

THE STATE AND THE MARKET IN HIGHER EDUCATION

Henry Hansmann
Yale Law School

October 1999

This is an English version of an article originally published in Italian as "Proprieta' e Concorrenza nell'Istruzione Universitaria" ("Ownership and Competition in Higher Education"), 1 Mercato Concorrenza Regole 475-96 (1999)

Abstract

European universities, for centuries among the jewels of Western civilization, are today surprisingly weak, particularly in comparison to universities in the U.S. While this is due in part to relatively low levels of both public and private expenditure, structural problems offer a more fundamental explanation. Highly centralized state control has resulted in a system in which there is little effective competition among universities, and hence little incentive for improvement in either instruction or research.

Any effort at reform of this system must confront three issues: the degree of governmental ownership, the degree of governmental subsidy, and the degree of competition. While these issues are interrelated, they are also to a degree separable. It is possible to have public subsidy without public ownership, and it is possible to have both public subsidy and public ownership while still maintaining a high level of competition. In analyzing university education, it is therefore important to keep these three issues distinct. It is important, too, to recognize that higher education is distinguished from other goods and services by its "associative" character, which has a strong and complicated bearing on the efficiency and fairness of competitive outcomes.

This article offers an economic perspective on these issues, and outlines potential steps toward reform.

JEL Classifications: H42, H52, I28, L33

I. INTRODUCTION

European universities are today surprisingly weak. The quality of education and research they produce, by common consent, compares poorly with that produced by universities in the United States. This is a striking change from the early 20th century, when European universities set the standard for quality throughout the world, as they had for nearly a millennium. One simple measure of this change can be found in the Nobel prizes awarded in the hard sciences (physics, chemistry, and physiology/medicine). In the decade 1921-30, Europeans received 23 of these prizes, as opposed to 4 for U.S. scientists. In the most recent decade, 1989-98, Europeans won 13, as opposed to 26 for the U.S. – a startling reversal.ⁱ Students today respond to the U.S. advantage by voting with their feet: the number of European students enrolled in U.S. universities is two and one half times the number of U.S. students enrolled in European universities.ⁱⁱ The U.S. advantage in quality of higher education, moreover, does not come at the expense of quantity. A substantially larger percentage of the relevant age group is enrolled in colleges and universities in the U.S. than in the leading nations of Europe.ⁱⁱⁱ

One source of the U.S. advantage in higher education is simply that the U.S. devotes more resources to the sector. U.S. public expenditure on higher education -- whether measured as percentage of GDP, as aggregate real expenditure, or as expenditure per student -- exceeds that in all European nations except Great Britain.^{iv} When we add to this the large private expenditure on higher education in the U.S., which is several times greater than that in any European nation, the total expenditure on higher education in the U.S. outweighs, by all measures, that of any country in Europe.^v

It seems unlikely, however, that the difference in quality between U.S. universities and European universities can be explained entirely in terms of relative expenditure. Rather, a very important part of the explanation seems to lie in the way European universities are organized. Indeed, the relatively low expenditure on higher education in Europe seems itself a consequence, at least in part, of the way the universities are organized.

The heart of the organizational problem is that, throughout most of Europe, university-level education remains largely a state monopoly. This is particularly the case in Italy, where most universities are under the control of a single national ministry of education. Just as with governmental ownership of factories, farms, and retail stores, governmental management of universities yields bureaucratization, poor productivity, entrenched privilege and power, unnecessary standardization, and excessive scale. All of these problems are plainly evident in European, and particularly Italian, universities.

Surprisingly, there is little public debate about this state of affairs, and even less effort to change it. The great movement toward privatization that has swept the world over the past decade has left European higher education largely untouched. While there have been modest steps toward decentralization of authority, there remains widespread acceptance of the notion that higher education should remain an industry that is largely owned and operated by the state and substantially immunized from the forces of competition.

There is, however, strong reason to believe that major restructuring would greatly improve the quality of university-level education and research. Moreover, these improvements need not come at the cost of social equity; on the contrary, structural reform could well improve fairness as well as efficiency.

There are three distinct issues involved here: the degree of governmental ownership, the degree of governmental subsidy, and the degree of competition. While these issues are interrelated, they are also to a degree separable. It is possible to have public subsidy without public ownership, and vice-versa. It is also possible to have both public subsidy and public ownership while still maintaining a high level of competition. In analyzing university education, it is therefore important to keep these three issues distinct. It is important, too, to recognize that higher education is distinguished from other goods and services by unusual characteristics that have a significant -- and sometimes complicated -- bearing on these issues of structure.

My object here is to provide an economic perspective on these issues, and to outline some potential steps toward reform that are suggested by this perspective.

II. THE RATIONALE FOR PUBLIC SUBSIDY

It is sometimes argued that university-level education should be subsidized because it is a public good. This claim is difficult to sustain, however. To be sure, citizens of a democracy may benefit when their fellow citizens are well educated, since educated citizens may vote for more competent leaders and more effective policies. But the magnitude of this effect is subject to doubt, and surely any such public benefits from a university education are quite small in proportion to the private benefits. A nation as a whole may also be more prosperous when its citizens are better educated and hence more productive, since individuals generally cannot capture all of the gains generated by their personal productivity. But investment in physical capital and other productive assets has the same consequences, so this is not a special reason to subsidize the formation of human capital. Moreover, though there will inevitably be some spillover to society at large, the great bulk of the returns from training of the sort offered by universities can in fact be captured by the individual student, owing to

competition among potential employers for the individual's services. In general, higher education is overwhelmingly a private good.

Another frequent justification for subsidizing higher education is that it is an effective form of social redistribution. This claim is, however, subject to the usual arguments against tying redistribution to consumption of specific goods and services. To begin with, such subsidies are inefficient. If one wants to make a poor person better off, sending him to a university for several of his most productive years is not always the best way to do it. In many cases his prospects may be better improved by helping him purchase a truck or a trattoria.^{vi} Second, subsidies to higher education are, in general, distributionally quite regressive. This is particularly true when, as in most of Europe today, the subsidy is in the form of free university tuition to the rich and poor alike – since, even with free tuition, it is generally the rich who attend the universities. But even subsidies confined to relatively poor students probably provide only modest redistribution in the long run, since the students who take advantage of such subsidies are generally those who would be likely to be relatively successful in life in any event. It is those young people that lack the background, talent, or character to pursue higher education who will end up among the poorest of their generation, and they will not be helped by subsidizing university education.

Nevertheless, there remain some persuasive arguments for public subsidies. The strongest of these arguments is that market imperfections prevent an adequate level of private financing for the formation of human capital. A young person may stand to gain long-term benefits from a university education that, in present value terms, greatly exceed the cost of that education, and yet still be unable to purchase the education because he and his family have inadequate resources and because – owing to the difficulties of pledging human capital as security for a loan – no private lender will give him a loan that is sufficiently large, and repayable over a sufficiently long period of time, to make it feasible for him to purchase a university education.

A related argument involves risk sharing. A university education is not only a very costly investment (both directly and in foregone earnings), but also a risky investment. This is particularly true with respect to training for specialized fields. Such training may pay off handsomely over the course of a student's life. But there is also the possibility that it will not pay off at all – for example, because demand for the specialty in question is ultimately lower than expected owing to changes in technology. While the risk to the individual may be high, however, social risk may be quite low, since the returns to society as a whole are the average across all students – and across all specialized fields. Owing to incentive problems, it is infeasible to insure students for this kind of risk. Consequently, students will underconsume education -- and especially highly specialized education -- in the absence of subsidy.

III. PUBLIC SUBSIDY VERSUS PUBLIC SUPPLY

To say that governmental subsidies are appropriate for university-level education is not to say, however, that it is appropriate for government to own and operate the universities themselves. Government can, and often does, heavily subsidize services that are provided by nongovernmental institutions.

Health care in the United States is a conspicuous example. Although the share of health care costs paid by government has increased enormously in the U.S. over the past thirty-five years, during that same period the proportion of hospitals and other health care facilities that is owned and operated by government has decreased substantially.^{vii} Moreover, even the most fervent advocates of further increases in governmental spending for health care rarely propose an increase in government's role as owner and operator of health care facilities. Whatever its defects, a regime of government subsidy to private institutions is generally conceded to be superior to a regime of governmentally-operated institutions.

Public subsidies for nongovernmental services can take either of two general forms. On the one hand, they can be structured as supply-side subsidies, in which the government provides grants directly to the supplying institutions – for example, by paying for specific inputs such as the construction of facilities, or simply by providing a general budgetary subsidy. If supply-side subsidies are to be effective, however, it is often important that the supplying institutions be organized as a nonprofit rather than for-profit firms. Otherwise, the benefits of the subsidy may be captured in substantial part by the firms' owners rather than by the consumers who are the intended beneficiaries of the subsidy.

The other alternative is demand-side subsidies, in which the government makes grants to consumers that can be used (only) for purchase of the service involved. In higher education, supply-side subsidies are particularly easy to administer simply by granting scholarships and subsidized loans that the students can spend at the institution of their choice. This form of subsidy can work with for-profit service providers as well as with nonprofit and governmental providers, since competition among the providers for consumers' patronage will assure that the principal benefit of the subsidy goes to the consumers rather than to the providers. To return to our previous example, governmental expenditure on health care in the U.S. has shifted markedly over the past half-century from supply-side subsidies (via direct grants to hospitals) to demand-side subsidies (via government-provided health insurance), with the result that citizens can purchase subsidized health care from either public, private nonprofit, or private for-profit providers. This is an important reason why, in the U.S. today, less than

25% of all general-purpose hospitals are governmental, while about 60% are private nonprofit firms and the remainder are for-profit firms.^{viii}

Despite this separability of governmental subsidy from governmental supply, throughout the developed world today higher education is provided largely by governmentally owned and operated universities. Even in the United States, more than three quarters of all university education takes place in public universities.^{ix} Japan is the only exception: although the elite universities in that country are public, eighty percent of Japanese university students attend private (largely nonprofit) institutions.

IV. THE RATIONALE FOR PUBLIC OWNERSHIP

Given this pattern, it is natural to inquire whether, in the field of higher education, there are special reasons not just for governmental subsidy, but for governmental supply.

Administering Subsidies. One possible rationale for public ownership of universities might be that, as an administrative matter, a system of public subsidies to private suppliers cannot effectively be administered. This is surely plausible for supply-side subsidies. Even if the institutions receiving the subsidies are nonprofit rather than for-profit, there remains the serious possibility that the institutions will find ways to use the subsidies to cross-subsidize activities that the government does not wish to encourage (such as esoteric research and teaching that serves the interests of the faculty more than those of the students). And if the government promulgates detailed and tightly-enforced regulations to prevent diversion of the subsidies, the result may be a regime so awkward as to offer no net advantage over direct provision through governmentally operated universities.

Demand-side subsidies avoid the need for close regulation of the services provided by the supplying institutions. But demand-side subsidies nevertheless require an elaborate, effective, and honest administrative apparatus for disbursing payments, for keeping track of students (and their activities), and (when the subsidy takes the form of a loan) for collecting payments over many years. Until recently, it may have been difficult for most national governments to develop such an apparatus -- or at least more difficult than simply having the government itself operate a small number of large universities. On the other hand, today this administrative task seems well within the competence of most developed nations, and in fact many countries deploy at least some portion of their educational subsidies in the form of scholarships given to the students themselves. Consequently, even if problems in administering institutional grants and student scholarships help explain why universities were generally operated

by government in the past, they provide little justification for maintaining publicly-operated universities today.

Supply Response. A more compelling reason for public ownership is that, even if demand-side subsidies can be administered effectively, they may fail to induce adequate “supply response” – which is to say, adequate expansion (or contraction) of capacity to meet changes in demand. This is particularly likely to be a problem where -- as is today typically the case -- nongovernmental universities are organized as nonprofit rather than for-profit institutions.

Nonprofits in general, and nonprofit universities in particular, are typically very slow to enter an industry or to expand their capacity when demand for their services increases. One reason is poor access to capital with which to expand facilities. Nonprofit institutions, by definition, cannot raise equity capital, and even their access to borrowed funds, via bank loans or bonds, is limited. Although this problem can be solved to some extent by having the government provide credit, that approach brings the problems of supply-side subsidies in general, and forgoes the benefits of capital market monitoring.

Another reason for poor supply response among nonprofit institutions, and one that is even harder to address, involves incentives. The nonprofit form prevents entrepreneurs and managers from profiting financially by entering or expanding, and thus deprives them of any pecuniary incentive to increase output. Indeed, given the absence of pecuniary incentives, nonprofit managers often seek satisfaction in providing services of especially high quality. Because -- particularly in higher education -- expansion of enrollment often comes at the expense of average quality, the result is actually a *disincentive* for managers to expand.

As a consequence, if it is important to have the supply of higher education expand quickly, then the only efficacious route may be for the government simply to build the universities itself rather than to use subsidies to encourage nonprofit institutions to enter and expand. This fact, it appears, offers the best explanation for the large market share of governmental universities in most modern societies.

For example, in the United States, as shown in Table 1, 51% of university students were enrolled in public institutions in 1951, with the other 49% enrolled in private nonprofit institutions. These market shares had remained constant for at least 30 years. Over the subsequent 25 years, however, the public share increased dramatically from 51% to 76%. That increase in market share coincided with an enormous expansion -- more than 400% -- in the number of students attending university. Moreover, the period of greatest increase in enrollments, 1960-65, was also the period of fastest expansion in the governmental share of the market. This correlation presumably reflects the fact that it was infeasible to induce sufficient entry and expansion by nonprofit

institutions to quadruple the capacity of U.S. universities in just 25 years. The only solution was for government to build directly. Thus, the large role of public universities in the U.S. seems best explained simply by problems of supply response in the private sector.

TABLE 1

**U. S. PUBLIC AND PRIVATE COLLEGE
AND UNIVERSITY ENROLLMENTS, 1920-1975**

<u>YEAR</u>	<u>PUBLIC</u>	<u>%</u>	<u>PRIVATE</u>	<u>%</u>
1920	315,382	53	282,498	47
1930	532,647	48	568,090	52
1940	796,531	53	697,672	47
1950	1,354,902	51	1,304,119	49
1955	1,484,000	56	1,177,000	44
1960	1,832,000	57	1,384,000	43
1965	3,624,000	66	1,902,000	34
1970	5,112,000	72	2,024,000	28
1975	6,838,000	76	2,185,000	24

Source: Henry Hansmann, *The Changing Roles of Public, Private, and Nonprofit Enterprise in Education, Health Care, and Other Human Services*, in Victor R. Fuchs, ed., *INDIVIDUAL AND SOCIAL RESPONSIBILITY: CHILD CARE, EDUCATION, MEDICAL CARE, AND LONG-TERM CARE IN AMERICA* 245, 267 TABLE 9.2 (University of Chicago Press, 1996).

A similar explanation perhaps accounts for the large public university sector in Europe. The earliest European universities – Oxford, Cambridge, Paris, Bologna – were for centuries essentially private nonprofit institutions. The large

role of the state in European higher education seems to date largely from the late nineteenth and twentieth centuries, with the advent of mass access to higher education. Moreover, the problem of nonprofit supply response has been even worse in Europe than in the U.S., since the nonprofit sector in general is much less well developed in Europe.

If public universities are largely a response to the need to expand higher education quickly, however, then it is arguably unnecessary to maintain the universities in public hands once they have been established. Privatization, in the form of independent nonprofit institutions sustained by demand-side subsidies, should be a workable alternative.

Monopoly. Given the enormous size of many public universities, one might think that economies of scale make higher education a natural monopoly, so that market power also provides some justification for public ownership. In fact, however, there is reason to believe that economies of scale in higher education are rather modest. With appropriate degrees of specialization across institutions, an enrollment of several thousand students appears to exhaust most economies of scale for many forms of university-level education. In the United States, for example, there are about 3,300 colleges and universities, most of which are relatively small, and there is little evidence that this represents excessive fragmentation. To put this figure in comparative perspective, if Italy had a similar number of number of colleges and universities in proportion to its population, it would have approximately 800 institutions rather than just the few dozen that it has now. Clearly higher education is not a natural monopoly in the classic sense.

There is, however, substantially less potential for competition than the small economies of scale might suggest. The reason is that, when market forces are free to operate, the market for higher education becomes highly segmented in terms of quality. The sources and consequences of this segmentation are complex, and we shall explore them more carefully below. For the moment, we simply note that problems of quality segmentation, and the barriers to effective competition they create, may today provide one of the few reasonable justifications for public ownership of universities.

V. PUBLIC OWNERSHIP VERSUS PUBLIC MONOPOLY

In Europe today, public ownership of universities often means public monopoly. This is conspicuously the case in Italy, with its highly centralized national university system. Public ownership is, however, also compatible with a fairly high degree of competition. The most direct means to this end is to place ownership of the universities, not in the hands of the national government, but in the hands of local governments, such as provinces or municipalities.

This kind of fragmented public ownership is characteristic of the public universities in the U.S., where none of the nation's many public universities are controlled by the national government. Rather, most public universities are operated by state governments, and the rest are operated by local governments. Since there are 50 states in the U.S., each of which has nearly complete sovereignty in the field of education, this offers the potential for substantial competition. And that potential has been realized. Public universities in the U.S. compete quite actively with each other, as well as with the nation's many private universities, for both students and faculty. The result has been continuous pressure on both private and public institutions to perform well. Presumably as a consequence, both public and private institutions can be found at the top of the quality spectrum. Thus, over the past half century, many would say that the honor of being the nation's -- and perhaps the world's -- finest overall educational institution has shifted back and forth between Harvard, which is private, and the University of California at Berkeley, which is public.

All of this suggests that the most important factor in higher education is not ownership, but competition. A highly productive system of higher education can be built with mostly public institutions, so long as those institutions must compete with each other (though it perhaps helps if there are at least a few private institutions with which they must compete as well).

Further evidence for this conclusion comes from U.S. primary and secondary education. The quality of that education, in contrast to the quality of U.S. higher education, is not particularly high by world standards. What accounts for the difference? Both systems are largely public. (The public share in primary and secondary education is about 90% for primary and secondary education, as compared to about 80% for higher education.) Moreover, both systems are financed at very generous levels by international standards, and both systems are decentralized through state and local, rather than national, control. But there is far less competition in primary and secondary education, for which the market is quite local, in contrast to the national market for higher education. And that lack of competition, arguably, is the crucial factor.

VI. PRIVATE UNIVERSITIES: NONPROFIT VERSUS FOR-PROFIT

I have been speaking so far as if the principal alternative to governmental universities were private universities organized on a nonprofit basis -- which is the alternative that is, in fact, most common. It is worth reflecting, however, whether for-profit colleges and universities might also be a viable alternative. For-profit institutions would obviously respond much better to a system of demand-side subsidies. In particular, the severe problems of supply response

that characterize nonprofit institutions would be avoided. Should we infer from the absence of for-profit institutions that there are forms of market failure that make such institutions undesirable?

In substantial part, the fact that private universities are organized as nonprofit rather than for-profit firms appears to be a response to the same types of market failure we have already discussed -- that is, to the difficulties students have in financing their own education due to the inadequacy of private loans and the students' inability to diversify the risk of a large investment in specialized training. The nonprofit form permits private colleges and universities to attract donations, which the schools can then use to provide a private tuition subsidy to their students to compensate for these market failures. The source of the donations may be private individuals, a religious order, or supply-side grants from the government. Interestingly, among American colleges and universities the principal source of donations is the school's own graduates. Thus, in a sense, American private colleges and universities are operating an implicit loan program and insurance scheme for their students, under which students are charged less than cost to attend the university on the implicit understanding that, if they meet with success after graduation, they will offer the school a substantial repayment.^x

But if this is the only reason to have nonprofit institutions -- that is, to serve as a means for providing subsidies to students -- then, with appropriately generous demand-side subsidies from the government, it might be possible to have investor-owned universities as well or instead.

In fact, there is already a great deal of for-profit higher education in the United States. There have long been many proprietary trade schools in a wide variety of disciplines -- including law -- as well as a group of respectable proprietary junior colleges that offer more general education. More recently, a substantial number of for-profit firms have begun offering courses sufficient to constitute a full college education and to permit the firms to award their students accredited degrees. The two largest of these firms, the University of Phoenix and the DeVry Institute, have publicly traded stock and enroll, respectively, 60,000 and 48,000 students.^{xi} Proprietary institutions of this character are expanding rapidly in number and size, and there is speculation that they may ultimately account for a substantial share of the market for higher education in the U.S.

Nor is experience with proprietary higher education limited to the United States. For example, the Philippines -- which even thirty years ago was sending about the same fraction of its youth to college as were Belgium and France -- has long relied heavily upon for-profit colleges and universities. And, in recent years, Australia has also experimented with investor-financed universities.^{xii}

These experiences with proprietary institutions demonstrate that investor ownership is consistent with at least the most basic forms of higher education. But one might still wonder whether proprietary firms are also capable of providing the type of sophisticated general education offered by the better public and nonprofit institutions. In other service sectors, nonprofit firms evidently serve as consumer protection devices of a sort, removing the incentive to cut quality in subtle ways that many consumers might not be able to appreciate but that are nonetheless important.^{xiii} Perhaps higher education is such a service, and rational consumers should not trust the quality that would be provided to them by a for-profit firm. For-profit universities, one might fear, would be too inclined to pander to the immature tastes of young students, finding it more profitable to amuse them than to educate them.

It is hard to judge this argument *a priori*. Only long-run experience with proprietary firms will give the answer. But there are reasons to believe that the quality of education offered by proprietary firms might be quite comparable to that offered by many public and nonprofit institutions. Educational institutions develop strong reputations, and their true quality is likely to become widely known over time. It seems highly unlikely that any given school could long fool applicants about the quality of the education it offers. One reason for this is that accrediting organizations – such as the regional associations that operate throughout the U.S. – can offer an independent judgment of an institution's quality. More importantly, detailed comparisons can also be offered by commercial publications, as they are in the U.S. through a variety of prominent college guidebooks and through magazines (such as U.S. News and World Report, which is now famous for its ratings of American colleges and universities in a variety of different disciplines).

Health care, again, provides an instructive example. Until twenty-five years ago, nearly all large private hospitals in the United States were nonprofit -- although there had always been a number of small propriety hospitals and clinics that were doctor-owned. With the federal government's institution of a large program of demand-side subsidies in 1965, however, there quickly arose several extensive national chains of general hospitals that were owned by large business corporations with publicly-traded stock. These hospitals were initially quite controversial. But today the debate over the role of the proprietary hospitals has largely abated. They are well accepted, and there is little evidence that they provide a quality of care that is inferior to that offered by nonprofit hospitals. Indeed, the for-profit hospital chains have even begun operating some distinguished university-affiliated teaching hospitals. Since it is probably far more difficult for consumers to judge the quality of hospital care than of university education, this successful experience with proprietary hospitals suggests that problems of inadequate consumer information are unlikely to be a serious obstacle to the success of proprietary colleges and universities.

There is, however, another form of market failure that poses difficulties for privately organized colleges and universities in general, and for proprietary institutions in particular. The source of this difficulty is that higher education has an important characteristic that distinguishes it from most other goods and services: it is an “associative” good.

VII. EDUCATION AS AN ASSOCIATIVE GOOD

The essential characteristic of an associative good is that, when choosing which producer to patronize, a consumer is interested not just in the quality and price of the firm’s products, but also in the personal characteristics of the firm’s other customers. And so it is with education. When choosing a university, a student is interested not just -- or even primarily -- in the colleges’ faculty, curriculum, and facilities, but also in the intellectual aptitude, previous accomplishments, sociability, athletic prowess, wealth, and family connections of the colleges’ other students. The reason is obvious: these and other attributes of a student’s classmates have a strong influence on the quality of the student’s educational and social experience, the relationships (including marriage) that the student will have later in life, and the student’s personal and professional reputation. In short, the thing that a college or university is selling to its students is, in large part, its other students. Harvard College would be nowhere near so attractive to prospective applicants if Harvard’s faculty, curriculum, and facilities were to remain as they are, but its other students -- past, present, and future -- were entirely mediocre.

Stratification. Markets for associative goods do not function like markets for other goods and services. Most importantly, when nonprofit firms produce associative goods, there is a strong tendency for customers to become stratified across firms according to their personal characteristics. Those customers who are most desirable as fellow customers will tend to cluster at one firm, the next most desirable at another, and so on down.

The reason for this hierarchical stratification is that a customer’s own personal characteristics – what we might term the customer’s “quality” – constitute an important part of the price that the customer pays for an associative good. As between two customers who would like to patronize a given firm, and who are going to pay the same price for the firm’s services, the firm will always prefer to serve the customer who is of higher quality, since that will make the firm more attractive to its other customers. Consequently, producers of associative goods have an incentive to pick and choose among their customers, serving only those that are of highest quality.

This incentive is particularly strong for nonprofit firms, which are effectively constrained to charge their customers, on average, no more than the cost of

producing the service that the firm provides. The cost of providing a given quality of a service, such as education, to high-quality customers is generally no different than the cost of providing it to low-quality customers. Consequently, nonprofit firms will charge the same price regardless of the quality of their customers. But, given that the price charged by different firms is the same, customers would prefer to patronize the firm with the highest-quality customers. Since the customers are constrained from offering to pay a higher price, the only currency that customers can offer the firm is their own quality. The result is simple clustering: everyone wants to patronize the firm with the highest-quality customers, but only the highest-quality customers will be accepted as patrons, since they have the most to offer the firm. In effect, the high-quality customers are paying for the privilege of associating with each other, using their own quality as currency. And once the highest-quality customers cluster at a given firm in this way, the highest-quality customers among those that remain will cluster at a second firm, and so forth, until customers are sorted among firms in hierarchical fashion.^{xiv}

This kind of stratification is very evident in U.S. higher education. The highest-quality students tend to cluster at a few elite institutions, the next-highest stratum at another set of institutions, and so on down. Indeed, among the elite institutions, there tends to be fairly pronounced stratification even from school to school. If a random group of educated Americans were asked to rank the eight schools in the prestigious Ivy League (Harvard, Princeton, Yale, etc.) in terms of their desirability as places to seek an undergraduate education, there would undoubtedly be a high degree of correlation among the responses. In specialized graduate-level education, the stratification is even more striking, although the ranking of individual universities varies substantially from one discipline to another.^{xv}

Competition. An important consequence of stratification is to dampen considerably the degree of competition among educational institutions. Although there are more than 3000 colleges and universities in the United States, higher education is a far less competitive industry than such large numbers would normally suggest. Extremely few of those 3000 institutions are potential competitors for Harvard, Yale, or Stanford, in the sense that they could attract students away from the latter schools simply by lowering the tuition that they charge.

A critical factor in preventing competition is the difficulty of quickly changing the character of a university's student body. Since students are commonly admitted for a program of study lasting several years, it is possible to change the quality of at most a fraction of the student body in any one year. Moreover, much of the attraction of attending a given university depends on the qualities of the university's *former* students, who contribute strongly to the university's (and hence all future students') reputation. But a university can do

virtually nothing to change the character of the students that it has already graduated in past decades – or centuries. The consequence is a very high degree of inertia in the general character of any given university's student body, and in turn a high degree of inertia in the relative attractiveness of universities to prospective undergraduates. It is this inertia that is largely responsible for the striking fact that the relative ranking of undergraduate colleges in the United States has remained relatively constant for three centuries, despite enormous growth in the industry and the entry of thousands of new institutions. No other industry exhibits this kind of stability.

Teaching on a university faculty is also an associative good. Physicists and historians generally want to be at universities where their fellow physicists and historians are as strong as possible, and this associational aspect of teaching and research often weighs much more heavily in choosing where to work than does salary or other material forms of compensation. The result is that, in a competitive system with autonomous institutions, colleges and universities show a strong tendency to stratify, not just in terms of the quality of their students, but also in terms of the quality of their faculty. Moreover, since professors like to teach good students, and students like to have good teachers, there is also an associational link between students and faculty, which tends to lead strong faculty and strong students both to cluster at the same institutions. And since academic tenure makes it very difficult to change the quality of a university's faculty quickly, the associative character of university faculties further diminishes the effectiveness of competition among institutions of higher education.

The Nonprofit Form. I noted earlier that the tendency toward stratification among educational institutions is accentuated by the fact that they are nonprofit. A proprietary college would have a stronger incentive to use price, rather than students' own personal qualities, as the basis for rationing admissions, since it might increase its profits by admitting some low-quality students who were willing to pay very high tuition for the privilege of associating with other students who are of higher quality.

Nevertheless, the incentives for stratification would remain strong even in a regime of for-profit universities.^{xvi} The market power that such stratification would yield provides a special reason for organizing universities as nonprofit or governmental firms rather than as for-profit firms.

To see this, imagine that Harvard were suddenly to be converted to a for-profit firm, while keeping the character of its student body unchanged. Harvard would then have both the incentive and the ability to raise its tuition considerably, since it could do so with little effect on the demand for admission: many students would willingly pay a good deal more to Harvard rather than attend another college. In effect, Harvard is a monopolist: it has a (near) monopoly on the best

undergraduate students in America, and can thus offer to a prospective student a group of fellow students who are of higher quality than competing institutions can offer. If Harvard were for-profit, it could therefore charge a monopoly price. And this monopolistic exploitation would be all the more galling to Harvard's students because the thing for which they would be paying a monopoly price would be their own personal excellence!

Moreover, stratification gives market power not just to the institutions at the very top of the status hierarchy, but to institutions that are lower down as well. The reason is that, in such a status hierarchy, an institution faces little threat of competition from higher-ranking institutions. Given that the first best university has secured all the best students and is charging them a monopoly price, the second best university is free to charge its students -- which are the second tranche of students in terms of quality -- a price that is at least as high without worrying about losing students to the first best university, since the latter university would have no interest in admitting those students. Rather, the only constraint on the price that the second best university can charge is the price charged by the third best university. And, even if that university puts its price at cost, there is still room for the second best university to charge a price above cost, because it is offering its students a higher quality student body. And so it goes down the chain. In such a status hierarchy, all institutions have some market power.

By organizing universities as nonprofit institutions, their opportunity and incentive to engage in this kind of exploitation is largely eliminated. And this probably provides another reason why private universities, and particularly elite universities, are generally organized as nonprofit rather than as for-profit institutions.

Is Stratification Desirable? It is possible that, quite apart from giving universities monopoly power, a high degree of stratification of students among universities may be undesirable in itself.

Suppose, for example, that while all students find it advantageous to attend an undergraduate college where their classmates are strong students, the degree of this advantage is greater for relatively weak students than it is for strong students. That is, students whose educational background, motivation, or even aptitude is relatively weak may gain more by going to school with classmates who are already strong in these respects than would other strong students, since strong students will generally learn quickly in any environment. The aggregate effectiveness of education, then, will be maximized by some mixing, within individual universities, of students of varying strengths. But the dynamics of competition for an associative good like education, particularly when the providers are nonprofit, will tend to sort the students quite strictly according to their qualifications, and thus frustrate the optimal mixing. Of course, if it is the

other way – if strong students gain the most from being with other students who are strong – then the kind of sorting that results from unregulated competition is a good thing. As it is, we simply do not know what is the optimal degree of mixing, and thus whether we have too much hierarchical stratification in higher education.

Another potential problem with stratification is distributional. Even if a high degree of hierarchical stratification of students across universities maximizes the average efficiency of higher education, it may strongly reinforce social inequality. Students who are intellectually talented, highly motivated, and well organized and disciplined are likely to end up in the higher reaches of modern society no matter where they get their education. If all the students who are strongest in these respects cluster at the same colleges and universities, they will not only reinforce their prospects for success but also form an elite that is strongly socially connected. And, for better or for worse, the elite institutions that educate those students will come to play an ever more important role in society.

Because a high degree of stratification -- and hence any pathologies in efficiency or distribution that such stratification might bring -- are just as likely (indeed, rather more likely) to arise in a regime of private nonprofit universities as in a regime of proprietary universities, the associative character of higher education, and its consequent susceptibility to stratification, therefore provides a potential argument in favor of public rather than private universities. To be sure, excessive stratification could, in principle, take place among public universities just as among private ones. But the strong bias of democratic politics is toward uniformity in the provision of services, and this bias shows up clearly in the field of education. As a consequence, public universities -- and particularly nationally administered universities -- are generally quite resistant to the threat of excessive stratification, though the French system demonstrates that this is not universally true.

Is the threat of excessive stratification a strong reason to maintain a national system of centrally administered public universities? There are good reasons to answer no. Although, in the past, stratification of students across universities may have tended to occur heavily along lines of social class, in modern societies the pressures are increasingly toward stratification that is meritocratic, leading students to cluster largely in terms of their intellectual aptitude, interest, and ambition. One reason for this is that today's technologies tend to give the advantage to individuals who are competent over those who are socially connected. Another is that demand-side subsidies, in the form of public and private scholarships and guarantees for student loans, are greatly reducing the importance of wealth in gaining access to higher education. The resulting stratification is therefore likely to be relatively benign. To be sure, even purely meritocratic stratification may, as noted above, exhibit some inefficiency and some distributional unfairness. But that inefficiency and unfairness could hardly

be worse than the forms of inefficiency and unfairness that characterize the state-run university systems in Europe today.

VIII. RESEARCH

So far, we have been speaking of universities largely in terms of the instruction that they offer. But modern universities are also an important source of research. It remains to ask whether privatization and competition offer the same promise for research as they do for instruction.

Although, as argued above, instruction is largely a private good, research is largely a public good. It might therefore seem reasonable to expect that public institutions would produce a great deal more of it than would private institutions. But experience suggests the contrary. American universities lead the world in research productivity, and among American universities the private institutions are especially productive.

As with instruction, flexibility and competition seem to be key factors in promoting effective research. Given that research is a public good, public subsidies are of course important. But, as with instruction, those subsidies can be structured as demand-side subsidies that reward performance and encourage competition. In the U.S., most funding of research in the basic sciences is provided by the federal government through grants awarded on a competitive basis to individual researchers and research teams, with decisions about grantees being made, not by government bureaucrats, but by panels of scientists who are themselves active researchers. The larger the number of independent institutions and individual scientists competing for grants in such a system, the better it works. The smaller the number of institutions involved, and the more closely they are connected, the greater the probability that the award of research funds will be made, not on merit, but through favoritism and *lottizzazione*.

IX. POSSIBILITIES FOR REFORM

We are left to ask what practical steps might be taken to improve the efficiency and equity of a system of higher education such as Italy's. From all that has been said above, the ultimate goal of reform should be to create a system comprised of universities that are truly independent from each other, and thus free to innovate and compete.

Decentralize the Universities. The most direct means to this goal is to decentralize radically the existing state-run universities. Granting greater autonomy to individual universities within the national system, as is currently

being done in Italy, is a step in this direction, though a rather modest step. So long as a central national ministry has ultimate authority over most universities, competition between those universities is likely to be badly stifled. It would be far better to grant the existing universities real independence.

One approach would be to give regional or local governments complete authority over the existing universities within their jurisdiction, thus replacing a unified system of national universities with a decentralized system of multiple regional universities. Another approach -- not inconsistent with the first -- would be to reorganize some of the existing universities as separate nonprofit entities of a nongovernmental character, with ultimate authority within each university lodged in a largely independent council of directors that, though perhaps appointed in part by governments at various levels, could not be recalled by government or otherwise subjected to direct governmental authority. (This does *not* mean that a university's faculty should be given control of the institution, although faculty in individual departments -- such as physics, history, or law -- can appropriately be given an important role, as now, in deciding which individuals should be hired or promoted within their own department.)

Encourage Entry. Another critical step is to encourage the formation and growth of new colleges and universities. One means to this end is to remove the existing barriers to entry, such as obstacles to obtaining charters, to accreditation, to making investments, etc. Another means is to provide more active encouragement by permitting tax deductions for private grants to such institutions and granting the institutions exemption from taxes.

Establish Demand-Side Subsidies. Whatever the ownership structure of the universities -- and even while the current centralized national system of universities still exists -- there is much to be gained by shifting public funding from supply-side subsidies to demand-side subsidies, principally in the form of scholarships awarded to individual students to study at the college or university of their choice, whether public or private. For the sake of both efficiency and equity, these scholarships should also be adjusted according to the wealth of the individual student and his family, so that the subsidies go to the students who are least able to pay. To encourage students to make good use of the education that is being offered them, rather than simply hanging around universities for year after year without much serious effort at learning, all students and their families should also be required to pay at least part of the cost of their education out of their own pockets, either immediately or over time (i.e., by giving them a loan rather than a grant).

Promote Competition Within the EU. The continuing reduction in barriers to movement among the nations of the European Union creates the potential for a much broader and more competitive market for higher education, just as it does for other goods and services. To realize this potential, students and faculty who

are dissatisfied with the opportunities offered by their home country's universities must be free to turn to a university in another country, and universities in each country must be free to attract students and faculty from across the country's borders. This means that students should be free to take their scholarships and loans to universities in other countries. It also means that universities should be free to charge foreign students, like domestic students, whatever prices they wish (so that they have some incentive to attract those students), and to pay both domestic and foreign faculty any salaries they wish. To permit competition to work, the EU should avoid substantive regulation of universities, such as setting curricular or other standards, and also should not operate universities of its own (which would simply involve socializing the industry at an even higher level).

Eliminate Unnecessary Regulation. More generally, both at the national and the EU level, regulation of the content, organization, and financing of higher education should generally be avoided. The temptation to standardize education seems difficult to resist. But it is hard to make a principled case for imposing standardization on the form and content of higher education, and experience in the U.S. suggests that students' needs and interests are diverse and changing, and that the effective means for meeting those needs and interests are similarly diverse and changing. As a consequence, bureaucratic standard-setting is far more likely to stifle quality than to promote it. Where common standards are truly useful for coordination or for communicating quality, those standards are likely to evolve quite satisfactorily without government assistance.^{xvii}

X. CONCLUSION

If European economies are to remain productive with today's rapidly evolving technologies, and if European citizens are to participate in and enjoy to the full our astonishing age of intellectual discovery, European universities must be seriously reformed. Simply pouring money into the existing systems will not be adequate. Fundamental restructuring, with an emphasis on competition, seems the only possible path.

ⁱ The World Almanac and Book of Facts 67, 666-668 (1999).

ⁱⁱ UNESCO STATISTICAL YEARBOOK 3-388 to 3-414 (Table 3.14) (1996).

ⁱⁱⁱ WORLD BANK, WORLD DEVELOPMENT REPORT 1997: THE STATE IN A CHANGING WORLD 226-7 (1997); see also the figures for postsecondary educational attainment reported by country in STATISTICAL ABSTRACT OF THE WORLD (3d ed., 1997).

^{iv}National Center for Education Statistics, *Education in States and Nations: Indicators Comparing U.S. States with Other Industrialized Countries in 1991*, Indicators 30, 31, 32. (July 1996), online at <http://nces.ed.gov/pubs/esn> .

^vSee *Education at a Glance*, OECD Education Indicators 1998 Tables B1.1 to B1.2 (1998), online at <http://www.oecd.org/els/edu/eag98>.

^{vi}For a general scheme of redistribution to society's youth that would give young adults funds that could be used not just for education but for any other form of investment the recipient chooses, see Bruce Ackerman and Anne Alstott, *THE STAKEHOLDER SOCIETY* (Yale University Press, 1999).

^{vii}See Henry Hansmann, *The Changing Roles of Public, Private, and Nonprofit Enterprise in Education, Health Care, and Other Human Services*, in Victor R. Fuchs, ed., *INDIVIDUAL AND SOCIAL RESPONSIBILITY: CHILD CARE, EDUCATION, MEDICAL CARE, AND LONG-TERM CARE IN AMERICA* 245, 256 (University of Chicago Press, 1996).

^{viii}American Hospital Association, *HOSPITAL STATISTICS*.

^{ix}National Center for Education Statistics [details].

^xHansmann, Henry, *THE OWNERSHIP OF ENTERPRISE* 232-3 (The Belknap Press of Harvard University Press, 1996).

^{xi}Tyler Cowen and Sam Pappenfuss, *The Economics of For-Profit Higher Education* (Department of Economics, George Mason University, 1999).

^{xii}See A. Franke, *Private Universities in Australia*, *MINERVA* (Autumn 1991).

^{xiii}See Henry Hansmann, *THE OWNERSHIP OF ENTERPRISE* Ch. 12 (The Belknap Press of Harvard University Press, 1996); Henry Hansmann, *Economic Theories of Nonprofit Organization*, in Walter Powell, ed., *THE NONPROFIT SECTOR* (Yale University Press, 1987).

^{xiv}For a more detailed analysis, and a more extensive discussion of associative goods in general and in the field of education in particular, see Henry Hansmann, *A Theory of Status Organizations*, 2 *JOURNAL OF LAW, ECONOMICS, AND ORGANIZATION* 119 (1986); Henry Hansmann, *THE OWNERSHIP OF ENTERPRISE* Ch. 10 (The Belknap Press of Harvard University Press, 1996).

^{xv}Note that stratification need not imply rigidity from the students' point of view. Indeed, the American educational system today provides substantial mobility and flexibility for students from one level to another, with the result that the students enrolled in the elite institutions at one level are not necessarily those who

advance to the elite institutions at the next level. One small example is provided by my own home institution, the Yale Law School. Yale has been ranked first among law schools in the U.S. for the past ten years by U.S. News & World Report, and admits to its basic program of study only 185 students each year. The natural consequence is that admission is highly competitive. Yet Yale's law students -- all of whom must have previously completed a four-year university education -- do not come from just a handful of elite undergraduate institutions. Rather, over the past five years, Yale has drawn its law students from 178 different colleges and universities (164 in the U.S., and 14 abroad).

^{xvi}Dennis Epple and Richard Romano, *Competition Between Private and Public Schools, Vouchers, and Peer-Group Effects*" 88 AMERICAN ECONOMIC REVIEW 33 (1998).

^{xvii}In this respect, it is encouraging to see that, in emulation of such U.S. publications as U.S. NEWS & WORLD REPORT, the German newsmagazine DER SPIEGEL has begun comparative ratings of Universities throughout Europe. *Uni-Test Europa*, DER SPIEGEL 95 (# 19, May 4, 1998).