

**Shifting the Burden:
Public and Private Financing of Higher Education in the United States and
Implications for Europe**

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Introduction

At first glance, it appears that the United States has met its stated goal of removing price as a barrier to higher education for needy, college-qualified students. Numerous federal, state, and institutional grant and loan programs totalling over \$100 billion have enabled students to secure funding to further their educational attainment since the passage of the Higher Education Act of 1965 (The College Board, 2003b). Record numbers of students (in excess of 16 million) are enrolling in programs at more than 4,100 public, private, and for-profit postsecondary education institutions (The Chronicle Almanac, 2004-05).

Yet these record enrolments mask the fact that the nation has done little to close the gap in college participation between the rich and the poor. While all income groups have increased the rate at which they attend college, a gap of approximately 30 percentage points between students in the top income quartile and those in the bottom has stubbornly persisted over the last three decades (The College Board, 2003a).

Over the last two decades, there has been a significant change in the financing of higher education in the United States. A decrease in student and institutional support in real terms, tuition increases at all types of institutions, along with the view that students are the primary beneficiaries of higher education has resulted in policies that reduce the proportion of higher education costs borne by the federal and state governments. This shift, from the federal and state governments to students and their families, has important implications for the distributional equity of college participation in the nation. In addition, there have been important changes in the type of financial aid that is provided to students, with more and more aid being in the form of loans rather than grants. In addition, many of the grants – which historically had been awarded based on the financial need of the student and her family – are today being awarded to students based on their academic merit without regard to the students' income or wealth. Both of these changes have important implications for the enrolment of lower-income students and others who are underrepresented in American higher education.

The changes seen in the United States are being mirrored in many European countries, as well as other countries around the world. "Increasingly, governments on both sides of the Atlantic are shifting the burden of financing from the state to the institution, and then on to the student" (American Council on Education, 2002, p.14). As the perception of higher education as a private good grows, national governments are stepping back from their longstanding commitment to fund all or most of the cost of education and subsistence for students (Labi, 2003). Thus, the impact of this policy change in the United States can be seen as a model for similar changes in other countries.

One important difference between the shift that has occurred in the United States and that of many European countries is that in the latter, the pace of the change has been increased. Financing changes that occurred over 20 years in the United States are being implemented in a much shorter timeframe in other countries. The ultimate goal and biggest challenge in Europe and in the United States is to protect and maintain access for low-income college-qualified students in an era of shrinking national and state support. This paper will describe this financing shift in the United States, and analyse its impact on college participation with a particular focus on equity and opportunity. It will also provide an analysis of some questions that European countries should address as they implement their own policies that shift the burden of paying for college

from the government to individuals, and as they consider various forms of financial assistance to help students pay for college.

An Overview of Higher Education in Europe

As most of the western world has made the transition to a knowledge-based economy which relies heavily on highly educated workers, higher education institutions in Europe have experienced an influx of students. The Organisation for Economic Co-Operation and Development (OECD) sees issues of "...equity, access and participation [as]... policy priorities in OECD countries" (Vossensteyn, 1999, p.159). As such, the OECD (2004) has identified several policy challenges that higher education institutions currently face in OECD countries. The two challenges that are most relevant to student financing of higher education in Europe are: the growth in volume of higher education activity and the complexity of the activity (more diverse students with diverse needs), and the lag in state support behind this student growth.

As in the United States, "a relatively new emphasis on lifelong learning in Europe is attracting new older and part-time students into higher education and diversifying the student population" (American Council on Education, 2002, p.8). The presence of these non-traditional students tax state funding for higher education systems that are near, at, or past, capacity. To further complicate matters, the continued expansion of the European Union has had and will continue to have a wide-ranging impact on the distribution of higher education and student financial aid. "Students within the European Union, no matter what their country of origin is, compete equally for spaces at universities and for financial aid" (Labi, 2004b, p.A38).

Enrolment Growth, Higher Education Funding, and Student Aid in Europe

The growth in volume of higher education activity has occurred throughout Europe, from Poland to Portugal. The number of students matriculating at institutions of higher education nearly doubled from 1990 to 2000 in Ireland and Sweden. Germany experienced a similar period of phenomenal growth in the decade of the 1980s, but saw its growth during the 1990s plummet to only 5 percent. This growth in the proportion of students attending higher education has been accompanied by a governmental platform to increase enrolment. In Germany, England, and Sweden, politicians have publicly set a goal of enrolling between 40 and 50 percent of young adults in higher education by the year 2010, a rate that would bring these countries closer to that of the United States (OECD, 2004).

This public proclamation of support for a more highly educated citizenry has not been accompanied by an adequate level of funding. In England, between 1989 and 1997, funding for higher education decreased by 36 percent in real terms. Other European countries experienced similar shrinking state support. Spanish higher education experienced a 17 percent drop (in real terms) in funding from 1994 to 2001 while Irish universities saw a slight nominal increase in funding (4 percent), but this was in fact a decrease in real terms (OECD, 2004).

In terms of student financial aid in Europe, periodically, "...students...have to meet study progress requirements (academic targets) in order to remain eligible for grants or other forms of public financial assistance (Vossensteyn, 1999, pp.168-69). The country of Germany is an exception in that students only have to pass one examination at the end of the second year of higher education in order to retain their eligibility. The case of the Netherlands is an interesting one with respect to grant aid and student progress. Dutch institutions provide "achievement-related grants" to students in the form of loans that convert to grants if students complete a four-year degree within six years. However, students who voluntarily assume student loans do not benefit from this convertible grant program (Vossensteyn, 1999). In France, Sweden and Belgium (Flanders), student support ceases if the student does not make satisfactory progress in 100

percent of their courses. There is a bit more flexibility for students in other European countries. Austrian, Danish, and Dutch students need only pass approximately 70 percent of their courses to continue receiving financial support from the government. At the other end of this spectrum lies the United Kingdom. Student financial support depends entirely upon registration at the institution, not the percentage of courses successfully completed. Registration is at the discretion of the institution (Vossensteyn, 1999). It is possible, and probable, that the somewhat relaxed progress requirements for grants will tighten as Britain and its institutions struggle to accommodate the cost pressures that accompany their burgeoning enrolments.

In national systems where higher education has been virtually free, students have taken to the streets to protest the shifting of the burden of the cost of education to the students. For the first time in history, German legislators would like to introduce a tuition charge of up to \$725 per year to attend German universities (Labi, 2003). Not surprisingly, students are in an uproar. The German Supreme Court is currently considering a legal challenge to the law because the right to higher education is considered a fundamental right in Germany. However, the German state system has been financially decimated by the “career student” (Labi, 2003). Ostensibly, charging tuition for university will purge the system of students who abuse the largesse of the German government, while simultaneously decreasing the fiscal pressures faced by German institutions of higher education.

The Americanization of the British Higher Education System

Higher education in Britain is a near perfect exemplar of the problems that were described in OECD countries in the above paragraphs. Reductions in state funding and greater cost pressures have called the quality of British institutions into question. In 1999, Britain spent 1.1 percent of its GDP on higher education. Comparably, the US invested 2.3 percent of its GDP in higher education. Seventy-five percent of funds come from government in Britain, but spending per full-time-equivalent student decreased by 37 percent in real terms between 1989 and 2000 (Galbraith, 2003).

Perhaps the greatest threat to quality higher education in Britain is its very success, as measured by student enrolment. In the 1960s, roughly six percent of young adults attended university in Britain. By the early 21st century, Britain boasted a university participation rate of 43 percent. By the year 2010, the Labour government aims to increase university participation to a full 50 percent of 18- to 30-year old Britons (OECD, 2004). In contrast, in 2002, 36.7 percent of all 18-24 year-olds were enrolled in college in the United States (The Chronicle Almanac, 2004-05). The desire for more university participation among Britons has given rise to the fear that institutions have become less “elitist” as the British university system has stretched to accommodate a more socially diverse student body (Galbraith, 2003). Class sizes have increased, buildings have fallen into a state of disrepair, and many colleges have been forced to cut faculty positions or close entire programs to cope with the money shortages (OECD, 2004). British universities are plagued by poor salary increases and consequently lose many talented academics to American institutions which offer more competitive salary packages (Labi, 2004d). According to the American Association of University Professors (in Galbraith, 2003), the average faculty salary in the US is \$64,455 versus an average salary of \$52,000 in Britain.

In January 2003, Britain’s Labour government introduced the Higher Education Bill to increase university revenue by allowing English institutions to charge “top-up fees” (with government approval and capping) of up to \$5,475 per year starting in September 2006, up from the 2003 level of \$2,050 per year. This is an increase of 167 percent (Labi, 2004c). Welsh universities, pending approval of the National Assembly of Wales, will not institute the tuition increases before 2007, if at all. Anticipating a rush north to Scotland, the Scottish

Assembly decided to increase their yearly fees to \$1,275 to cope with the influx of English students hoping to avoid the new fee structure (Labi, 2004e). Under the new plan, students would pay the fees after graduation, not during matriculation, and only once their income reaches \$27,300 (Labi, 2004e). The use of student loans as a mechanism to postpone payment for higher education is similar to what has become the foundation of student aid in the United States, though the great majority of American students have to repay a fixed amount on their student loans no matter what their post-graduation income level.

The Higher Education Bill was opposed by many of Prime Minister Tony Blair's own Labour Party, as well as the Conservatives and Liberal Democrats. Certain opponents worried about the impact on poor students and the debt burden that recent graduates would face, while others criticised Blair for the goal of having 50 percent of the population in higher education. Instead, they wanted more focus on supporting vocational training to address employers' workplace needs. Supporters of the bill indicated that the concerns about poor students rang hollow because poor students would receive up to \$5,450 annually in financial aid, and have access to low-interest loans of up to \$7,300, which they could write off after 25 years (Labi, 2004a). Blair, as did his predecessor, believed that students should shoulder some of the cost of higher education (Labi, 2004c). Despite concerns that the increases would deter the matriculation of poor students and amid much partisan and bipartisan political debate, the Higher Education Bill won final approval in the House of Commons on July 1, 2004 (Labi, 2004e).

Students fear the fee increase will result in a multi-tiered system of higher education because tuition fees are not uniform across Britain. Liberal Democrats refused to support the bill because they thought that it would create a system in which cost was an indicator of quality (Labi, 2004e). Labour opponents failed in their efforts to require a uniform tuition fee, regardless of institution or degree sought, in order to prevent the rise of a tiered, hierarchical system (Labi, 2004c). Many students and lawmakers believe that wealthier students will attend the more elitist, higher cost institutions such as Oxford and Cambridge, while all others would find themselves relegated to cheaper, less prestigious, lower-cost institutions (Galbraith, 2003). This sounds remarkably like the stratified system that exists in the United States.

The Shifting of the Burden in American Higher Education

Part I: The case of federal student financial aid

The 1970s could easily be referenced as the "Golden Age" of federal student financial aid. Adjusting for inflation, federal grant aid grew ten-fold (900 percent) from 1970-71 to 1980-81 (Hansen, 1991b). Much of this growth in grant aid may be attributed to the non-existence of certain grant programs (Pell grants, State Student Incentive Grants) prior to the 1972 reauthorization of the Higher Education Act of 1965 (HEA). With the election of Ronald Reagan in 1980, the heyday of unfettered political support for federal student aid would come to an abrupt end. "In the 1980s the Reagan administration challenged federal assistance programs on the grounds that they had not equalized educational opportunity and that they had often benefited institutions rather than students" (Hansen, 1991a, p. 13). Despite this very public lack of confidence, Congress continued to fund student aid programs at historic levels, although many of the grants lost purchasing power as they did not keep pace with the rise in tuition prices.

The growing emphasis on student loans over the last two decades can be attributed to two factors: 1) economic and budgetary pressures, and 2) a shift in perspective that the benefits of higher education accrue primarily to the individual, rather than to society as a whole. According to Hansen (1991b), the policy realignment was not a deliberate manner of altering the balance of responsibility for paying for college. "The fiscal legacy of the 1980s – a national debt of more

than \$4 trillion - ...cast a long shadow over policy making in the 1990s. Facing tough choices, the new president [Clinton] decided to emphasize debt reduction, sharply constraining resources for the social and education investments he championed during his election campaign” (Gladieux & King, 1995, p.23).

The slowdown in the growth in the Pell grant relative to inflation in the 1980s and the early 1990s, coupled with the elimination of the Social Security Student Benefit grant program, made student loans a necessary part of postsecondary education for many low-income students (Gladieux & King, 1995). Congress abolished the Social Security Student Benefit Program in 1982, which provided grants totalling nearly \$4 billion per year to one out of ten college students (whose parents or guardians were recipients of Social Security benefits) at its highest point (Dynarski, 2003). In addition, loosening eligibility requirements that accompanied the 1980s’ reauthorizations of the HEA failed to target the aid to the financially neediest students; middle-income students qualified increasingly for Pell grants due to higher family income limits (Gladieux & King, 1995). Despite targeting the lower-income population in the 1970s, new federal financial aid policies and programs in the 1980s catered to a broader range of students. For McPherson and Schapiro (in Hearn, 1994), “the Higher Education Act’s’ [1965] original programmatic focus on lower-income and lower-middle income students has become increasingly blurred to include increased numbers of the middle and even upper-middle class” (p. 96).

This decline in federal grant purchasing power was accompanied by slower increases in family and personal economic growth, which lagged well behind escalating college costs. The 1980s saw college costs outstrip income growth for all but the wealthiest quintile, which Hansen (1991b) concludes represented a threat to the middle-class lifestyle. “Tuition increases outpaced growth in personal and family income during the 1980s and 1990s...average tuition at both public and private four-year institutions more than doubled from 1981 to 2000. At the same time, median income for families most like to have children in college has been relatively stagnant, rising 27 percent since 1981” (College Board, 2001, p. 5).

Tuition increases outpaced, and continue to outpace, the federal commitment to student aid (Gladieux, 2002). During the 1980s, federal grants grew by approximately 85 percent, but college costs increased by more than 100 percent in both the private and public sectors (Hansen, 1991b). As a result, the share of family income required to pay college costs has risen for most families, but has hit low- and middle-income families the hardest. Tuition and fees have risen sharply at public and private institutions, which have increased the loan burden that many students, especially low-income students, carry (McPherson & Schapiro, 1998; Gladieux, 2002; Mumper, 1996). The waning purchasing power of federal grants, together with mounting student loans and record levels of unmet need, have increased the opportunity gap for low-income students in higher education.

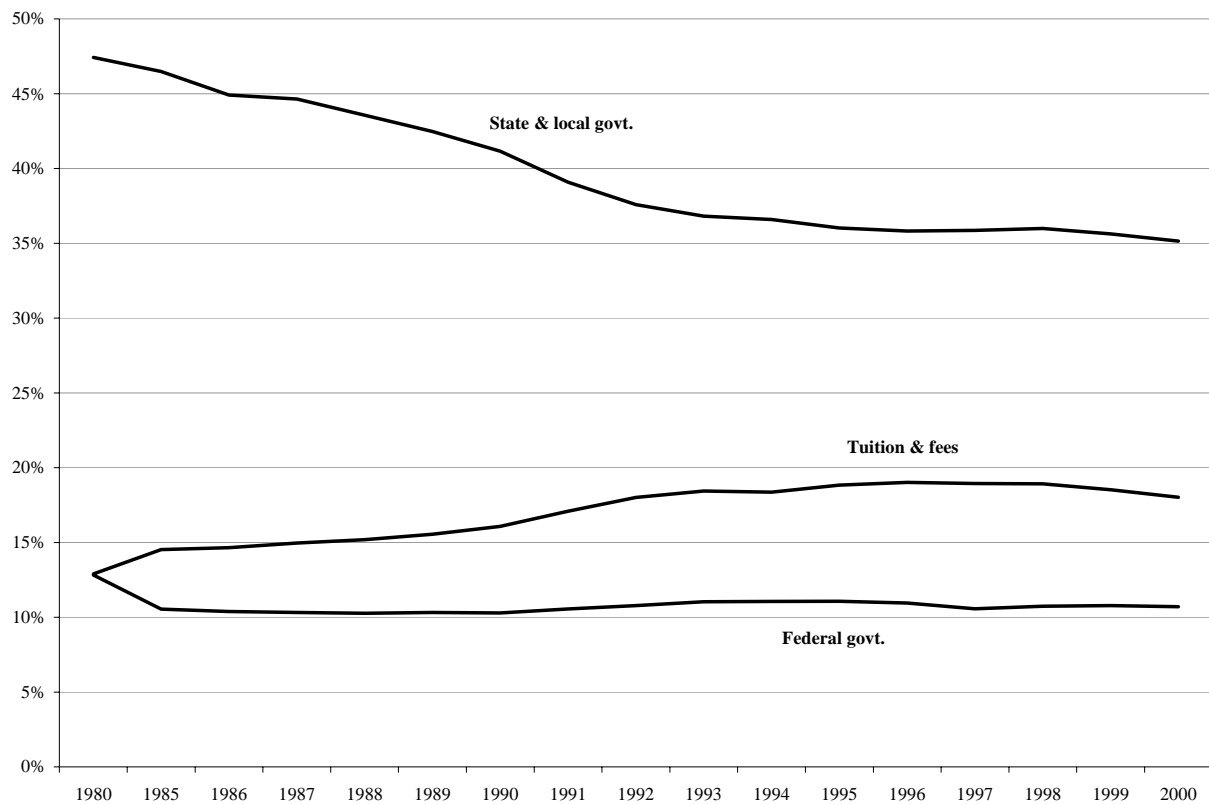
The increased reliance on loans for financing higher education in America was enabled by the economic data that showed an increasing college wage premium, or the additional earnings enjoyed by college graduates compared to individuals who entered the labour markets with only a high school diploma. Beginning in 1980, the college wage premium began a steep rise, driven both by increases in the earnings of college graduates, as well as stagnating wages for those with less education (Levy & Murnane, 1992; Murphy & Welch, 1992).

Part II: The role of the states

As opposed to most European countries, where the primary responsibility for public financing of higher education rests with the national government, in the United States it is individual states that are the primary source of public funds. States have reduced their commitment to funding

higher education the most, resulting in an increased share paid by students. For example, McPherson and Shapiro (2002) showed that from 1980 to 1996, the share of college and university revenues borne by tuition for all institutions increased from 26 to 36 percent of the total. During the same period, funds from state governments decreased from 43 percent of total higher education revenues to 31 percent. Revenues from the federal government decreased from 19 to 15 percent.

In public institutions, which enrol 80 percent of all undergraduates in the nation, the shift has been even more dramatic. Figure 1 shows the share of total revenues received by public institutions from the three primary sources: state and local appropriations, the federal government, and tuition and fees. In 1980, state and local appropriations provided just fewer than half the revenues received by public colleges and universities. By 2000, this had declined to 35 percent. The share of revenues received from the federal government decreased from 13 percent to 11 percent. Tuition and fees received from students and their families increased from 13 percent of total revenues in 1980 to 18 percent in 2000. During these two decades, the proportion of total current fund revenues received from these three sources combined decreased from 73 percent to 64 percent.

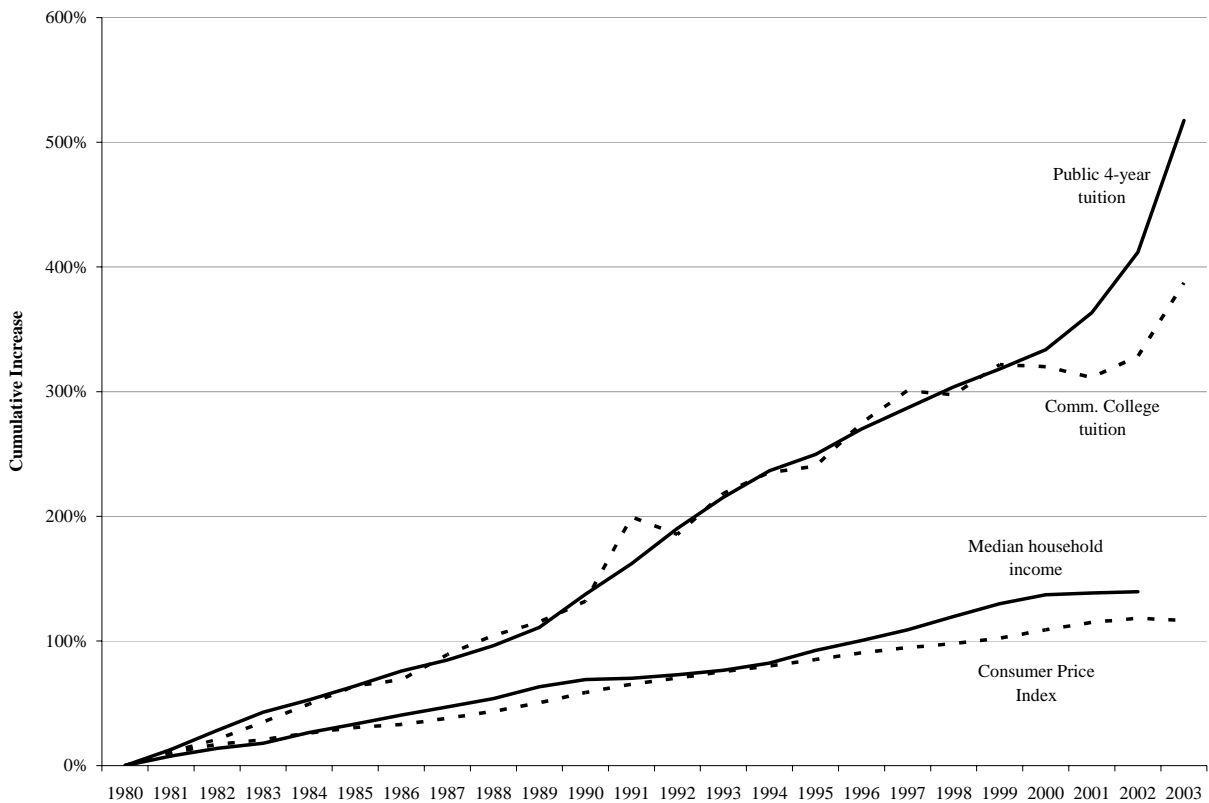


Source: Heller (forthcoming)

Figure 1: Share of current fund revenues in public institutions

Total current fund revenues are only available through the 2000-2001 academic year, and there are no reliable national-level sources available to estimate them for more recent years. However, given the trends since then— overall state appropriations for higher education decreased one-half percent in current dollars from 2000 to 2003 (Center for the Study of Education Policy, 2004), and tuition prices increased 35 percent at public 4-year institutions and 16 percent at community colleges (College Board, 2003a) – it is very likely that the share of total revenues received from tuition and fees has risen well above the peak level of 19 percent reached in the mid-1990s.

The substitution of tuition and fees paid by students and their families for general appropriations from the state over the last two decades is reflected in the tuition price increases shown in Figure 2. The cumulative increases since 1980 in tuition prices in public 4-year institutions and community colleges nationally are shown along with the increases in the Consumer Price Index (for all urban consumers) and median household income in the country. While incomes and inflation increased less than 150 percent between 1980 and 2003, public 4-year tuition prices rose 517 percent and community colleges prices increased 387 percent.



Source: Heller (forthcoming)

Figure 2: Increase in public tuition prices, household incomes, and consumer prices

In addition to this change in the source of funds received by public colleges and universities, there have also been changes in the type of financial aid awarded to students to help offset the tuition price increases. In 1980, approximately one-third of all financial aid in the United States was in the form of loans, and 63 percent was awarded in the form of grants (The College Board, 2003b). By 2003, this shifted to 54 percent of the funds awarded as loans and only 40 percent as grants (with the remainder in the form of work study and tax credits).

In addition to this shift from grants to loans as the primary form of student financial aid, there has been an increasing reliance on the use of merit measures, rather than financial need, as the primary criterion for the awarding of grants. In the states, which award \$6 billion in grants to students (in contrast to the \$15 billion awarded by the federal government), the percentage of aid awarded without consideration of the financial need of the student and her family increased from 9 percent in 1992 to 27 percent in 2002 (National Association of State Student Grant & Aid Programs, 2004).

A similar trend has been seen in grants awarded by colleges and universities themselves. In the United States, most higher education institutions have some form of grant program funded from either “recycled” tuition revenue or from donated funds. Between 1992 and 1999, institutional grant dollars awarded using financial need criteria increased 59 percent, while grants awarded using merit criteria without consideration of financial need increased 152 percent (authors’ calculations from National Center for Education Statistics, 2004a, 2004b).

In the next sections we describe how merit scholarship programs have grown in the United States, and analyze their impact on college access.

The Growth of State Merit Scholarships Programs

Historically, most financial aid in the United States was awarded for the purpose of helping to increase access to higher education. Title IV of the Higher Education Act of 1965, which authorizes the federal student financial assistance programs, opens with this statement:

It is the purpose of this part to provide, through institutions of higher education, educational opportunity grants to assist in making available benefits of higher education to qualified high school graduates of exceptional financial need, who for lack of financial means of their own or of their families would be unable to obtain such benefits without such aid (Higher Education Act of 1965," 1965, § 401).

In order to meet this statute, federal grants – particularly Pell Grants, the largest federal grant program – have been awarded for the last four decades using the financial need of the student and her family as the primary criterion.

From the 1970s to the early 1990s, states also committed to the awarding of need-based. The total dollars awarded by states to undergraduates grew from \$626 million in 1976 to \$2.4 billion in 1993. During this same period, the percentage of dollars awarded without using financial need as a measure fluctuated between 8.9 percent and 11.1 percent of the total (National Association of State Scholarship and Grant Programs, various years).

The first broad-based, state-financed merit aid program in the country was started in Arkansas in 1991. The Arkansas' Academic Challenge Scholarship, funded by general state revenues, provides up to \$2,500 per year to high school students who demonstrate merit and have need (Dynarski, 2002). Unlike Arkansas' breakthrough program, which required scholastic achievement and a means test, Georgia's Helping Outstanding Students Educationally (HOPE) scholarship program rewarded only academic talent.¹ "First awarded in the fall of 1994, the HOPE Scholarship provides full tuition, fees, and a book allowance for all Georgia students with a B average who attended an in-state public college. Those students choosing to attend an in-state private college were given comparably valued compensation" (Mumper, 2003, pp. 50-51). Funded by the state lottery, Georgia's approach to funding meritorious students was soon the template for nearly a dozen states. Presently, 12 states have merit programs with no need component that allow for at least partial payment of tuition, and in most instances, full tuition at any public college or university (Heller, 2002). Broad-based merit aid programs are heavily concentrated in the South, with nine of the existing 12 programs located in the southeastern region of the country.

As described earlier, nationally the share of state spending on merit based programs has grown from less than 10 percent of the total (need and merit combined) in 1992 to 27 percent in 2002. During the 2002-03 academic year, these merit aid states awarded a combined \$1.2 billion in merit awards, over three times the \$350 million provided in need-based aid by the states (National Association of State Student Grant and Aid Programs, 2003). States have articulated three primary motivations for the creation of these programs: to promote post-secondary educational access and attainment, to stanch the "brain drain" of the best and brightest students and encourage them to attend university in the state, and to encourage and/or reward students who work hard academically. This paper will focus on the first of these motivations, the desire to promote access and attainment.

The eligibility criteria for merit scholarships vary widely by state. Of the existing programs, six states require a minimum grade point average (GPA) between 2.5 and 3.0 and standardized test scores (Arkansas initially based their program solely on test scores, but later added the GPA element), while five others look only at a student's GPA (four states require a minimum 3.0 GPA, while two states require only a 2.5 GPA). Only two states, Florida and Kentucky, award differing amounts of aid to students based on their academic credentials (Office of Program Policy Analysis and Government Accountability, 2003; Kentucky Higher Education Assistance Authority, 2003). Michigan is the only state to rely solely on performance on a state curricular frameworks test (Dynarski, 2002).

The Michigan Merit Award Scholarship Program

The legislation that created the Michigan Merit Award Scholarship program had a stated goal "to increase access to postsecondary education and reward Michigan high school graduates who have demonstrated academic achievement" ("Michigan Merit Award Scholarship Act," 1999). First awarded to the high school graduating class of 2000, the awards provide a one-time \$2,500 college scholarship (\$1,000 for out-of-state institutions) to students who achieve a minimum score on all four sections of the Michigan Educational Assessment Program (MEAP) 11th grade test, the state-wide curricular framework test. Because the program uses state test scores rather than high school grades as the award criterion, the effects of grade inflation can be discounted.

¹ When first implemented, the HOPE program had an income cap of \$66,000, which was raised to \$100,000 the second year. The cap was eliminated entirely the third year.

Data on the 2000, 2001, and 2002 graduating classes in Michigan were obtained from the Michigan Merit Award Office (2003). The data include all high school students, public and private, who took the MEAP test at least one time; over 100,000 students are in each cohort. Data on the characteristics of high schools in the state were obtained from the Michigan Department of Education (2003) and were merged with the student datasets.

Bivariate analyses of the data were conducted to examine the trends among the three cohorts in scholarship qualification rates for different populations of students in each cohort, including racial/ethnic groups, and schools with varying levels of free/reduced lunch eligible students.

To qualify for the Michigan Merit Award Scholarships, students must pass two thresholds. First, they had to have taken all four sections of the MEAP 11th grade test to be considered for the scholarships.² The second step in scholarship qualification is to score at a performance level of 1 or 2 (on a four point scale) on all four of the test sections. Students may also qualify for the scholarships by taking all four sections, scoring a 1 or 2 on at least two of the sections, and scoring in the top quartile nationally on the SAT or ACT test. For the classes of 2000 through 2002, the qualifying SAT score was 1170 and composite ACT score was 24.

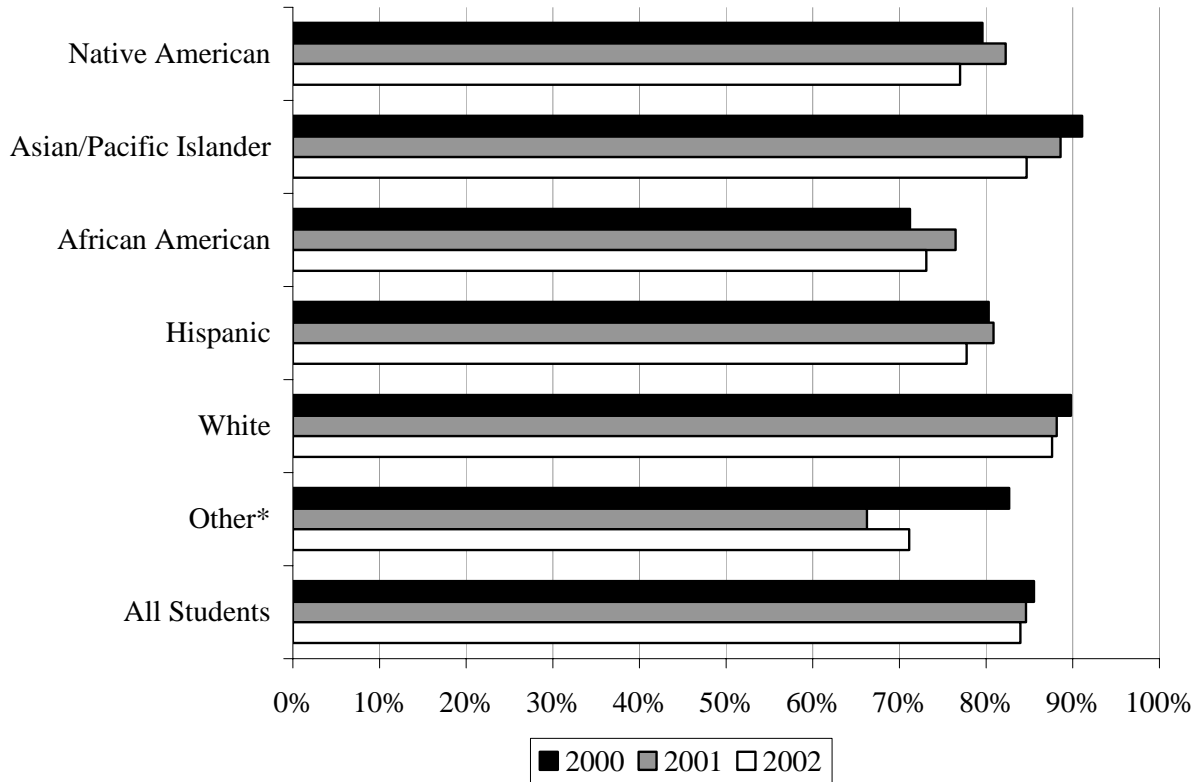
Before examining the trend in MEAP test results and standardized test scores, it is important to understand the timing of the development of the Michigan Merit Award Scholarship program. Governor John Engler of Michigan announced in his 1999 State of the State Address that he would introduce legislation to create the Michigan Merit Award, “for all Michigan high school graduates who master reading, writing, math and science” (Engler, 1999). Engler proposed that the program be funded from a portion of the state’s share of tobacco settlement funds. The bill quickly passed both houses of the Michigan legislature and the Michigan Merit Award Scholarship Act was signed into law by Engler on June 30, 1999.

The argument can be made that the incentive of the scholarship should have had little impact on the graduating class of 2000, which would have taken the MEAP tests in April of 1999, before the legislation had been enacted. Even though the proposal had received some coverage in the press, the details of the program were not hammered out until after these students took the test. Once enacted, the program received even more publicity – including information about how students could qualify for the scholarships – and thus, it would reasonably have been expected to have the largest impact on the class of 2001.

For all 106,000 students in the baseline year (graduating class of 2000) who took at least one MEAP section, 86 percent took all four sections. Large differences were found in the rates at which students in different racial groups took the four sections, however (figure 3). For example, in the baseline year (graduating class of 2000), while 90 percent of white students took all four tests, only 71 percent of African Americans and 80 percent of Hispanics achieved this first threshold. In the second year, the rate at which all students took the four sections decreased to 85 percent, due largely to a drop in the rate for white and other students.

The third year saw a continued drop off in the proportion of students taking all the sections, with the total decreasing another half percentage point. While some of the racial groups saw small increases from the first year to the second year, all saw a decline from the second to the third year so that by 2002 a small proportion of all groups took all four tests (with the exception of African Americans) than in the baseline year.

² While the tests are normally administered to 11th graders in the spring of that year, students are able to retake the test in the fall and spring of their senior year if they choose.

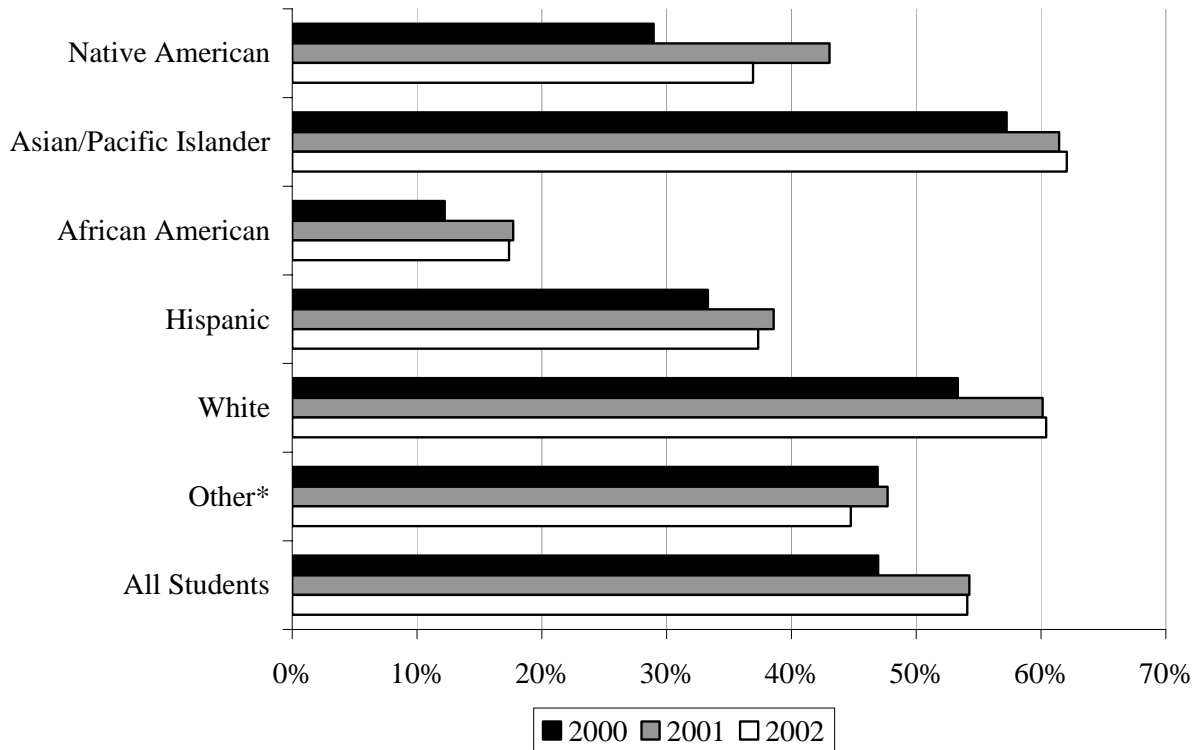


* Includes students of unknown race, other race, and multiracial

Figure 3: Percentage of students taking all four MEAP sections

Figure 4 shows the proportion of students in each racial group who qualified for the scholarships, of those who took all four MEAP sections. There was a large gap in scholarship qualification rates between white and Asian American students on the one hand, and African American and Hispanic students on the other. While over 50 percent of the white and Asian American students in each year qualified for the scholarships (among those taking all four sections of the test), fewer than 40 percent of Hispanics each year and 20 percent of African American students each year qualified for the scholarships.

Overall, the proportion of students qualifying for the scholarships increased from 47 percent in the first year to 54 percent in the second year, and then decreased 0.2 percentage points in the third year. For Native American, African American, Hispanic, and other students, this pattern was repeated – a relatively large gain from year one to year two, followed by a slight drop-off in year three. White and Asian American students saw a large gain in the second year, followed by a much smaller gain (less than one percentage point) in the third year.

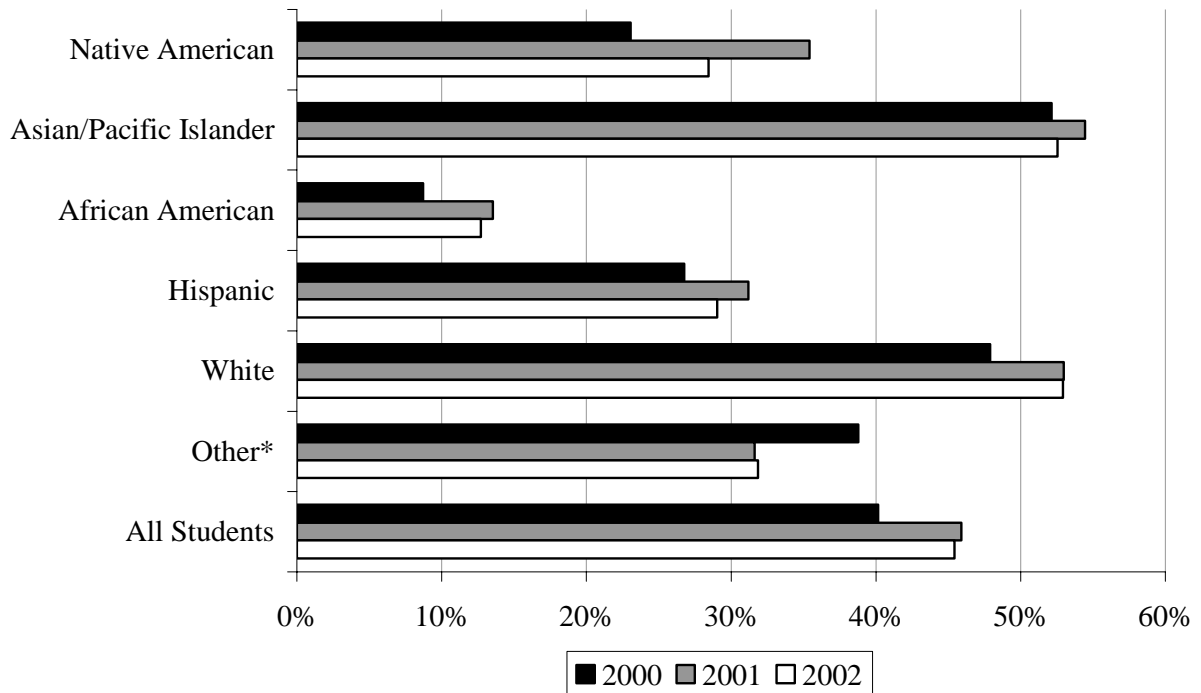


* Includes students of unknown race, other race, and multiracial

Figure 4: Scholarship qualification rates for students taking all four MEAP sections

Figure 5 combines the data from the two steps necessary to qualify for the scholarships. In the graduating class of 2000, 40% of all students who took at least one section of the MEAP test qualified for a scholarship. This proportion increased to 46 percent in 2001, and then dropped slightly to 45 percent the following year.³ Again, large gaps in scholarship qualification can be seen among students in the different racial groups.

³ The rate for white students decreased from 53.0 percent in 2001 to 52.9 percent in 2002.



* Includes students of unknown race, other race, and multiracial

Figure 5: Scholarship qualification rates for all students taking at least one MEAP section

Data from the Michigan Department of Education were used to calculate the percentage of students on free or reduced lunch in each high school, which is used as a proxy for the proportion of low-income students attending each school. The free/reduced lunch data were combined with the MEAP data to look at the scholarship qualification rates for students attending schools in five quintiles. Schools in the first quintile had the lowest proportion of students receiving free or reduced lunch; schools in the fifth quintile had the highest proportion. Figure 6 shows the scholarship qualification rates for all students taking at least one MEAP section, by the high school’s quintile ranking of students on free or reduced lunch.

Two patterns are evident in figure 6. The first is the initial jump in qualification rates for all students from the first year to the second year, followed by a smaller increase (first, second, and fourth quintiles) or a slight decline (third and fifth quintiles) in the third year. The second pattern is the declining proportion of students qualifying for the scholarships as the ratio of students on free or reduced lunch increases. In 2002, for example, schools in the first quintile – those with the fewest students receiving lunch benefits, or the wealthiest school districts – saw 59 percent of students qualifying for the scholarships. In contrast, the schools with the largest number of poor students saw less than half as many students (24 percent) qualify for the scholarships.⁴

⁴ Students with missing free/reduced lunch quintile are largely students in private schools and home schooled students.

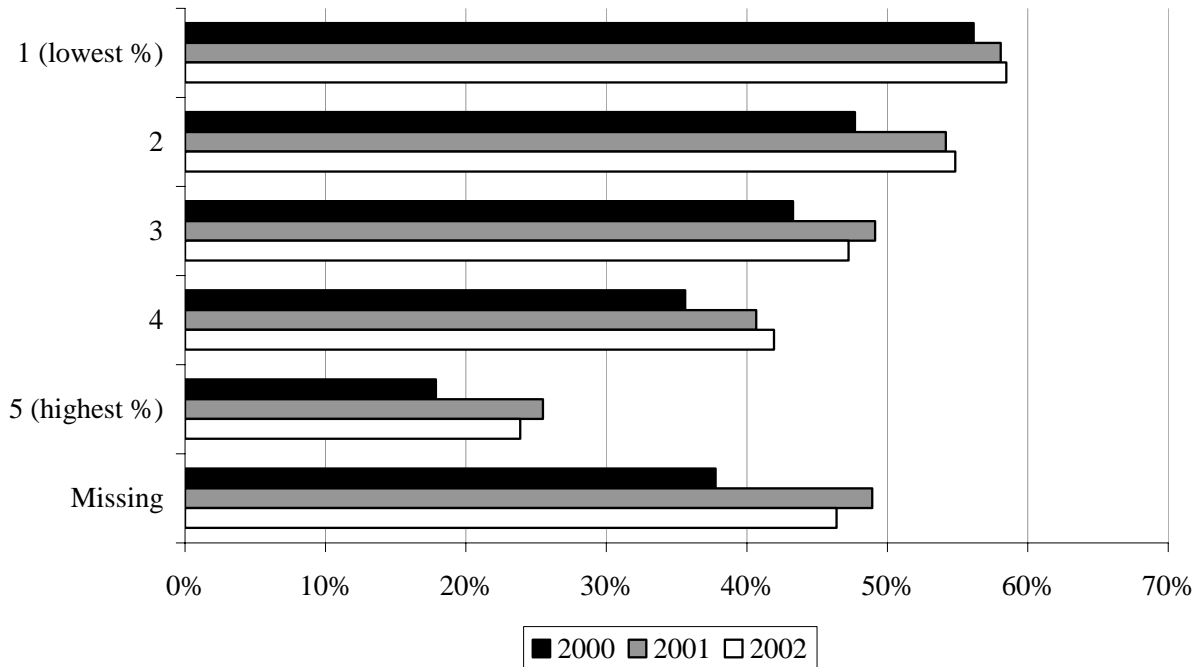


Figure 6: Scholarship qualification rates for all students taking at least one MEAP section, by school free/reduced lunch quintile

The results of this study indicate that there are large differences among the scholarship qualification rates among students in different racial groups. Minority students who have been underrepresented in college participation in Michigan (Heller & Rasmussen, 2002) – African Americans, Native Americans, and Hispanics – had the lowest qualification rates, as well as the largest drop-off in qualification rates from the second to the third cohorts of students.

The Impact of Merit Aid Programs

When examining the impact of broad-based merit aid programs, we must observe potential and actual race effects. Minority and poor students receive a disproportionately smaller share of merit scholarships, while white and upper-income students – exactly the groups who have had the highest college-going rates in the nation – receive a larger share of the grants (Mumper, 2003; Heller & Marin, 2002). For fall semesters 1999, 2000, 2001 and 2002, 78 percent of all South Carolina LIFE recipients were white (South Carolina Commission on Higher Education, 2003). However, whites accounted for only 57 percent of all South Carolina public high school graduates in 1999 (American Association of Collegiate Registrars and Admissions Officers, 1999). In Georgia, white students have experienced a 12.3 percentage point increase in college enrolment post-HOPE while the rate for African Americans appears unchanged (Dynarski, 2000). In Georgia, only 15 percent of African Americans have a high school or college GPA of 3.0 or above to qualify for the HOPE (Dynarski, 2002). However, the one bright note is that black Georgians were much more likely to attend four-year institutions in the post-HOPE policy arena, than before (Dynarski, 2002).

The situation in Florida – where the Bright Futures Scholarship Program is the nation’s second largest – is similarly dismal for non-white students. White students received at least 70 percent of

all Bright Futures scholarship money at all three program levels, yet accounted for only 58 percent of public high school graduates in 1999 (AACRAO, 1999). African Americans and Hispanics comprised only 11 percent of Academic Scholars, 21 percent of Medallion Scholars, and 26 percent of Vocational Gold Seal Scholars (OPPAGA, 2003). More students of colour qualified for the less lucrative awards that had less academically rigorous requirements.

Even though Florida Bright Futures rewards merit and not need, the OPPAGA (2003) found that college was more affordable for everyone, regardless of need. However, this raises the question of whether state-supported merit aid programs should aid those students who do not have financial need, and would be likely to attend college without the assistance of public funds, to the detriment of those who do. In New Mexico, 64 percent of the Lottery Success Scholarship funds are awarded to students whose families make \$50,000 a year or more while only 15 percent of the money goes to students from families with incomes of \$20,000 or less (Selingo, 2001). Subsidizing the enrolment of middle- and upper-income students – who are able to and do attend college without public assistance – serves no obvious purpose of equity (McPherson & Schapiro, 1998).

Merit aid can shift state appropriations away from institutions, which may result in tuition creep. In the end, this will make college more expensive for the people who can least afford it, the non-white, low-income students who do not qualify for merit scholarships (Dynarski, 2002). While the Georgia HOPE and Florida Bright Futures programs have not actively disadvantaged students of colour, there is the fear that they have added to their stratification through increased admissions standards at four-year institutions and potential and actual cuts in state need-based aid. “The expansion of HOPE occurred simultaneously with large cutbacks in Georgia’s need-based scholarship programs. In 1993-1994, the first year of the HOPE Program, Georgia allocated \$5.3 million to its need-based programs. By 1998-1999, it had decreased appropriations to these programs to \$0.5 million, cutting them by over 90 percent during those five years.” (Heller, 2002, p. 240)

The political popularity of merit aid programs is a force that is difficult to resist for and undo by politicians. With the ever-increasing costs of college attendance, it may become nearly impossible to derail the merit aid train that is speeding through many states. Yet, a weak economy may halt or diminish the amount of the awards as well as the number of recipients. Arkansas has temporarily closed its program to new applicants, although renewals are still possible. New Mexico finds itself in a similar position as the costs of the programs have far exceeded the expectation of politicians (Selingo, 2001). Georgia, with the nation’s largest state-funded merit scholarship program, recently acted to tighten eligibility requirements and cap the size of the annual grants because of projections that in the coming years the Georgia Lottery would no longer generate sufficient revenues to fund the HOPE program (Badertscher, 2004).

Conclusions and Implications for Europe

The changes in the funding of higher education documented in this study have important implications for European countries. While the demographics of each nation are different from the United States, many of the lessons from the U.S. are applicable to other countries. As the price of higher education rises - as measured either by the gross "sticker" price or by the net price after financial aid - poorer students are likely to encounter barriers to college participation. These barriers are likely to cause educational and social stratification.

Unlike most Americans, many Europeans believe in free, or virtually free, university education. As the perception of higher education as a private good and the consumer mentality of students increase in the United States, European countries should be hesitant to embrace American

financial aid policies and programmes. The politically popular policy shifts toward merit aid and the decreasing support for need-based aid will have serious and long-term consequences for those low-income students who wish to pursue higher education.

With the decline in the purchasing power of federal grants, increasing reliance on student loans, a preference for tax credits, and the rise of state and institutional merit aid, American financial aid policy has now assumed a path of helping the middle class to the detriment of low-income students. According to Kane (1999), “the most basic goal of federal and state financial aid should be to ensure that lack of money is not the primary obstacle preventing low-income youth from making crucial educational investments” (p. 10). As many European countries inevitably move towards the adoption of higher tuition and fees for university students, they would be wise to examine the relatively lengthy history of college costs, student financial aid, and their overall consequences, intended and unintended, on access and opportunity for underprivileged students in the United States.

The implications of these changes for access to and equal opportunity in college are critical. Empirical research on these topics has consistently shown that poorer students are the most impacted by rising tuition prices, and are most dependent upon financial aid in order to attend college and persist through to attain a degree (Heller, 1997; Jackson & Weathersby, 1975; and Leslie & Brinkman, 1988). As the costs of college are shifted from governments to students, it is lower-income students who are most likely to be forced out of higher education, or forced to attend lower-cost or less-prestigious institutions. McPherson and Schapiro (2002) have documented this stratification in the United States, finding that in 1999, over 40 percent of students coming from families with incomes above \$50,000 (just above the median in the United States) attended either medium- or highly-selective 4-year universities, while less than 16 percent of students from families with incomes below \$15,000 per year enrolled in this sector. In contrast, 39 percent of these lower-income students were enrolled in community colleges, while less than 15 percent of the upper-income students were enrolled there.

As nations shift the burden of paying for college from the public to students and their families, they need to be aware of the impact this will have on postsecondary educational equity. Rising tuition prices are most likely to be a barrier to the enrolment of poorer students. In addition, policymakers need to be aware of the effectiveness of varying types of financial aid on helping students to enrol in college. The results of this study lead us to conclude that awarding grants on the basis of academic merit – without consideration of the financial need of the student and her family – is unlikely to help increase overall college participation rates.

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