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Going Broke by Degree: A Review Essay

by

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I. Introduction

Readers familiar with my research over the last decade will surely conclude that Richard Vedder and I live in two different worlds. This is not because my own book, *Tuition Rising: Why College Costs So Much* (Cambridge MA: Harvard University Press, 2002), deals primarily with college costs at selective private academic institutions and his book, *Going Broke By Degree: Why College Costs Too Much* (Washington DC: AEI Press, 2004), deals with college costs at public higher education institutions. Rather, it is because his and my views of the state of public higher education in the United States today are very different. So when offered the opportunity by the editor to write a review essay about *Going Broke by Degree*, I eagerly accepted and I will cite considerable evidence in this essay to support my views.

Many years ago, a friend, who is a long-time resident scholar at the American Enterprise Institute, told me that I would never have a major impact on public policy because liberals think I am conservative and conservatives think I am liberal. Another friend, a long-time senior fellow at the Brookings Institution, told me that the first friend had things exactly backwards; because people know that I do not start off with any ax to grind, they take my research much more seriously that they would if I always approached things from either the right or the left. In *Going Broke by Degree,* Richard Vedder always approaches things from the right and my overriding concern is that while the book often provides a good diagnosis of the issues facing public higher education, it also often is a polemic in which political philosophy, rather than empirical evidence, shapes statements and drives policy conclusions. Readers of *Going Broke* need to understand what statements are based on fact and what are based on philosophy and my essay seeks to help them do this.

The introduction to *Growing Broke* sketches Vedder's complete argument and I begin in the next section by summarizing this argument, without offering my own views. In section III, I provide a critique of some of the assertions made in the introduction. The remainder of my essay discusses each major section of *Growing Broke*.

II. *Going Broke By Degree: Why College Costs So Much*- The Introduction

Vedder begins by noting that "productivity of university personnel is almost certainly falling" and that "The basic problem is that universities are mostly nonprofit organizations, subject only to muted competitive forces and lacking market-imposed discipline to economize and innovate" (p. xv). With third parties (government and donors) paying much of the cost, consumers (students) are relatively insensitive to costs and this reduces any incentives the institutions have to hold down costs.

Further pressures on tuition come from two types of cross-subsidizations that occur at academic institutions. First, institutional scholarship aid increasingly comes from tuition revenues and increases in this aid require higher tuition levels to pay for it. Second, teaching loads have gone down and increasingly institutions are diverting resources away from undergraduate instruction to allow professors to do more research (p. xvii).

While public university presidents claim that reductions in state support are the major factor responsible for their having to raise tuition, "more generous state support does not usually translate into lower tuition costs. Nor does it enable more students to attend college" (p. xviii). Rather, more generous state support is used to fund higher salaries, additional staff, more facilities and more research. Furthermore the evidence suggests that when other factors are held constant, “the more state governments support higher education, the lower the rate of economic growth in the state” (p. xviii).

The financial benefits to individuals from going to college are considerable, which leads him to question why third parties, including governments, should finance most of the cost of college. There are three arguments that are traditionally given to justify public support of higher education and he rejects all three. First, there are positive externalities to higher education; he rejects this citing evidence that people tend to move from “university-intensive” states into states where less effort is put into higher education (p. xxi). Second, imperfect capital markets; he argues that this calls for direct financial support for students, not support for institutions. Finally, universities support functions other than undergraduate education, such as research, and these costs should not be charged to undergraduate students; he rejects the value of state sponsorship of research at public universities asserting that “There is some doubt, however, whether the university is a better venue for most research than, say, private laboratories or nonprofit institutions” (p. xxii)

Not surprisingly then, he argues that government should get out of the business of supporting public higher education, while increasing the support for students themselves through a voucher program, such as is currently being done in Colorado. The rest of the book is an elaboration of these assertions and the provision of “evidence” that supports his claims.

III. **A Critique of the Introduction**

Before turning to the rest of the book, it is important for me to point out some fundamental differences between Vedder's views of public higher education and public higher education as I know it. First, productivity is in the eyes of the beholder and Vedder's eyes are only on the numbers of undergraduate students being educated per faculty and staff member at universities. Lost from his vision is any notion that research, graduate education and extension and public service activities have value. Lost also is any notion that the quality of what is being provided in higher education institutions has changed over time in a positive fashion. Spending resources on information technology (campus networks, staff) so that students can access the internet, register-on-line, access on-line library reserve lists and the like, has no value to him. Spending more money on student services, such as psychological counseling, is again something that universities should not be worrying about.

Gordon Winston has long pointed out that even if we ignore the explicit grant aid that some students receive, no undergraduate student attending public or private non profit higher education in the United States pays tuition and fees that cover the full cost of his or her education.[1] In private higher education, the subsidies that all students receive come from endowment income, annual giving, government grants and the value of capital services that were paid for by previous giving and government grants. In public higher education, all the above plus direct government appropriations contribute to the subsidies that students receive. Thus, Vedder's statement that undergraduate students are increasingly subsidizing research is simply incorrect – rather the statement should be that on average the sizes of the subsidies undergraduate students are receiving are somewhat

[1] Gordon Winston (1999a)

smaller because a greater share of state appropriations to public universities and of state universities' tuition revenues is going to support research. Moreover, estimates obtained by colleagues and I suggest that the effects of increased institutional expenditures on research on tuition levels and student/faculty ratios at public higher education institutions is quite modest.[2]

Contrary to Vedder's assertion, several careful econometric studies do suggest that increases in state support per student to public higher education institutions are associated with smaller increases in public tuition levels.[3] Moreover, the evidence is compelling that the resource base of public higher education institutions has declined relative to the resource base of private higher education during the last 30 years.[4] For example, in the late 1970s, the average full professor at a public doctoral university earned about 91% of what the average full professor at a private doctoral university earned. By 2003-2004, this percentage had fallen to under 78%.[5] As salaries in public higher education institutions fall in relative terms these institutions are increasingly having difficulty attracting and retaining top faculty.[6] This surely influences the quality of education being offered undergraduate students at public institutions (more on this point below).

As Vedder asserts, it has been well-documented that public higher education institutions are devoting a greater share of their institutional resources to research and a smaller share to undergraduate education.[7] However, this is in response to governors and

[2] Ronald Ehrenberg, Michael Rizzo and George Jakubson (forthcoming)
[3] Michael Rizzo and Ronald Ehrenberg (2004), Robert Lowry (2001a, 2001b)
[4] Thomas Kane and Peter Orzag (2003)
[5] Ronald Ehrenberg (2004a)
[6] Ronald Ehrenberg (2003)
[7] Roger Geiger (2004).

state legislatures that increasingly expect their public institutions to conduct research that will serve as a vehicle for economic development. Why do politicians take such a different view about the importance of their supporting research at their public universities than Vedder does? Perhaps, it is because the available evidence suggests that knowledge spillovers are often local in nature. For example, citations in patent applications to existing domestic patents are more likely to come from the same state and SMSA of the cited patent.[8] Perhaps it is because the available evidence suggests that there is a multiplier effect of state support for university research, in terms of the increase in federal and other external research dollars that these investments generate.[9]

IV. *Going Broke By Degree*: Part I- The Problem

Vedder begins chapter 1 in Going *Broke* with a discussion of the cost explosion in higher education. The discussion here is not confined to public higher education, although most of the policy conclusions in the book deal with public higher education. He also does not make clear here that tuition increases and cost increases are two different concepts. This is an important distinction because tuition increases in private higher education have invariably been associated with increases in expenditures per student, but tuition increases in public higher education are much less tightly related to increases in expenditures per student because public tuition increases often are associated with cut backs in state appropriations per student.

He does note (p. 7) that actual tuition increases may overstate the quality adjusted price of attending college because of changes in the nature of the college experience (as I have described above). However, he discounts this possibility and instead points to

[8] Adam Jaffe et. al. (1993)
[9] Ehrenberg, Rizzo and Jakubson (forthcoming)

evidence of declining higher education quality, such as more students taking 5 or more years to earn bachelors' degrees, a decline in the scores of students taking the Graduate Records Examination, and an increase in the share of students taught by graduate student and part-time faculty. Declining college graduation rates may well be due to the increasing share of American college students that must work part-time while enrolled in college as federal grant aid programs have not kept pace with tuition increases, while the GRE findings may be due to the changing composition of students taking the exam (e.g. more foreign students, a greater share of American college graduates going on for post graduate education), so neither says anything about college quality. Careful research needs to be undertaken on both of these issues before jumping to conclusions about changes in higher education's quality.

I share Vedder's concern about the growing use of part-time faculty and have recently provided evidence that the increased use of part-time and full-time non tenure-track faculty is associated with lower graduation rates and higher drop out rates, with the magnitudes of the effects being largest at public comprehensive universities.[10] Somewhat surprising to me, Vedder does not make the connection here that budget tightness at the publics, occasioned by limitations in state support, is responsible for this growing use of contingent faculty.

Next Vedder presents information to show that tuition has grown relative to family incomes, even if one takes account of the growth of institutional and other forms of grant aid given to students, Again these data refer to all higher education; not just to public higher education. The simple supply and demand analysis that follows about why

[10] Ronald G. Ehrenberg and Liang Zhang (forthcoming). Recent research by Eric Bettinger and Bridget Long (2004) using individual level data from Ohio public institutions does not yield as negative conclusions about the impact of the use of contingent faculty on students.

tuition has risen so much is well worth reading, although his claim that the tuition tax credits provided by the federal government in the late 1990s led to dollar for dollar increases in tuition levels has not been substantiated by empirical research.[11]

At the end of chapter 1, Vedder asks the question, “How have universities utilized their enhanced revenues?” (p. 23). It is probably useful to point out here that the real state appropriations per student at public higher education institutions grew in constant dollars from $5622 in fiscal year 1974 to $6717 in fiscal year 2004 – an average increase of only 0.6% a year.[12] Indeed, the share of state budgets devoted to public higher education has fallen by over one-third during the period.[13] While there are many reasons why state support for public higher education has not kept up with state resources, the increases in state appropriations per student for higher education have been insufficient to keep up with the rising costs of higher education.

Vedder moves in chapter 2 to a discussion about why universities are inefficient and costly. Many of these forces and others were discussed in *Tuition Rising* and what he describes applies equally to private and public higher education. What he does not highlight is an important difference between public and private higher education. In most states public tuition levels are explicitly, or implicitly, under the control of the political process. For even in situation in which the trustees of the university formally control tuition (such as in New York State), they will only recommend tuition increases that the governor and state legislature will support because the trustees understand that if they recommend higher tuition increases the political process can compensate by cutting their state appropriation. So increases in public tuition levels should be understood as being at

[11] Bridget Long (2004)
[12] Ronald Ehrenberg (2004b)
[13] Michael Rizzo (2004a)

least tacitly approved by the political process; it is not simply public university administrators going wild and seeking rents for themselves and their faculty.

I stress this point because chapter 3 deals with why productivity has declined (in Vedder's view) in higher education and the rent seeking behavior of participants in the process. He shows that during the last quarter of the 20th century the shares of public university spending nationally going to research and administration rose, while the shares going to instruction and plant operations declined (table 3.2). Similarly, while full-time equivalent employment per full-time equivalent students at universities has increased during the same period, only a small increase in faculty occurred and the major increase was in the other professional category (table 3.3). The growth was larger in private higher education than it was in public higher education, but even at the publics employment per student grew.

Does this indicate declining faculty productivity and rent seeking behavior by administrators? Vedder believes yes but there are alternative explanations. Much of the growth in spending on research comes from the growth of external funds provided to public universities from the federal government, corporations and foundations for research; these funds are not available to be used for other purposes. Much of the growth of administration may be due to changes in legal requirements (environmental regulations, occupational safety and health, federal and state auditing requirements, research grant compliance and monitoring) and many of these employees' salaries are charged to external funding sources, not to state appropriations and tuition revenues. Much of the growth of administration is also due to the changing nature of where universities look for revenues (increases in staff in the development and alumni relations functions) and where they send their students off-campus (study abroad offices). Much of the growth of other professionals may lie in the information technology area. Sadly the world higher education faces is increasingly complex and thus the need for administrators and other professionals is ever increasing. Similarly, the expectations placed on public universities by their state governments have also changed; as I have noted the expectation that research conducted by the university will be an engine for economic development in the state has increased.

It is in this chapter that Vedder provides his detailed analyses of changes in GRE test scores and changes in the shares of students graduating in five year; I have already explained why these analyses have little to say about university productivity. He also provides some back of the envelope calculations of the value of university research; he is dubious of the value of most research. Finally, he provides extensive data on faculty compensation changes over time and tries to debunk the myth (in his view) that real faculty pay has been stagnating over time (p. 62).

This latter analysis is based on a comparison of average faculty salary increases with changes in the consumer price index, an adjustment of the consumer price index for inflationary bias, and an adjustment for the failure of average faculty salary data to correct for growth in employee benefits. No where does he mention that the data on faculty compensation that he is using apply only to full-time faculty and the share of faculty who are full-time has been steadily decreasing during the period. No where does he mention, as I have already discussed above, that average faculty salaries in public higher education have fallen substantially relative to average faculty salaries in private higher education. No where does he mention that the share of American college graduates going on for PhDs has declined substantially over time; at least partially due to the decreased attractiveness of academia as a career and the decreased chance of new PhDs attaining tenure track positions.[14] No where does he discuss how earnings in alternative professional occupations have dramatically increased, which further reduces the attractiveness of PhD study and academic careers.[15] If things were as cushy in academia as Vedder and other critics of higher education believe, I would not be spending so much of my time worrying about how to attract the next generation of talented students into academic careers and involving undergraduate students in research early in their college careers to try to interest them in pursuing PhD study.[16]

In chapter 4, Vedder switches to a discussion of some of the unique characteristics of American higher education. Price discrimination is one- and he discusses need based financial aid and merit based financial aid. Other forms of discrimination discussed include preferences in admission for athletes, alumni children and under represented minority students.

More relevant to his concern about college costs is his discussion of the tenure system. He understands some of the benefits of the tenure system, such as academic freedom, but his focus is on the well-known costs of tenure. As a labor economist, I view tenure as a desirable job characteristic and expect that in the absence of tenure, universities would have to pay higher salaries to attract individuals into faculty positions. Indeed, a study that I did a few years ago with Rachel Willis and Paul Pieper showed that, other factors held constant, economics departments that offered low tenure

[14] Ronald Ehrenberg (2005)
[15] Derek Bok (2002)
[16] Ronald Ehrenberg (2005)

probabilities to their assistant professors had to pay higher salaries to attract them.[17] And, as I have already noted, the fraction of faculty members with tenure or on tenure-track lines has been steadily decreasing in the United States.

The final topic covered in chapter 4 is cross-subsidization; a topic that has been addressed before by many scholars.[18] Some departments that teach a lot of students, such as economics, subsidize other departments, such as classics. Some departments have higher costs per student than other departments because of differences in instructional technologies (e.g. laboratories in the sciences) and Vedder wonders why universities tend to charge uniform tuitions across disciplines. Although some economists have modeled differential tuition by majors, the standard answer is that universities would like their students to choose their academic subjects based upon interest, not based upon cost.[19]

More important to him is the cross-subsidization of research and graduate education by undergraduate education. Remembering Gordon Winston's dicta that no undergraduate student at public or private higher education institutions bears the full cost of his or her education, the issue here is really one of the sizes of the subsidies to each activity. So too is Vedder's concern, shared by many other observers (including me), that many institutions are spending much too much money on intercollegiate athletics and that some cost savings could be achieved in this area.

V. *Going Broke By Degree* – Part II: Have Our Universities Lost Their Way?

Having discussed why costs are increasing in American higher education, the next section of *Going Broke* begins to look more broadly at American higher education. Chapter 5 provides information on historical growth in university enrollments, including

[17] Ronald Ehrenberg, Paul Pieper and Rachel Willis (1998)
[18] See, for example, Estelle James (1986)
[19] Stephen Hoenack and William Weiler (1975)

the growth in enrollment per population age 18 to 24, the growth in graduate enrollments relative to undergraduate enrollments, the increasing share of nontraditional students, the increasing internationalization of our student bodies (especially at the graduate level), the increasing share of students that are female, the changing racial/ethnic composition of our student bodies, the changes in the shares of students attending 2-year colleges and the changing share of students enrolled at private universities. While private enrollments fell relative to public enrollments between 1955 and 1980, between 1980 and 2000 the share of students enrolled at the privates increased slightly, with some of this growth coming in the for-profit sector (which caters to nontraditional students seeking professional training).[20]

Perhaps the most interesting discussion in this chapter deals with interstate differences in the proportion of the adult population that has college degrees. Vedder shows that this proportion varies across states with income levels and that while the proportion grew in all states between 1980 and 2002, interstate differences in the proportion did not decline substantially during the period (table 5.11). The correlation between educational attainment and income in a state does not imply causation and he will return to discuss this issue more in chapter 7.

Chapter 6 deals with why our nation needs colleges and universities at all. Vedder identifies two primary functions the dissemination and the production of knowledge. However, he stresses, and this leads to the subject of the next chapter, that higher education institutions do not have a monopoly on either function and that as universities become more costly they run the risk of the seeing more competition from other cheaper substitutes. Clearly the growth of proprietary institutions fits neatly here.

[20] Gordon Winston (1999b)

Chapter 7 is one of the most important in the book for it is in this chapter that Vetter makes the argument that the purported social benefits of higher education are overstated. Put simply, this is the chapter that provides the foundation for his policy prescriptions that are described in the final section of *Going Broke*. Social benefits of higher education are benefits that accrue to individuals other than the recipients of higher education and there actually is evidence by others that these benefits exist.[21] For example, in several careful studies Enrico Moretti has shown that as the share of college graduates in an area (or employed in a plant) increases, the earnings of non college graduates in the area (or employed at the plant) also increases.[22]

Vetter conducts his own analyses of the social benefit issue using state level data during the 1977 to 2002 period and finds that while there is a strong positive relationship between the percentage of college graduates in a state in 1980 and the growth rate of income in the state during the 25 year period, there is a much weaker correlation between changes in the percentage of college graduates during the period and the growth rate of income (table 7.1). He takes this to imply that the social benefits to higher education, as measured by income growth in the community, may have existed in the past, but that they are diminishing now. Moreover, when he regresses the growth rate of income in the state on the change in state and local higher education spending (as a share of personal income in the state), he finds a negative, not a positive relationship, when other factors are held constant (table 7.2). Taken at face value, his results here (and later in the chapter when he conducts some case studies) suggest that increased state spending on higher education is associated with lower income growth rates.

[21] Michael Rizzo (2004b) provides an overview of these studies
[22] Enrico Moretti (2004a) (2004b)

Of course there may be a chicken vs. egg problem here. Those states that may have increased their spending (as a share of state income) the most may be the states whose growth rates would have otherwise been below average. Thus, the relationship may run from low projected growth rates of income to decisions to spend more on higher education, rather than visa versa. Sadly, Vetters's attempts to subject his model to some sensitivity analyses (p. 138 to 141) do not include testing this hypothesis.

Vetter does find in this chapter that there is only a weak positive relationship between the level of state spending for public higher education in a state and the proportion of its graduates that have college degrees (table 7.3). This is because college educated labor is mobile and moves to where its return is highest. Much more detailed and careful studies than his have already made this point.[23] However, to say that individual states do not reap most of the benefits of their investments in public higher education, due to the mobility of college educated labor across states, is not to say that that it is socially optimal for the public sector to invest less (which is the conclusion that Vetter wants to draw). Rather, inadvertently, Vetter may have made the case for greater federal investment in higher education. For if, as Moretti finds, there are social benefits to higher levels of education in our society as a whole, the relevant funder should be the level of government that can reap the benefits, the federal government.

VI. *Going Broke* – Part III- Solutions

Vedder surveys the changing landscape of higher education in chapter 8 and discusses alternatives that may help to hold down rates of tuition increases in the future. These include the growing competition from proprietary (for-profit) degree granting institutions, the growth of distance learning and the growth of alternative forms of certification that

[23] John Bound et. al. (2004) and Jeffrey Groen (2004)

may reduce the need for formal college degrees (for example major companies having their own certification processes in the information technology field).

In chapter 9, he then discusses policies that institutions might pursue to hold down instructional cost increases. These include increasing student-faculty ratios by increasing the teaching loads of faculty members, making better use of technology, changing the tenure system by introducing more systematic post-tenure reviews and providing alternatives to tenure (higher salaries for those willing to accept appointments without tenure), cutting and consolidating costly programs, including marginal PhD programs. Some of these proposals will make it more difficult to attract new people into PhD study (e.g. increasing teaching loads in academia), but all are worth thinking about. So too are his proposals for other forms of cost reduction – efforts to reduce bureaucracy and the size of non instructional staff, contracting out and privatization of services and reform of intercollegiate athletics.

I must caution here, however, that the growth of non instructional staff has been at least partially driven by the growth of external funds coming into universities (e.g. research grants) and reducing externally funded employment will not lead to institutional cost savings. Similarly, while privatization of non instructional services are worth considering, some institutions that have moved in this direction have found that they could not both achieve the cost savings that they wanted and maintain the quality of the services provided to students and thus have moved back to direct university operations.[24]

This is not the place to debate his call for the end of formal affirmative action programs; this debate has much more to do with broader issues of the goals of public higher education and social justice than it does with cost savings. Moreover, the public

[24] David Kirp (2002)

debate, as articulated in the recent Supreme Court case, has shifted from a focus on affirmative action to a focus on diversity and the benefits of a diversified student body to the educations of all students.[25]

To further improve productivity, Vetter would encourage efforts to reduce drop out rates and reduce times to degree at both the undergraduate and graduate levels. Policies here would include tying state support to graduation rates and restricting state support per student provided to a university to perhaps four years in college per student. He also calls for more serious grading standards, although this may directly conflict with his desire to reduce drop out rates and times-to-degree. Indeed, further grade inflation may be an unintended consequence of his financing proposals.

All of these changes would at best be marginal and would be resisted in Vedder's view, by faculty and administrators. So in chapter 10 he proposes alternative systematic reforms. The first would be to reduce state support to their public universities and instead provide tuition vouchers directly to students; this is a reform currently underway in the state of Colorado. Institutions would then have to compete for students to get the tuition vouchers. To make such a proposal palatable to people concerned with educational access, the size of the voucher could be tied to a student's financial circumstances. In the extreme case, all public support would be in the form of vouchers, there would be no direct support to the public institutions.

Such a proposal is based upon the belief that the goal of public higher education is simply to provide private economic returns to the undergraduate students that attend their institutions. No funding is provided for extension or public service activities, nor is any explicit funding provided for research or graduate education. The size of vouchers would

[25] Peter Schmidt (2003)

go up by no more than the rate of inflation to help force public universities to hold their costs down (of course the reader should remember that state appropriations per student to public higher education have barely exceeded this rate of increase over the last 30 years anyway).

Moreover, should one be concerned that a university would have to drop costly activities that are not self supporting, such as perhaps its classics department? If these activities are truly desirable, Vedder believes that private philanthropy will be the source of funding.

Once the voucher plan is on the table, the next logical step, which Vedder takes is to extend it to private higher education institutions as well. After all, if the return to higher education is solely a private return, students should be free to choose whatever institution they feel will benefit them the most. To provide some transition protection to public higher education institutions, the extension to privates would be phased in over time. The voucher would have only a fractional value at privates during the first few years and then would gradually rise to the level of the public voucher. At that point in time, privatization of public higher education would be complete and publics and privates would compete on what Vedder believes would be a level playing field.

Of course Vedder's argument ignores a number of important points. First, if vouchers were extended to private higher education, their cost to state government would soar (remember about one-third of all four-year college students are educated at private institutions), unless the size of the vouchers were reduced proportionately. If this were done, the support that publics would receive from the vouchers would decline even more and the publics would be squeezed financially even further.

Second, replacing state appropriations by vouchers does not reduce the public universities need for tuition revenues. The vouchers only make up (partially in the case of Colorado) for the cut back in state support and, absent increases in state support, tuition at the publics will have to continue to rise. Inflationary cost increases affect the whole public university budget, not simply the share of the budget that comes from state appropriations or vouchers.

Finally, to say that the publics and the privates would be playing on a level playing field ignores the vast differences in annual giving and endowments that exists between public and private higher education. The sums that would be necessary to raise the endowment per student levels at public universities to the levels that exist at private universities are mind-boggling and most certainly not attainable. For example, John Wiley, the Chancellor of the University of Wisconsin-Madison has calculated that his institution would need an 8-fold increase in its endowments, from $1 billion to $8 billion to make up for the loss of its state support.[26]

If a voucher scheme can not be implemented, Vedder proposes a set of second-best solutions; explicit controls on tuition increases, more explicitly tying increases in state appropriations to moderation in tuition increases (as I have already indicated this is done in practice in most states), eliminating tuition tax credits for students attending institutions whose rates of tuition increases are large, reducing tax deductions for charitable giving to institutions whose rates of tuition increase are too large, reducing state appropriations for graduate education and research and mandating cost reductions.

In evaluating these schemes it is worth noting the preference that many give to private institutions. To see why, suppose that penalties (in terms of reduced tax credits or

[26] Brian Howell (2003)

reduced tax deductions) go into effect if tuition increases exceed the rate of inflation and the rate of inflation is 4% in a year. A private institution with an initial tuition level of $30,000 can raise its tuition per student by $1,200 and not be subject to any penalty. A public institution whose tuition is initially $4,000 a year and that faces no increase in state appropriations in the year, would receive an additional $400 a year in tuition per student (only one –third the amount that its private counterpart received) if it raised its tuition by 10 percent and it would be subject to the penalty. Invariably such schemes would penalize public higher education relative to private higher education and would lead to a further decline in the relative quality of public higher education institutions.

The final chapter of *Going Broke* summarizes all of the key arguments and policy recommendations that Vedder had made. In this chapter, Vedder comes out and explicitly says what he has hinted at throughout the book. "Externalities are hard to measure, but the statistically significant negative correlation between university funding and economic growth in the United States suggest that, at the minimum, state funding should be reduced, if not eliminated" (p.216). Put simply, in his view the return to undergraduate education is purely a private one, and there is no social return to graduate education, research, or extension and public service activities either.

So if you do read *Going Broke*, be careful to separate out in your own mind what is hard analysis from what is Vedder's preconceived view on the proper role of government. As I have tried to indicate, many of the policy recommendations in *Going Broke* are based on the latter; not on the former.

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