount and form of cost-sharing is increasingly made, however reluctantly, by elected officials and other policy influentials, including many of those on the political left who are otherwise committed to large public sectors, generous transfer payments, and the high taxes that are so implied. But the proper apportioning of higher educational costs among parents, students, and taxpayers remains greatly contested, with much political theatre. As noted, the most controversial in Europe has been the offset of some instructional costs by tuition fees that would shift a portion of the underlying cost-of-instruction from the general taxpayer to parents and/or to students. The UK implemented a tuition fee in 1997 that is still small by US standards but was more than a mere token (which term may better describe the tuition fees in the Netherlands, Portugal, and most recently Austria). But in all of these countries, the political and ideological controversy over tuition fees—and thus over grants and loans and the proper targeting of governmental subsidies—continues to rage (Johnstone 2004a).

Part of this controversy, at least in theory, should be amenable to resolution by research and the mustering of facts and evidence--such as the degree to which tuition fees actually inhibit the higher educational opportunities of academically able but low income youth, or women, or ethnic minorities. However, much of the controversy, like other matters of political and ideological contention, is more about symbols. For example, higher education that is not only free but that carries substantial additional cost-of-living subsidies is a particularly vivid symbol of the extensive sphere of public benefits so prized by the political left (and a symbol that is particularly and literally close-to-home for politically active students). And many (but by no means all) of those advocating tuition fees are portrayed as *neo-liberals*, who are assumed to be against most public spending, taxation, governmental regulation, and taxpayer assistance to the "unworthy poor" and whose policies are thus to be generally opposed. But this same tuition fee-free higher education is seen by many in the political center and by most on the conservative right not only as an entitlement that is both overly expensive and likely to be over-consumed, but as an entitlement that is paid for substantially by the working middle classes and enjoyed predominantly by privileged students and self-serving professors (the latter including some whose poor teaching and irrelevant courses would, to their political critics, be even more unpopular if there were fees attached).

However, political controversy over cost-sharing, like most political controversies, is less over whatever policy seems currently to hold sway than over the perceived winners and losers in any proposed policy shift in the apportioning of these shares—and the purpose that is purported to be served by such a shift. Political reactions to the worldwide shift in cost burdens from governments and taxpayers to parents and/or students depend very much on the intended objectives and actual consequences of such shifts. For example, *more cost-sharing* (that is, a shift in the direction of greater reliance on tuition fees) is much more acceptable to most of the political center and the political left (indeed, sometimes even viewed as a positive good) if the added revenue goes toward, for example:

- an increase in the quality of the education,
- an increase in capacity of, and thus of total participation in, higher education (and thus presumably in the number of those currently excluded); or
- an increase in revenue (from those able to pay) sufficient not only to increase quality and capacity of higher education, but also to increase *targeted* subsidies to those currently excluded—e.g. prospective students from the rural poor.

Clearly, such intended and actual consequences of a shift in the overall higher educational costs burden borne by parents and students is far more acceptable to the political center and left than would be the same shift in the higher educational cost burdens, but for the avowed purpose merely to lower the burden on taxpayers generally, or especially for the purpose of lowering the higher marginal rates currently paid by the wealthy, or to allow tax revenues to be shifted into some other less generally-accepted purpose, such as military adventures or higher salaries for politicians and government bureaucrats.

The political debates over tuition fees go far beyond the mere appropriateness of cost-sharing, whatever its intended objective. In the UK, for example, before and during the discussions of the Government's 2003 White Paper (Department for Education and Skills 2003) and through the passage of the new higher education legislation in the summer of 2004 (Woodhall and Richardson, chapter xxx), there seemed to be at least four quite different political controversies, all of which are likely to continue to simmer in some form long after the supposed resolutions of 2004. As these same issues have their counterparts in most other OECD countries, a brief discussion can be instructive.

1. The first and still the most basic issue continues to be contention over the very appropriateness of tuition fees at all. Some of the old Socialist "Hard Left" still seeks the abolition of tuition fees altogether, with the shift back to totally governmentally-borne instructional costs to be paid for by increasing taxes on the rich and by eliminating politically unpopular public expenditures such as defense and military engagements.
2. Somewhat surprisingly, some of the 2004 political opposition to tuition fees came from the Conservative Right, which has historically been avowedly pro-tuition, but which prior to the passage of the legislation in 2004 was calling for an abolition of tuition fees. However, this stance seemed mainly to call attention to an altogether different political agenda, which was opposition to the Labour Government's call for enrollment expansion—which some Conservatives perceive to mean more academically less prepared students in the universities. The opposition's willingness to forgo the revenue from tuition fees may thus have

been more of a symbol of its conviction that there are simply too many academically unworthy students pursuing bachelor's degrees and its willingness to make up for the revenue loss from the abolition of tuition fees by a reduction in the size and costs of the public higher education establishment itself.

3. Meanwhile, much of the opposition from the Left in 2003-04 was over the Government's proposed variable, or *top up*, tuition fees, with the Government, joined by some of the Conservatives and ultimately successful in passing the legislation, seeking higher tuition fees for the more costly (and the more academically and also more socially elite) universities, while much of the Government's own Left opposed the likely accentuation of the already considerable differences in wealth, prestige, and private benefits between the elite and the less-elite universities.

4. Finally, the government in an apparent effort to recapture some of its own Left that opposes all tuition fees, and yet determined to preserve most of the needed fee revenue, was successful in its plan to abolish only *up-front* tuition fees—but to replace them with *deferred* fees, as in student loans. Thus as described in rich detail in Woodhall's and Richardson's chapter xxx and as anticipated by my contribution to the Douro3 seminar in the fall of 2003 (Johnstone 2004b), the new legislation, while seeming to abolish tuition fees, actually abolished only the part of higher educational cost-sharing that is generally paid for by *parents* (and only those who could afford to pay, as the up-front tuition fee to be abolished is means tested) and replaced the foregone revenue not with government revenue but with additional revenue from *students* in the form of additional debt (albeit to be repaid income contingently).

As these debates in the UK confirm, policy debates over tuition fees, student loans, and other elements of higher educational cost-sharing as well as the encroachment of market forces and other forms of privatization within the academy, are parts of larger political and ideological contests involving the appropriate size of the public sector generally, the appropriate forms and generosity of transfer payments, the amount and form of governmental regulation required to look out for the public interest, and the social priorities revealed by the government in its decisions on to whom or toward what public purpose to allocate or reallocate resources.

The Cost-Effectiveness of Alternative Grant and Loan Subsidies

Within the context of country-specific politics and policy aims, we can consider the cost-effectiveness of alternative forms of targeted financial assistance: that is, grants or the effective grants of loan subsidies--either form targeted to some subset of students and/or families. At least ten quite different alternative forms of targeted governmental subsidization can be discerned in the mature industrial economies that have been the subject countries of the Douro Seminars:

1. direct grants based on the low income and/or assets of the family (i.e. *means-tested*);

2. direct grants based on other attributes (than parents' income) associated with under-representation (such as ethnicity, gender, or regional location);

3. direct grants based on the academic achievement or preparedness of the student's secondary school experience (i.e. *merit*);

4. direct grants based on the academic performance of the student while in the college or university (i.e. *merit*);

5. direct grants based on special attributes or talents desired by the institution (such as athletic prowess);

6. "up front" loan subsidies (*effective grants*) in form of low interest rates based on low income of borrower's parents at time of borrowing (i.e. *means-tested*);

7. "up front" loan subsidies (*effective grants*) in form of low interest rates based on other "underrepresented" attributes at time of borrowing;

8. "remaining debt forgiveness" (*effective grants*) based on borrowers' own low lifetime income (i.e. as in an *income contingent* loan contract);

9. "debt reduction" (*effective grants*) based on academic performance while in college (i.e. *merit*);

10. "debt reduction" (*effective grants*) based on borrowers post-graduation choice of professional practice or venue (e.g. teacher practicing in urban or remote school).

These different types are shown in Table 1, together with their presumed targets, their public or institutional purpose[s], and some conjectures regarding their respective effectiveness. In some cases, the consideration of one form of subsidy over another is a matter of the choice of alternative policy goals. Where there is but a single goal, however (i.e. more equitable higher educational opportunities) the policy question is a simpler one of the cost-effectiveness of the alternative forms of governmental subsidy. For example, the use of means-tested grants in pursuit of expanded higher educational accessibility for hitherto underserved populations must be weighed against such alternative public expenditures as:

- means-tested lower tuition fees as a direct "entitlement" upon matriculation--i.e., without the separate processes of grant applications and awards;[11]
- a (slight) reduction in tuition fees for all or subsidized loans for all—that is, without the attempt at targeting;
- fewer, but very highly subsidized, loans for the same "targeted populations" as the means-tested grants (that is, children of low income parents);
- a greater dollar volume of minimally or even unsubsidized loans available to the same "targets."

[11] The discount, in effect, would be automatic and totally outside the discretion of any grant giver. However, an advantage to means-tested *grants* over means-tested *tuitions* is that the grants may be easier to "fine tune" and are less dependent only on reported income, which in some cases is an imperfect measure of ability to pay.

- subsidized loans “after the fact” in the form of a forgiveness of remaining repayments for borrowers’ whose own “lifetime” incomes turn out to be low—i.e. governmentally subsidized income contingency.

It is against student loans—whether highly or minimally subsidized—that the cost-effectiveness of grants must mainly be measured. This is so because, at least on the surface, student loans, especially with minimal subsidization, should be substantially less costly to the government. Therefore, if grants and loans were found to be similarly effective in reducing or eliminating financial barriers to post-secondary enrollment (or in achieving any other public objective), then the preference ought to be for loans (and minimally-subsidized ones at that) and for allowing the considerable governmental expenditures for a grant program to be redistributed to subsidies for a much larger volume of student loans, with, at least theoretically, a greater impact in reducing the financial barriers to enrollment and success. If, on the other hand, there are demonstrable limitations to the use of loans in eliminating or at least substantially reducing enrollment

Table 1
Forms of Grants by Target, Purpose Served, and Conjectures Regarding Effectiveness

Form of Grant	Target	Public or Institutional Purpose To Be Served	Conjectures Regarding Effectiveness
1. Direct grants based on low income or assets of family (***means-tested***)	Financially dependent children of low income parents	(Public) reduce financial barriers, and enhance targeted student participation; (institutional) enhance diversity and thus value of education and degree.	Especially applicable in cases where parents are officially expected to contribute to higher educational expenses of children. Requires cost-effective and verifiable system of means-testing.
2. Direct grants based on student's *own* low income and/or assets	Adult or independent students with low income or assets.	Reduce financial barriers, and enhance targeted student participation.	Conceptually complex as almost *all* independent students have "need," and the case for grants as opposed to loans may be less compelling.
3. Direct grants based on other attributes (than parents' income) associated with underrepresentation (such as ethnicity, gender, or regional location);	Underrepresented ethnic minorities (in some countries, females).	Reduce financial barriers, and enhance targeted student participation.	Likely effective in combination with low parental income, but increasingly politically controversial.
4. Direct grants based on academic promise, or *prior* high school achievement (***merit***)	High achieving secondary school students.	(Public) enhance academic effort of many secondary school students; (institutional) enhance institutional prestige.	Attractive mainly to political conservatives; questionable use of public funds as grants have minimal effect on student enrollment behavior.
5. Direct grants based on academic achievement *while in college or University* (***merit***)	Students who achieve academically in College/university.	(Public) enhance academic effort in post-secondary institution; may enhance timely progress to degree	Similar to #3: Unclear how much influence such rewards have on grades.
6. Direct grants based on special talent deemed beneficial to the institution	Students with e.g. athletic prowess or musical talent.	No public purpose, but may enhance prestige of *institution* or *program*	Little or no use with public funds; increasingly controversial with athletes in US.

Table 1 [continued]

Form of Grant	Target	Public or Institutional Purpose To Be Served	Conjectures Regarding Effectiveness
7. *Up front* subsidy (*effective grant*) to borrowers in form of low interest rates based on low income of family or other attributes associated with under-representation	Targeted students who nonetheless must borrow for some or all of the private costs.	May reduce debt aversion and "awkwardness" of defaults; May increase willingness to borrow.	Expensive and "trades off" with direct grants; not clear that interest rates factor into any debt aversion or willingness to borrow.
8. "Remaining debt forgiveness" (*effective grants*) based on borrowers' own low lifetime income (in an ***income contingent*** loan contract)	Students whose low "lifetime" income makes it impossible to repay entire student debt—and are eventually released from further repayments	Reduces risk of unmanageable debt and possible "debt aversion"; may increase willingness to borrow	Assumes workable income contingency: If so, then basing subsidies on *own low lifetime income* may be preferable to basing subsidies on *parent's low income at time of initial borrowing.*
9. "Debt reduction" (*effective grants*) based on academic performance while in college (***merit***)	Good academic performance while in college	(Public) May enhance academic effort in post-secondary institution; may enhance timely progress to degree	Unclear whether academic performance responds to the "prize" of debt reduction; may reward those who do not need rewarding.
10. "Debt reduction" (*effective grants*) based on borrower's post-graduation choice of professional practice or venue (e.g. teacher practicing in urban or remote school).	Students who practice targeted professions (e.g. nursing) or in targeted venues (e.g. inner city or rural venues).	Enhance numbers of the targeted professionals and/or those who will serve in less desirable venues.	Unclear as yet how cost effective (compared to direct bonuses or direct income supplements).

disparities—such as the commonly alleged socio-economically-, ethnically- or gender-based *debt aversion*--then a diversion of public funds from grants even to the considerably more extensive volume of loans that are presumably supportable for the same amount of public dollars would probably not be cost-effective.

This policy conundrum cannot be "solved" by a simplistic observation that students would quite universally (all else being equal) prefer grants to loans—any more than by the similarly simplistic observation that students would prefer low or no tuition fees for all over means-tested grants for some. The opportunity costs and trade-offs must be recognized and programs of at least approximately equivalent present values compared. Thus, for example, a given present value dollar volume of grants, at least in theory, should be able to purchase a much greater volume of minimally subsidized loans, or a somewhat greater volume of highly subsidized loans (presumably available only to students of low income parents) or a roughly equivalent volume of income contingent loans, the effective grants for which would go not to borrowers whose parents were poor when they attended college, but whose own lifetime incomes turn out to be insufficient to pay off the students indebtedness within a reasonable repayment period at a reasonable percentage of income.

Such is the essence of economics: the (relatively) scientific study of alternatives and trade-offs. Unfortunately, the trade-offs between e.g. tuition fees, expected parental contributions, loan subsidies, and grants is deeply confounded with politics and ideologies as well as with troubling gaps in our understanding of how alternative public expenditures affect the enrollment behaviors of what kinds of students.[12]

Public Policy and the Expansion of Higher Educational Opportunities

This treatment of cost-sharing and the cost-effectiveness of grants and loan subsidies closes with the following observations, in rough order of centrality to the underlying public policy discussions surrounding the expansion of higher educational opportunities in Europe and most of the other OECD countries:

1. Elected officials to whom a democracy has delegated such ultimate decisions need to clarify – and if possible come closer together--in the value that they place on the elimination of financial barriers to post-secondary education. This is a relatively easy proposition to which to give politically requisite lip service. However, the virtually universal correlation of both low academic preparedness and low or ambivalent interest in post-secondary education with both low family income and linguistic and ethnic minority status makes successful participation in more selective institutions and the longer programs of study less likely even with substantial compensatory

[12] For example, there is an extensive literature, mainly US (e.g., Heller 1997) purporting to explain (tuition) price elasticities of demand for higher education—mostly with a dollar rise in tuition as the independent variable and a change in aggregate enrollment as the dependent variable. However, the common sense of experience should tell us that there are many alternative "enrollment decisions" that might be affected by an exceptional tuition hike—such as borrowing more, working longer hours, "stopping out" for a semester, moving "back home" to save money, transferring to a less expensive institutions (or less expensive living situation), dropping out altogether, or changing one's plan and not matriculating after all. Clearly the last two are deeply troubling as they represent real financial barriers to post-secondary education. The other alternatives, while not inconsequential, are less troubling to most observers. Yet we know very little about these "more "nuanced" behavioral responses to increases or decreases in either tuition fees or grants.

means-tested financial assistance. To the degree that targeted subsidies are supposed to remove all financial barriers not merely to entry but to successful completion, it is almost certainly the case that effectiveness, however defined, will diminish very greatly at the margin: that is, more and more dollars will be required to induce the ill-prepared and the ambivalent to enter, persist, and finally to succeed. Thus, it is it is almost certainly also the case that none of the OECD countries are devoting enough public dollars to eliminate—or even to very substantially reduce-- socio-economic and ethnic disparities in post-secondary educational participation. The very difficult and probably unanswerable —*but not merely rhetorical*—question to ask of our elected officials is: How much reduction of the ubiquitous disparities in post-secondary educational participation and attainment is realistically attainable within realistically conceivable public budgets?

2. Public officials must also come to some relatively common agreement on what would constitute the acceptable lessening not simply of the disparities in postsecondary participation and success, but in the even more inevitable (and arguably more insidious) disparities in the types of institutions and programs. Thus, even when disparities in overall higher educational (or postsecondary) participation and even completion are lessened, great disparities may persist between matriculation at short-cycle, non-elite, "access institutions" (e.g. community colleges or private non-selective vocational institutions) versus classical universities and other selective, prestigious options, public as well as private.

3. There needs to be some policy concurrence (which does not have to mean *agreement*) on the appropriateness of an expected parental contribution toward the post-secondary education of the children—at least to the limit of the parents' measured financial means and at least until the children have attained a certain age or a certain level of higher educational attainment (or otherwise may be reasonably declared to be financially independent). At one time, it was not considered necessary even to pose this question: the US, Canada, UK, Germany, Japan, and virtually all OECD countries (other than the Scandinavian countries) based their financial assistance on the bedrock of an assumed parental contribution (to the limit of financial means). This was never popular with students, who naturally long to be independent—particularly as long as the necessary revenue to meet all of their postsecondary expenses is forthcoming from the general taxpayer. But if this is deemed to be no longer financially possible, the alternative to being considered a financially dependent child (for the purpose of establishing an appropriate parental share of postsecondary educational costs) is mainly the student himself or herself via loans. And while it may seem unlikely for a country to backtrack on an "officially expected family contribution," this is precisely what happened in the UK in the summer of 2004 (to take place in 2006), apparently beguiled by the political ease with which Scotland adopted the a Australian plan for income contingent loans *in place of* "up front" parental contributions (Johnstone, 2004b).

4. Both loan (repayable) and grant (non-repayable) programs are built upon relatively precise estimates of the costs of instruction (i.e. tuition fees, book, etc.) plus assumptions about the necessary costs of student living (i.e. food, lodging, and all other living expenses). These costs of student living assumptions, or reasonable

estimates, are highly variable, depending on the local costs of food and rent, whether the student is living at home or independently, and whether the student in question is a traditional age, financially dependent child or is an older, financially-independent adult, possibly with his or her own dependent children and other significant family financial responsibilities. For the traditional-age, financially-dependent child, a reasonable estimate of necessary living expenses can be made knowing only the residential status. For the independent student, however, living costs are exceptionally variable and will depend on individual circumstances that are not so easy to estimate. And because the necessary costs of student living for the independent student in virtually all cases will be higher (however calculated), the level of either loans or grants that are needed to remove the financial barriers to postsecondary attendance will also be higher—thus increasing the financial stakes to the government in the particular methodology used to establish this "reasonable estimate" of living costs. Survey-based estimates of actual and reasonable living expenses estimates (e.g. Cervenan and Usher, 2004, Hemingway, 2004) provide examples of an empirical approach to the question. But this problem—i.e. the increasing proportions of independent students with higher, *but also highly variable*, living expenses--will be an increasingly critical challenge to financial assistance programs aspiring to reduce financial barriers to post-secondary education. And the arguably increasing social need to bring not simply *entry* but also *advanced level*, higher education into the financial reach of all compounds both the financial and the technical challenge.

5. How important to policy makers is the public aim of *financially healthy [public]) colleges and universities* (however such "financial health is to be determined)--as opposed to the public aim of inducing, by public subsidy of some form, *a few additional (and thus almost by definition academically marginal) students into postsecondary participation?* If some [public] colleges and universities, presumably by their strong academic reputations, can compensate for insufficient governmental revenue and maintain their academic quality by raising tuition fees—assuredly beyond the reach of at least some low income students—should they be allowed to do so, even if the effect is to widen the socio-economic disparities in participation between the public and private "elites" and all other institutions?[13] Is it a cost-effective use of public money to provide the substantially larger grants required to bring the very high cost-high tuition institutions (whether public or private) "into range" for traditionally underrepresented students—particularly when even the more modest tuitions are thought by some to be a deterrent to some students?[14]

6. Do scholars, policy analysts, and public officials believe the commonly professed claim of socio-economically- or ethnic minority- or gender-based *debt aversion*—suggesting that the higher educational under-representation of such groups will *not* be rectified by *loans,* however attractively packaged, but will require (more expensive) *grants* because such groups are thought to be culturally averse to borrowing (Callender, 2003a, 2003b and chapter xxx)? This belief is widely held in spite of what

[13] This is a burning issue in the UK over the issue of permitting co-called *top up* fees.
[14] The principal US means-tested grant, the Pell Grant, is explicitly not tuition sensitive, revealing a long established federal policy that this grant program is only for access, not for "choice" or for making accessible the most challenging (selective) institution.

some others believe to be the thin evidence in its support (Bradley and Whitehead, 2003). Furthermore, even if there is some demonstrable correlation between low family income and non-participation in higher education *because of debt aversion*, is such a correlation significant enough to be worth the substantial expense of abandoning loans in favor of grants--or the even greater cost of abandoning tuition fees altogether, thus incurring the opportunity cost of forgoing other governmental expenditures that might benefit students and institutions?[15]

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Higher and other forms of postsecondary education are costly. The total and the per-student costs of instruction are pressing upward at rates typically greater than the average rate of increase of prices generally--that is, greater than the prevailing rate of inflation--and generally, even in mature economies, at rates that governments almost certainly cannot match. This chapter has been about the variety and cost-effectiveness of various forms of cost-sharing and targeted governmental subsidization designed to achieve the delicate and complex balance among:

- financially healthy universities and other higher educational institutions--recognizing the increasing benefits of higher education to individuals, economies, and societies;
- expanded and more equitable participation in higher education— recognizing the persisting but politically and morally unacceptable disparities in matriculation, persistence, and success in higher education by social class and other demographic characteristics; and
- the most cost-effective use of public, or taxpayer-originated, revenues for whatever public purpose or set of purposes—recognizing the voracious fiscal appetite of higher education and the fiercely competing claims on scarce public revenues.

This chapter has attempted to present the entire complex of policies setting forth (or eschewing) tuition fees, expected parental contributions, means testing, student and/or parental loans, the degree of governmental subsidization thereof, and the entire panoply of governmental and/or institutional grants or bursaries as a set of policies that shift a relatively fixed set of expenses around among taxpayers, parents, students and philanthropists in pursuit of diverse higher educational policy goals. These policies affect the fundamental financial position--and thus the nature and the quality--of universities and other institutions of higher education as well as the participation and relative accessibility of higher education to students of different socio-economic and cultural and perhaps even of different genders.

[15] There is at least an arguable disconnect between the assertion that young people from low income or ethnic minority cultures that have traditionally eschewed higher education ought now to seek out higher educational opportunities because of the changing times– but ought not be expected to accept other aspects of modernization, such as accepting the appropriateness of credit—and especially of investing in one's own education.

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