The Federal Government seeks to achieve a multitude of objectives that concern the academic and scientific community. Setting aside the issue of whether the government should be regulating everything from birth control to rat control, and whether the regulations should be improved or clarified, a major question is: why piggyback the government regulations onto the support of scientific research? When a university or other institution makes a scientific advance, all citizens benefit, but no individual or institution benefits exclusively. Without continued federal support for research, we will all enjoy fewer solutions to our major problems in health and energy, as well as in the social and economic domains. Thus, if funds were cut off from the top universities for failure to comply with social legislation, society would be the big loser. Removal of research support as a punishment for alleged noncompliance with statutes that are at times not even marginally related to scientific objectives is an irrelevant and undeservedly harmful punishment. In short, the current system subverts one national objective, advancement of science and technology, in an effort to achieve other national objectives. (Author/SE)
GOVERNMENT ACTION IN UNIVERSITIES AND COLLEGES

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and

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Ever since the burgeoning of Federal expenditures for research beginning with the Second World War, American universities have become increasingly involved in government programs. At the start of that period, the government required from the universities little more than financial accountability. By the mid-1970's, the situation had changed drastically. As Joseph Califano put it in *A Presidential Nation*,

"Regardless of what anyone thought of the Great Society when Lyndon Johnson left government, it was a political, social, institutional, financial, and bureaucratic reality...The central government had become involved in American education at every level with billions of dollars and countless forms and regulations."^{2}

Indeed, over the last decade, the government has begun to require more and more from educational institutions, for example, conformity with a variety of public policies. In some cases, pieces of social legislation have been extended to cover institutions of higher education. For example, certain guidelines originally set forth regarding discriminatory hiring practices of construction companies in Philadelphia have now been extended by the Department of Health, Education and Welfare (HEW) to universities and all other institutions employing twenty-five or more people.

Another category of regulations includes those for which failure to comply on the part of a university can result in a loss of federal funds. The Family Educational Rights and Privacy Act of 1974 introduced by Senator James Buckley (and often referred to as the Buckley Amendment) is an example. This act denies federal funds to educational institutions unless they give parents and students over the age of 18 the right to inspect data files directly related to them. Here, and in other instances, the Federal government is behaving as if it were operating under a modern golden rule: He who has the gold has the rule!
After a brief discussion of some of the ways the government interacts with the university, the subset which involves a threat to federal funds flowing into the university will be discussed more fully. The funds are earmarked largely for scientific research. The problem with the current system is that receipt of funds for scientific research is made contingent on satisfactory compliance with statutes that are at times not even marginally related to scientific or educational objectives. Thus, removal of research support as a punishment for alleged noncompliance with social policies is an irrelevant punishment—a punishment which does not fit the crime. Further, the current system will punish persons who have committed no crime. There may be more sensible ways to ensure that colleges and universities conform to the new variety of public policies.

Government/University Interaction

This section describes four ways in which the Federal government interacts with the university: Judicial decisions, Executive Orders, Administrative rules and regulations, and Congressional legislation. Numerous examples within each classification are outlined, to give a flavor for the range of ways that educational institutions are affected by the government.

Judicial decisions

The judicial branch of the Federal government has played a role in protecting the educational rights of citizens, educational institutions, and both local and state governments. Supreme Court decisions not only set precedents, but they represent some of the important thinking on American education.

The case of David Roth, an assistant professor of political science at Wisconsin State University in the late sixties, provides an example. Roth held a position as a university professor on a one-year contract. As a professor at a state university, by law he could acquire tenure as a permanent employee only after four years of year-to-year employment. If he achieved tenure
he could not be discharged except for cause and only after certain procedures had been followed. While nontenured, however, he could be dismissed, as long as the university informed him by February first concerning employment for the next academic year. Also by law, no review or appeal was possible in such a case. Roth was informed that he would not be retained and subsequently sued the university on two counts. First, he argued that the true reason for his nonretention was that he had made certain critical remarks against the university, and thus his right to freedom of speech was violated. Second, he charged that no reason was given for his dismissal, nor had he been allowed a hearing, constituting an infringement of his due process rights.

Justice Potter Stewart, speaking for the majority, with three justices dissenting and one not participating, asserted that since no charge was made against Roth, there was no deprivation of procedural due process. Further, since Roth had not proven that the decision not to retain him was actually based on his critical remarks, there was no deprivation of his free speech rights. The dissenting judges, on the other hand, argued that Roth should have been told the reasons for his dismissal, and should have been given an opportunity to rebut these reasons. Not to do so, the dissenters argued, constituted a violation of the Fourteenth Amendment's due process clause.

At about the same time, a similar case dealt with a teacher, Robert Sindermann, who had been employed in the state college system of Texas for ten years at three different institutions. Here the Court ruled that Sindermann had the equivalent of tenure and therefore he was entitled to a hearing to question the grounds for his nonretention.

While constitutional decisions such as Roth & Sindermann by their terms apply to state or other public universities which are governed by the 14th Amendment, many of the Supreme Court decisions affect all colleges and universities.
In addition, the decisions of lower courts impact upon higher education. Consider the case of Boris S. Browzin, a tenured professor in the School of Engineering and Architecture at Catholic University, who was dismissed in 1971. His case provoked the U.S. Court of Appeals for the District of Columbia to declare that when a university dismisses a tenured professor because of a reduction in funds or the need for a change in curriculum, it must have flexibility, but that "an institution truly motivated only by financial considerations would not hesitate to place the tenured professor in another suitable position if one can be found, even if this means displacing a nontenured instructor."\(^4\)

Professor Browzin's troubles began in late 1969 when the School of Engineering and Architecture was faced with a severe budget reduction and began considering retrenchment. Some nontenured faculty were released, and a few who had tenure. Browzin was notified in November of 1969 that his courses would no longer be offered at the university and his appointment was to be terminated as of January, 1971 -- 15 months hence. Browzin sued, contending that his dismissal was a breach of contract. The university moved for dismissal of the case, and won. Browzin appealed to the higher court, and in spite of affirming the lower court's disposition of the case, this court appeared to be sensitive to the Professors' plight. In his 16-page opinion, Circuit Judge J. Skelly Wright made the point that the "financial exigency" excuse can become an easy way for universities to dismiss teachers who are merely controversial or unpopular. "The 'suitable position' requirement would stand as a partial check against such abuses. An institution truly motivated only by financial considerations would not hesitate to place the tenured professor in another suitable position if one can be found,..."
As long as they fall under the purview of the Executive branch and are not inconsistent with existing law, the President can issue Executive Orders. These Orders, many of which impact on higher education, are usually enforced by some department or administrative agency. For example, the Department of Labor has the responsibility for enforcing Executive Order 11246, as amended by Executive Order 11375, but it can delegate portions of that responsibility. And so, as regards higher education, the Office for Civil Rights (ORC) in the Department of Health, Education, and Welfare (HEW) has delegated responsibility for the enforcement of this particular Executive Order. The Order itself imposes equal employment opportunity requirements upon Federal contractors and upon construction contractors on projects receiving Federal assistance from HEW.

More specifically, Executive Order 11246, as amended, in part requires that a Government contractor who signs a contract in excess of $10,000 agree not to discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. Further, the contractor must agree to "take affirmative action to ensure that applicants are employed and that employees are treated during employment" without regard to these factors. If the contractor fails to comply, the contract may be cancelled, and the contractor may be declared ineligible for further Government contracts.

It is important to be aware that a Federal contractor's obligations apply to all employment by that contractor, not solely to employment associated with the receipt or use of Federal funds.
Administrative, rules, and regulations

Federal departments and agencies are empowered to issue rules, regulations, or orders of general applicability. Often they are authorized by a particular statute, and must, of course be consistent with that statute. In other cases, they are issued pursuant to an Executive order. In both cases, their purpose is to carry out the relevant statute or order, and they become effective after publication in the Federal Register.

By way of example, consider the regulations pertaining to employee testing, which were issued pursuant to Executive Order 11246. In 1971, the Department of Labor issued an order to deal with the increased usage of testing practices which resulted in discriminatory employee selection. An investigation had revealed that many Federal contractors had come to rely almost exclusively on tests as the basis for making the decision to hire, to promote, to transfer, or to retain, with the result that candidates were invariably selected or rejected on the basis of test scores. In many cases, minority candidates were frequently rejected, since they failed to attain score levels that had been established as minimum standards for qualification. Moreover, many contractors used tests as a basis for employment decisions without evidence that they were valid predictors of job performance.

As a consequence, the Department of Labor added a new part to the Code of Federal Regulations which forbid a contractor from using a test unless he could demonstrate that the test was valid, that is, that it had a significant relationship to job behavior. Failing to do so, the contractor could be held in noncompliance with the requirements of Executive Order 11246, as amended. The imposition of appropriate sanctions would then follow.
Occasionally administrative rules designed for industry extend into the realm of educational institutions. For example, under a 1971 rule, it is illegal for an employer to expose an employee to noise of more than 90 decibels for eight consecutive hours. The Occupational Safety and Health Administration inspects premises for violations, and violators can be fined up to $1,000. While this particular regulation has not caused special problems for educational institutions, other occupational safety and health regulations have. For example, recently the University of Illinois built a new walkway with a railing required by regulation. The regulations required a railing 42 inches high, however the Illinois railing was only 37 inches. According to a recent article in Change magazine, the university estimated that it would cost $24 million to bring this safety hazard into line, and to take care of other safety hazards such as the replacement of certain so-called "hazardous" toilet seats.

Congressional legislation

Through laws enacted by Congress, the Federal government has been involved in both the support and control of education. Congress has supported education by enactment of programs which lead to grants, and loans to, and contracts with, states, educational institutions, and individuals. At the same time, Congress exerts control over the use of that support largely in specifying the purpose for which they may be used, or specifying other conditions of use.

The Higher Education Facilities Act of 1963 provided grants and loans for the construction of academic facilities. It was essentially a "bricks and mortar" act, one that attempted to meet the desperate need for expanded facilities created by multiplying student enrollments. The Higher Education Act of 1965 provided for assistance for students through educational opportunity grants, subsidized loans, and work-study programs. Furthermore, it provided grants for library materials, and encouraged the strengthening of developing institutions and continuing education programs. The Higher Education Amendments of 1966 and 1968 sought to update and revise the previous legislation concerning higher education.
The 1966 Amendments included the requirement that Federal funds granted under the Higher Education Facilities Act of 1963 be used to ensure that facilities be accessible to and usable by handicapped persons, according to HEW standards. Other "conditions" were written into the Emergency Insured Student Loan Act, passed by Congress in 1969. This Act permitted incentive payments on insured student loans in hopes of guaranteeing—during economically difficult times—that students would have reasonable access to loans for financing their education. However, Congress would not extend any payments to lending institutions that discriminated against students' sex, color, creed, or national origin.

**General legislation**

One class of legislation that often presents special problems for the university is social legislation designed to be general in nature and then extended to cover institutions of higher education. The familiar Social Security, and recent pension reform legislation, are examples. Legislation in these areas applies to educational institutions simply because they employ large numbers of people.

Tax laws fall into the category of general legislation. Amendments to these laws affect the incentive and thus the likelihood that charitable contributions will be made to universities. For example, reforms of the tax laws in 1969 affected incentives (in a positive way) for gifts to charities. Prior to 1969, the maximum deduction for such gifts was equal to 30% of adjusted gross income. The current law allows deductions of up to 50% of adjusted gross income for gifts of this sort. A further amendment concerned the fate of gifts exceeding the ceiling. Previously, if gifts exceeded the deduction limit, the excess was lost forever, frequently forcing donors to make major gifts in installments over a number of years. The current law permits the excess over the 50% ceiling to be carried over for as many as five more years.
Legislation tied to Federal funds

A distinction can be made between legislation which is not tied to funds (no strings attached), and legislation which is. Included in the former category are requirements concerning employment discrimination under the Civil Rights Act of 1964. A violation might result in an order to pay damages or to employ someone. These requirements are generally applicable to all employers. On the other hand, there is a growing number of laws for which failure to comply can result in large scale withdrawal of funds or the decision not to allocate funds.

The late 1950's, when Russia's successful launching of Sputnik created a situation in American education that approached hysteria, saw the passage of the National Defense Education Act declaring an "education emergency." Through this Act, Congress made available to education nearly a billion dollars. It was to be spent over a four year period on programs important to "our defense." Title II of the Act provided long-term, low-interest loans to college students with up to 50 percent cancellation of loans to students who opted to teach in public elementary and secondary schools. However, to the aversion of many, the provision required the signing of a "loyalty oath" and a disclaimer affidavit ["I swear I have never belonged..."] by students who requested the loans. In this way, the loyalty oaths were directly tied to Federal funds, in that students who refused to sign would not receive loans. Many institutions refused to participate.

Almost as offensive to students was the later movement in Congress to deny Federal benefits to students participating in campus disorders. While the then-President Richard Nixon deplored student unrest, he was reticent to impose regulations.
In his 1970 message to Congress, he asserted two principles which he hoped would guide relations between the Federal government and the institutions of higher education:

First, that universities and colleges are places of excellence in which men are judged by achievement and merit in defined areas. Second, that violence or the threat of violence may never be permitted to influence the actions or judgments of the university community.

His reticence to impose regulations emerged later in this message.

...I have repeatedly resisted efforts to attach detailed requirements on such matters as student discipline to programs of higher education. In the first place, they won't work, and if they did work they would in that very process destroy what they nominally seek to preserve.

Later, however, explicit legislation was adopted which required that Federal benefits be cut off from institutions that failed to punish student unrest.

More recently, the "Education Amendments of 1972" was signed into law. Title IX of this Act forbids sex discrimination in all federally assisted education programs. The main provision of Title IX is patterned after Title IV of the Civil Rights Act of 1964 which prohibits discrimination on the basis of race, color, and national origin in all federally assisted programs. Although there are a few exceptions, the Act is important to all institutions of higher education receiving Federal financial assistance. As a condition of receiving this assistance, each institution must make all federally-assisted benefits and services available to people without discrimination on the basis of sex.

Legislation affecting the relations between a university and its students was passed in 1974, in the form of the Family Educational Rights and Privacy Act. At the eleventh hour, Senator James Buckley made it applicable to universities by the "Buckley Amendment." This is yet another example of legislation that is tied to Federal funds. This Amendment denies certain Federal funds (e.g. those administered by the Office of Education) to educational institutions unless they...
give students over 18 (or parents, if the student is under 18) the right to inspect data files directly related to them. Certain information is exempt. For example, confidentiality of letters of recommendation written prior to January 1, 1975, students' psychological and medical reports (although a student's doctor may see these), and parents' financial statements are preserved. More recent letters of recommendation are subject to inspection although a student can waive access to these letters. If an institution denies admission to a student simply because the student refuses to sign a waiver, it may lose its Federal funds.

As an aside, such respect for student privacy is scarcely part of our educational heritage. In the eighteenth century at Harvard College, expulsion of a student was a public affair. The entire college assembled, whereupon the President announced the crime leading to expulsion and delivered a solemn warning to all other students. A butler then brought in a bulletin board on which the names of all members of the College were posted in order of seniority, and cut out the expelled member's name.

The Buckley Amendment and Title IX have something important in common; receipt of Federal support is made contingent on compliance with both, although both are unrelated to the purpose for which that support was given. Receipt of Federal support is also contingent on compliance with other regulations, such as those pertaining to research on human or animal subjects, occupational safety and health. More of these contingencies are undoubtedly in the works: According to the May 31, 1976 Chronicle of Higher Education, "A U.S. Senator is pushing an amendment that would deny federal funds to any college or university that permits its students to obtain food stamps." (p. 2). All of these regulations derive their bite from the threat of loss of funds. These examples have led concerned faculty to ask whether the Government should tie social legislation to the receipt of Federal funds, an issue to which I turn later.
In sum, the number of Federal rules, regulations, laws, orders, and decisions that directly affect higher education is large and growing. Yet, much of this activity has resulted in substantial and needed Government support. In some cases a regulation is unrelated to support, and applies more or less generally; for example, the regulations pertaining to social security require that an institution contribute to the employee's social security benefits across the board, regardless of whether it receives any federal funds. In other cases, support is offered, but a "condition" is part and parcel; for example, students in the late 1950's could not receive Federal loans unless they signed loyalty oaths. Finally, in some cases, regulations are issued for which failure to comply carries a very great punishment, namely, the potential loss of all Federal support, for example, receipt of Federal funds is contingent on satisfactory compliance with affirmative action regulations designed to achieve equal opportunity.

The Piggyback

What is the Piggyback?

As we have seen, the Federal government frequently threatens to cut off funds if social legislation is disobeyed. In other words, certain rules and regulations have been piggybacked onto Federal funds for research. This situation is diagrammed in figure 1.

The Federal government supplies vast sums of money to universities, funds which are earmarked largely for scientific research. These funds are intended to advance science, which in turn will lead to the improved health and well-being of the beneficiaries of that scientific research.

The Government takes actions designed to accomplish other objectives. For example, affirmative action regulations have been imposed so that citizens are not discriminated against because of race, color, religion, sex, national origin or handicapped status. The Buckley Amendment protects the rights and privacy of students. Occupational Safety and Health regulations promote safe working conditions. It would indeed be difficult to dispute the appeal of the goals of these regulations.
GOVERNMENT ACTION

GOALS

FEDERAL FUNDS FOR RESEARCH, etc.

ADVANCEMENT OF SCIENCE

PIGGYBACK

AFFIRMATIVE ACTION

EQUAL OPPORTUNITY, EQUALITY

OCCUPATIONAL SAFETY AND HEALTH REGULATIONS

SAFE WORKING CONDITIONS

BUCKLEY AMENDMENT

RIGHTS OF STUDENTS

FIGURE 1: The Piggyback
The government makes receipt of its funds for scientific research contingent on satisfactory compliance with affirmative action regulations designed to achieve equal opportunity. Similarly, noncompliance with the Buckley Amendment and with Occupational Safety and Health regulations leads to federal threats to remove certain funds from institutions. In other words, the government has chosen to "piggyback" certain regulations onto scientific research. I will argue here that the current piggyback system attempts to accomplish the aforementioned social objectives in a way which is clearly inappropriate, often ineffective, and damaging to the goodwill and harmony both within the university and between the university and its outside relations.

Who benefits from scientific research?

Consider a few great scientific discoveries of the recent past.

1) The elimination of poliomyelitis

Before 1950, a person who contracted poliomyelitis could only hope to have his suffering eased or his breathing aided by an iron lung. Then, in 1954, Enders observed that viruses could be grown in vitro in monkey kidney cultures. His work was followed up and eventually led to the introduction of the Salk and Sabin polio vaccines. Within the last two decades, poliomyelitis has been virtually eliminated.

2) The electron microscope

Developed in the 1930's in the industrial laboratories of Germany, the electron microscope allows researchers in such fields as biology and medicine to examine the microstructure of materials, to see viruses, to look inside living cells, to examine the neurons in the brain. The progress that we have enjoyed in these fields would be unimaginable without the electron microscope.

3) The computer

Basic circuits in computers were not found by people who wanted to build computers; rather, they were discovered in the 1930's by physicists concerned
with the counting of nuclear particles. The modern computer has enabled
scientists to study highly complex events, events that occur far too rapidly
to be studied without the aid of a computer. In addition to its use in
science and industry, the computer now reaches into the everyday life of the
citizen.
4) Transistors

The inventors of transistors were scientists who were trained in and
contributed to the quantum theory of solids. This invention, too, reaches
into the everyday life of the citizen.
5) Cancer

While the "war on cancer" is far from over, current approaches to the
control of the disease are at least promising. One such approach is to
identify cancer-causing factors in the environment and eliminate them.
Indeed, for years, modern biochemists have been searching for certain chemicals,
called carcinogenic agents, that cause cancer when administered to experimental
animals. Yet, human beings are continually exposed to thousands of chemicals
which may or may not cause cancer. The cost and effort involved in adminis-
tering each such chemical to many experimental animals would be astronomical.
A clear need exists, then, for a rapid way to identify carcinogenic chemicals.

Work in the laboratory of Dr. Bruce Ames at Berkeley has filled the need.
These researchers discovered that by use of special strains of a certain bac-
terium, salmonella, hundreds of chemicals could be screened for cancer-causing
properties in less time than was formerly needed to test a single chemical.
This technique has already revealed that many chemicals formerly thought to
be innocuous (such as certain commonly used hair dyes) have cancer-causing
potential. Clearly, this work is a powerful tool for detecting bio-hazards,
and will contribute to our improved health and well-being.
These examples make it clear that when a person, an institution, or a university renders a scientific advance, all citizens benefit from that advance, but no one individual or institution benefits exclusively. Thus, if federal support were to be cut off from the top 5 or 10 or 100 universities for failure to comply with certain federal regulations, society would be the big loser. Removal of research support as a punishment for alleged noncompliance with statutes that are at times not even marginally related to scientific objectives is an irrelevant punishment—harmful not only to a particular investigator and institution, but also to the countless beneficiaries of that institution's research. In short, the current "piggyback" system subverts one national objective, advancement of science and technology, in an effort to achieve other national objectives.

The current piggyback will punish persons who have committed no crime. Thus, if the English Department refuses to hire women faculty members, theoretically a complaint could result in the removal of all funds for scientific research. The discriminatory act in the English Department would result, for example, in a physicist housed across the campus losing all federal grant funds. Yet, that physicist has committed no crime and might conceivably even be a person whose project employed no one but women. In other words, it is clearly unjust to penalize a particular scientific investigator for alleged inequities of his institution, over which he has no control, and which may bear no relation to his own work.

The sciences versus the humanities

The current piggyback system has an unpleasant side consequence; it contributes to poor relations between the scientists and humanists on campuses actively engaged in research.
At one time, the humanists were important. They connected us with the past. They were at the center of academia. The point has been made by Robert Nisbit in *The Degradation of the Academic Dogma*:

In the nineteenth century... legislation [was] required to crack the iron facades of the historic universities and colleges, thus permitting entry into the curricula of fields of study, many of them vital to human welfare.... And even after fields such as engineering, agricultural science, and the human-welfare disciplines... forced their way with governmental assistance, they were, despite their manifest utility to human health and welfare, placed at the very bottom of the academic totem pole. Not even medicine and law, the two oldest of the professions, received much better consideration. ... By comparison with the prestige carried by the metaphysician, the Shakespearian student, the historian of ancient Greece and Rome, that of the technologist—he for whom knowledge was, in Bacon's word, power—was miniscule.9

Yet, today the humanities are not at the top of the academic totem pole. The social and cultural role of the humanities is shrinking. It has been said that the humanists are demoralized.10 Many of them speak as if they belong "to a little known sect, disliked where known in the larger society, and divided within."11

This change has to be due, in part, to the Federal government. Federal support is granted not for education in general, but to further the specific purposes of particular Federal agencies and departments. The Federal government, thus, emphasizes programs that may make a contribution to the solution of problems or the advancement of human welfare. This view that the government should emphasize social contributions is expressed in a recent *Science* editorial which states, "The citizens of the United States deserve a greater economic return on their investment."12

During the academic year 1959-60, Harvard University's Faculty of Arts and Sciences received over eight and a half million dollars of Government support.13 Nearly $900,000 was earmarked for projects in the Chemistry department. To Physics went $842,000. Biology got $636,000. On the other hand, English,
Philosophy, and Literature received practically no Federal support at all. The same state of affairs obtains in most universities: almost all government support goes to scientists for research rather than to humanists.

By piggybacking regulations to the award of federal funds, the government divides the campus; scientists who receive federal grants are pitted against the humanists who do not but must still share exhorbitant costs of compliance. Adhering to the multiplying list of federally mandated programs has imposed astronomical administrative costs. In his annual report for 1974-75, Harvard University President Derek Bok estimated that many large universities are spending millions of dollars each year to administer federal regulations. These costs, which must come from the university's operating budget, often result in reductions in academic programs. Thus, in a sense, the humanist is paying a part of the cost of complying with regulations in order to preserve the support received by his fellow scientist. Resentment is not unexpected.

Ineffectiveness of the piggyback

It has been argued that the piggyback system has been ineffective in achieving its objectives. In the specific case of affirmative action, a recent analysis by economist Thomas Sowell in The Public Interest deals with what has and has not been accomplished in higher education. Sowell used two massive surveys of academics conducted by the American Council on Education in 1968-69 and 1972-73 to try to answer two questions: "How much discrimination existed before the implementation of affirmative action 'goals and timetables'?" and "How much good have these regulations done?"

According to Sowell, almost all of what has been achieved since 1970 had already been achieved by 1969, before affirmative action, and there has been little change since that time. Apparently the situation we enjoy today is more the result of over a decade of civil rights legislation, demonstrations,
and change in American public opinion than it is the result of affirmative action regulations.

The issue of how much affirmative action programs have accomplished has been hotly debated. To point out an opposing argument, namely, that a good deal has been accomplished, consider the arguments contained in a report released recently by Phyllis Keller, Equal Employment Officer for Harvard's Faculty of Arts and Sciences. Keller takes issue with the technique of measuring the success of affirmative action by looking at the percentages of women and minority group members among the total university and college faculty. By these measurements, progress looks unimpressive. For example, data published by the American Council on Education show that women were 19.1 per cent of academics in 1968-69 and 20.0 per cent in 1972-73. At Harvard, the proportion of women among the total teaching faculty moved from 10.8% in 1973-74 to 14.0% in 1975-76, according to Keller's report. Both examples indicate a "change in the right direction," but an impact that is far from dramatic.

The problem with these measurements of change, Keller argues, is that they do not take account of the fact that the overwhelming majority of faculty positions in any given year is fixed in place by either tenure or term contracts, and therefore is not subject to change. Affirmative action can only apply to the recruitment of new faculty and therefore to get a realistic view of the success of an affirmative action program, one must look at the number of positions that become available each year, and see "how women and minority group members fare in the hiring competition." Over the last two years at Harvard, 35% of newly hired faculty members at the tenured level has been women, while women have been recruited to nontenured positions at an average rate of 23.4%. This compares highly favorably with the approximate percentages in the pool of eligible Ph.D holders.
Whether one feels that affirmative action programs have or have not been successful, it is reasonable to ask why they have not been more successful. One possible reason is that the punishment—the removal of federal funds—is so severe that it will almost never be invoked. Universities know it is unlikely that this "atom bomb" will ever be dropped. It is no wonder that women and minorities who are protected by affirmative action feel frustrated by the state of affairs. It is not surprising to read in the Chronicle of Higher Education that: "In a stingingly critical review of efforts by the U.S. Office for Civil Rights to enforce anti-discrimination laws, the U.S. Commission on Civil Rights last week said the agency had 'repeatedly permitted civil-rights violations by colleges and universities to continue without imposing sanctions.'" It is not surprising to see that H.E.W. is being labeled "The Reluctant Dragon." Realizing the importance of scientific research and the gravity associated with its possible interruption, who wants to drop the atom bomb?

A related question is this: why redress a grievance with greater severity than necessary to right the wrong? If a person is found guilty of embezzling from a bank, it makes more sense and is certainly far more judicious to punish the person by sending him to jail than by sending all employees who work in the bank off to prison together. The latter penalty is far more severe than necessary to right the wrong.

The University and its relations

The battle is between government control and university autonomy. Because the government appropriates large sums of money for higher education, it will want to impose conditions on the use of the money. Indeed, there are occasions where regulation is justified. The Government has the right to say "you may
have certain funds for building construction if you use them to ensure that the facilities are usable by handicapped persons." The university has the right to accept the money with the strings attached or refuse to accept it.

But when the Government uses its spending power to prescribe educational policies, university people may well cry out. Presidents describe the Government's philosophy as "now that I have bought the button, I have a right to design the coat." (Kingman Brewster, Yale) Faculty energies will become involved, being diverted from teaching and research where they belong. And, the "outside world" may even get involved.

Take Harvard. Members of the University were particularly bitter about the Buckley Amendment, which was offered from the floor of the Senate and passed without much discussion among the Senators. So much confusion was created in the minds of concerned faculty members, that Dean Rosovsky invited the General Counsel of the University to address a regular meeting of the Faculty of Arts and Sciences on January 14, 1975, in order to answer questions on the matter. Faculty members were filled with questions such as these. Could a faculty member refuse to write a letter of recommendation unless a waiver had been signed by the student? Would the law require that an institution maintain a student's records until he died or until the institution went out of existence? Did a consent form have to be obtained for each letter, each time one was sent out? The Buckley Amendment had confused and angered sufficient members of the faculty and administration that a committee of faculty was organized, The University Government Relations Committee, to concern itself with the exponentially increasing Government invasion of the University.

In his 1974-75 Annual Report, Derek Bok also worries about increasing Government invasion. He discusses the role of Federal support for higher education
and the loss of independence that has resulted for colleges and universities. He points out that carrying out extensive regulations has cost the institutions enormous sums, and has drained faculty time. Both the sums and the faculty time could be going into academic programs. President Bok does not simply leave us with a long list of problems, he offers solutions. Among other things, he suggests that a sensible long-range policy for the Federal support of education should be developed, that advisory committees composed of knowledgeable representatives from universities work closely with government agencies, that there be more communication. Clearly, "he's among the leaders" on this issue.

Although President Bok's position is sensible and well-argued, not everyone agrees. It has been criticized outside the University and within. In the March 6, 1976 issue of the National Observer, editor James Meagher takes issue with Bok's assertion that unlike large businesses, colleges and universities cannot easily pass along the added costs of regulations by raising their prices. From the point of view of the President of General Motors, increases in the price of a Vega might do GM more harm than a tuition boost would do Harvard. At least some members of the business community apparently feel that the universities are crying about Government regulations that industry has been sweating about for years.

And industry has been sweating. One example should be sufficient to show this: in 1973, one public utility paid over 50 million dollars in extra wages in settlement of suits involving sex and race discrimination in employment practices.

Criticism from within can be found in the April 8, 1976 issue of the Harvard Crimson:

Yet Bok's vision is more disturbing for what it leaves out than for what it depicts. His report displays no concern for the very real problems that have occasioned government intervention, and no sense of the historical failure of private institutions to confront those
problems without external pressure. The implied message is clear: discrimination, invasion of students' privacy and abuse of human subjects may or may not go on at Harvard, but they are in any case less troublesome than the government's attempt to prevent them. Bok has vigorously attacked the symptoms and even the medicine, but he has ignored or belittled the disease.

Alternatives to the Piggyback

"Who wants to be against...a fair day's pay for a fair day's work... protection of human and animal subjects against research abuse, discrimination on grounds of race, sex,...or safe working conditions?" asks the President of a major American university. The answer is obvious--nobody. The problem, however, is how to accomplish these objectives less injuriously and more judiciously.

What follows are a few ideas which are not meant, by any means, to be complete proposals. The selection of a judicious alternative to the piggyback calls for a careful analysis of all the laws impinging upon a university, an examination of their sources, their sanctions, and their possible effects upon the university. It may turn out that no alternative works to achieve the social objectives; only then might it be justifiable to resort to the highly pervasive penalty of withdrawing federal research support from offending colleges or universities.

Abolition of regulations

A good case can be made for the abolition of certain regulations in that the goals in these special cases will be accomplished anyhow. For example, in the case of the Buckley Amendment, it has been argued that unlimited access by students to their files will have harmful effects on the educational process, including the advising and admissions procedures. Moreover, groups exist,
at least at Harvard University, which have sought and will continue to seek ways to protect students from the prejudicial use of their files. In other words, internal mechanisms are extant for protecting the rights and privacy of students. As a result of the Buckley Amendment, educational institutions have wasted unnecessary energy figuring out ways to "get around" the Amendment. Most have composed waiver forms, for example, which are made available to individual faculty members from whom a letter of recommendation has been requested. While an institution cannot require that a student waive his right of access to letters of recommendation as a condition of admission, many students are now being urged to sign waivers under the belief that the receiver of a letter of recommendation will take that letter more seriously. At the Stanford University School of Medicine, students are informed that "the attached letter of evaluation will not be considered" unless the student puts a signature below one of the following two statements:

1) If admitted to the Stanford University School of Medicine, the undersigned hereby waives any right to inspect the evaluation submitted by the person to whom this form is being given.

2) If admitted to the Stanford University School of Medicine, the undersigned hereby reserves the right after enrollment to inspect the evaluation submitted by the person to whom this form is being given.

The presence of two statements makes it appear as if a student has a choice in the matter. But, if advised that any letter of recommendation will only be considered seriously if statement 1) is chosen, does the student really have a choice?

Some educational institutions have "gotten around" the Buckley Amendment in a different way. The Harvard Crimson, May 14, 1976, quotes an unhappy undergraduate as saying "I asked to see my files last month and there wasn't a single thing in them that I hadn't written myself or already seen." The student didn't
know it but the Registrar's office had only shown him one of his files; the other remained off-limits to the student. This has become Harvard's policy. Students may see their own college applications and their transcripts. But recommendations from teachers and reports from guidance counselors are filed separately and are inaccessible to students.

In sum, at some institutions, a good deal of costly, time-consuming energy has gone into complying with the Buckley Amendment; at other institutions the costly effort has gone into a form of coping with the Amendment. The objective of the Amendment is the protection of students, and the internal mechanisms may have already been available to achieve that objective.

Supply Plans and Incentives

In a recent editorial in Science, the suggestion was made that the affirmative action objective would be enhanced by a program of early identification and training of talented women and members of minority groups. Sowell's article in The Public Interest leads to the same conclusion. Sowell claims that both women and blacks are underrepresented in academia as measured by their proportion in the general population, but they are overrepresented when measured as a percentage of the "qualified supply." He points out that "Women hold about 10 per cent of all Ph.D.'s but are more than 20 per cent of the academics. Blacks hold less than one per cent of the Ph.D.'s but are more than two per cent of the academics." The implication that we need to increase that "qualified supply" is clear.

Cognizant of the problems surrounding a low pool of eligible women and minority Ph.D. holders, the Carnegie Council on Policy Studies in Higher Education recently called for major changes in government and institutional policies designed to end discrimination. One of their recommendations dealt with the "supply" problem. A summary of the Council's recommendations states: "The supply aspects of the equality of opportunity effort are now generally of more importance than the demand aspects. ...there are other ways of incr. sing
Supply, such as better financial support for low-income college students and for graduate study, that should also be pursued. The council suggests that each affirmative-action plan include a 'supply plan' wherever the institution contributes to the supply of potential faculty members.  

Affirmative action objectives might also be better accomplished by a system of incentives, as was recently proposed in Science by P.H. Abelson who remarked "How much better change might have gone with the carrot instead of the stick!" Perhaps the Government could reward "good" universities with endowed chairs, or with funds for special programs, rather than punish "bad" universities. Incentive plans are more consistent with what we know about psychological aspects of reward and punishment. Punishment, by itself, appears only to temporarily inhibit behavior. Ideally, punishment--if applied--should be paired with reinforcement of some desired behavior to encourage the frequency of that behavior.

Alternative penalties

If it is deemed desirable to keep certain regulations as they are, the Government should consider alternative ways to enforce them, ways which do not conflict so drastically with the advancement of science. The Carnegie Council recently recommended that in cases of noncompliance, a series of graduated sanctions be developed to replace the single "atomic bomb" penalty of cancellation of all federal contracts. Moreover, it recommended that adequate grievance procedures be established within institutions for persons who feel their rights have been violated. The advantage of internal grievance procedures is that they will avoid overburdening the courts and federal agencies.

If it is discovered that a university has failed to comply with some regulation, a system of fines might be imposed. Fines are common in industry. For example, according to the New York Times, the Occupational Safety and Health Administration has issued a regulation making it illegal for an employer to expose
An employee to noise of more than 90 decibels for eight consecutive hours. Violators can be fined up to $1,000. In the last four years, the Government has cited 8,158 employers as illegally noisy, and has collected about $265,000 in fines.

Another solution in the event of noncompliance would be to provide for injunctions to be issued only after a full hearing to be sure that everyone's rights are respected and the government is acting responsibly. If the injunctions are ignored, graver penalties could be invoked.

What might these graver penalties be? A frightening penalty, but one being seen more and more often in industry, is individual accountability on the part of the chief executive officers. Some examples from the May 10, 1976 issue of Business Week indicate that officers of large companies are being ordered to personally pay large fines and/or go to jail.

1) The President of the multibillion-dollar food chain, Acme Markets Inc., was personally fined for failing to ensure that the company keep rats out of a Baltimore warehouse as required by law.

2) Lloyd A. Fry Roofing Co. was ordered to select one of its executives to serve a 30-day jail term after it was found that odors coming from one of the company's plants violated the city's air pollution standards. (A technicality ultimately resulted in a rescinding of this order).

3) A manager of one of the H.J. Heinz Co's plants received a suspended six-month sentence and probation after being cited by state food and drug officials for unsanitary conditions in his plant.

4) A manager of Armco's Southwestern area sales district had to pay a $5,000 fine and $15,000 in attorney's fees out of his own pocket when he pleaded no contest to a 1974 federal price-fixing charge.

These sort of incidents prompted one official to note that "many of the companies are thinking about hiring a vice-president in charge of going to jail."
Even if the proposed title for this vice-presidency is not serious, the point is. The Business Week article further states that over the short term the potential for personal liability will spread to other areas, mentioning specifically medical areas involved in laboratory testing. Could such a scheme spread to universities and colleges? It goes without saying that such measures are not the solutions most chief executive officers would suggest. But if all else fails, it might come to this.

Summary

The Federal government seeks to achieve a multitude of objectives that concern the academic and scientific community. It seeks to advance scientific research. It seeks the achievement of equal opportunity. It seeks to protect the rights of students, and to ensure that workers will have safe working conditions.

The Federal government makes receipt of its funds for scientific research contingent on satisfactory compliance with affirmative action regulations designed to achieve equal opportunity, with regulations related to occupational safety and health, and with the Buckley Amendment, which broadens students' access to their educational records. Failure to comply with these and other rules leads to federal threats to remove funds from institutions.

Setting aside the issue of whether the government should be regulating everything from birth control to rat control, and whether the regulations should be improved or clarified, a major question addressed here has been: Why piggyback the government regulations onto the support of scientific research? When a university or other institution makes a scientific advance, all citizens benefit, but no individual or institution benefits exclusively. We all benefited from the elimination of poliomyelitis, for example. Without continued Federal support for research, we all will enjoy fewer solutions to our major problems in health and energy, as well as in the social and economic domains. Thus, if
funds were cut off from the top universities for failure to comply with social legislation, society would be the big loser. Removal of research support as a punishment for alleged noncompliance with statutes that are at times not even marginally related to scientific objectives is an irrelevant and undeservedly harmful punishment—harmful not only to a particular investigator and institution, but also to the countless beneficiaries of that institution's research. In short, the current system subverts one national objective, advancement of science and technology, in an effort to achieve other national objectives.

The objectives of safe working conditions, rights of students, and equality appeal to us all. The problem is implementation. There may be many other ways to achieve these objectives that deserve at least a modicum of consideration.
Footnotes

1. Requests for reprints should be sent to Professor Elizabeth F. Loftus, Department of Psychology, University of Washington, Seattle, Washington 98195. Appreciation is expressed to the American Council on Education for support during the preparation of this paper, and to Dr. Robert Perloff, University of Pittsburgh, and Dr. J. Michael Syvanen, Harvard Medical School, for many useful discussions.


8. Here the relations are related to the purpose for which funds are given, namely, research. In 1966, public pressure forced the government to assume an active role in the protection of human subjects in scientific research. Unethical behavior on the part of a few scientists indicated that scientists needed outside policing. The most infamous example was the Tuskegee case, in which poor blacks with syphilis were left untreated— for the sake of science. The National Institutes of Health responded to the pressure with regulations establishing research review committees at all institutions receiving funds from them.


21. Minutes of the Meeting of the Faculty of Arts and Sciences, Harvard University, October 29, 1974, p. 6.


23. Sowell, see footnote #14.


26. Society, see footnote #24.

