Keep Mandatory Retirement for **Tenured Faculty**

Richard A. Epstein and Saunders MacLane

ritually all universities in the United States now adhere to a standard practice that requires their tenured faculty members to retire at age 70. That practice has been influenced by the Age Discrimination in Employment Act (ADEA), which has gone through many modifications since its initial passage in 1967. Before 1967 there was no limitation on the authority of universities, or indeed any other employer, to set mandatory retirement ages as low as they liked. The 1967 act prohibited discrimination against persons between 40 and 65 years of age, but did not touch discrimination over that age. The 1978 Amendments to the ADEA extended the protected age range from 65 to 70. With some minor grumbling, most universities raised their retirement ages (that were, with some exceptions, set at age 65) to age 70, but otherwise made no internal institutional changes. In 1986 a new set of amendments to the ADEA removed the upper limit of age 70 for all employees except tenured faculty and certain law enforcement fficers. At that time Congress asked the National Academy of Sciences (NAS) to conduct a study to determine whether universities should be able to

Richard A. Epstein is the James Parker Hall Distinguished Service Professor of Law at the University of Chicago. Saunders MacLane is the Max Mason Distinguished Service Professor, emeritus, in the Department of Mathematics at the University of Chicago.

preserve their traditional policies on mandatory retirement, or whether they should be governed by the general rules applicable to other private employers effective in 1994. That study is now in its final stages of internal review, but it is generally known that its report will not recommend the continuation of the current system, even if it is unclear at present what changes the NAS endorses or is prepared to accept.

Private universities, however, cannot wait for the outcome of the political process to determine their response to the prospect of uncapping the mandatory retirement age. The demands of long-term planning are excessive. Therefore, as the 1994 date draws ever closer, a number of prominent universities among them Harvard, Yale, and the University of Chicago—have prepared studies directed to the inevitable follow-on question: if mandatory retirement is by the boards as of 1994, what internal responses should universities make with respect to tenure, internal governance, pensions, medical insurance, and related issues? We fear that any effort to plan for the 1994 changeover will be treated as a tacit acknowledgment of both the inevitability and the desirability of uncapping retirement for tenured faculty. One of the authors (MacLane), a mathematician, has been retired for nine years; the other (Epstein), a lawyer, has 22 years to serve under the current system. We disagree about many things, but have come together in the conviction that this proposed statutory reform is as short-sighted and

ill-advised as it is probable. We stand as one in writing this plea to preserve (or, more accurately, to allow universities to contract to preserve) the current system of mandatory retirement for tenured faculty.

One familiar caveat is important at the outset of our assessment of mandatory retirement for tenured faculty. It is not possible to offer any precise quantitative estimate of the harms that we believe will ensue. There is no body of historical experience with uncapping because that system has been implemented only in a few instances in recent years, and then largely under the pressure of state or federal law. Our numerical projections are therefore at best crude estimations of future conduct, necessarily

The retirement policy for tenured faculty has served the university and the country well. It should not be reversed by legislative decree.

based upon uncertain behavioral assumptions. We have therefore chosen to use a very simple model, which we hope captures the central tendencies under the new system. Yet even if our numbers prove perfectly accurate, they capture at best only a fraction of the total change in the internal dynamics of collegial life, academic inquiry, and internal governance of the university. The ADEA changes, if implemented, will affect every aspect of university life. While these matters are only subject to theoretical examination, we can nonetheless state with confidence that, when these operational features of the statutory reform are brought to light, no social gains will result from the congressional (or state) reversal of any well-established university retirement policy. The only debate is over the size of the losses. Nor shall we address the political question whether those losses justify a fight in Congress over

American universities, both public and private, are one of the great resources of this nation. It is not in the nation's long-term interest to reduce their effectiveness in meeting the intellectual and social challenges of tomorrow. In reaching our conclusions, we shall not reconsider the wisdom of the ADEA outside the university, let alone the further reach of the antidiscrimination laws. We are content to examine the mandatory retirement rule for tenured faculty of universities in its own domain and on its own merits, without making any artificial presumption for or against its continued use. Within our setting, the retirement policy for tenured faculty has served the university and the country well. Hence, it should not be reversed by legislative decree.

Why Tenure?

Changes in the retirement policy inevitably raise questions about the tenure system. Faculty tenure until retirement is one of the distinctive features of American universities—whether public or private, large or small. It is adopted whether the emphasis within the university is on teaching or on research. It is awarded to faculty members regardless of the subject matter of their discipline. And in virtually all universities the permanence and privilege of tenure end by contract and convention summarily at some fixed age.

Our initial premise is that any practice, or constellation of practices, that is so widespread must have something that commends it. To make judgment, it is not strictly necessary to identify those features of the system of tenure with mandatory retirement that make it systematically advantageous to other arrangements universities might adopt. If the present system were inefficient, relative to some alternative, then some new system of university governance would be hit upon, even by chance. Its success in time would allow it to displace the present well-established pattern across the board. Mere durability may not explain why certain practices are beneficial to the institutions that adopt them. But by the same token, durability is a good test of which practices are sound. Here soundness is not measured against some ideal institutional arrangement, but against some alternative institutional arrangement that might be devised.

This basic point is of special relevance here because the system of tenure has often been attacked on the ground that it protects academic deadwood from the rigors that ordinary mortals have to face in the employment marketplace. Academics are said to be coddled and protected by a set of hoary privileges that even civil service employees may envy. The abolition of tenure, the argument cortinues, should be on the agenda of all thinkir administrators and scholars. Accordingly, the proposed legislative uncapping of mandatory retireme should be regarded as a blessing in disguise, as the needed spur that could force hidebound institutions long insulated from market pressures, to abandon policies that should have been discarded in their own right long ago.

Forcing people to be wise is always a dangerous

strategy of governance. In this context it has an extra degree of irony in that the one certain effect of uncapping mandatory retirement is to increase the length of service of tenured faculty members and to reduce the prospects for hiring and promotion that are available to young academics just starting their careers. It is both naive and irresponsible to suppose that any external change will, or should, induce a specific institutional response—eliminating tenure—that has not been argued for on independent grounds. We believe that tenure serves important functions within the framework of the university that account for its widespread durability. The disadvantages of the system are the price that is paid for its advantages. Uncapping mandatory retirement will lead to many anxious moments

One certain effect of uncapping mandatory retirement is to increase the length of service of tenured faculty members and to reduce the prospects for hiring and promotion that are available to young academics just starting their careers.

about the tenure system, but it will not, in our judgment, lead to its abolition or major modification. On the contrary, uncapping will magnify tenure's admitted disadvantages relative to its often unappreciated strengths.

In dealing with the question of organizational structure, it is important to recognize at the outset that universities are not simply replicas of firms that work in the profit sector. Businesses that sell widgets to consumers can usefully be organized on profit-making lines, because a firm rarely makes any net social contribution when it operates at an internal loss. With shareholders given the "residual" financial stake in the profits and losses of the firm, they have, in economic terms, the right incentive to manage the resources of the firm in ways that promote their effective use. Universities largely deal with intangibles—the creation and dissemination of knowledge. The goods that it produces - scholarship and students—are public goods that do not generate a financial return to their creators that is equal to the value that they provide to society at large. The internal organization of universities, both public and private, implicitly acknowledges their function and mission. The independence of the

faculty must be secured to advance the independence of its output. Academic freedom-of vital concern in intolerant times—is one manifestation of the basic problem, but the problem is far more pervasive. Outsiders will have confidence in the research and output of a faculty only if they believe in the independence of its authors; students will study with faculty only if they believe in the independence of their teachers; and private donors and government agencies will support the ongoing activities of the faculty only if they believe in the independence and openness of their inquiry.

Tenure is the well-established response to this wide range of pressures brought to bear on the university. It is not granted to all faculty members, because the risk is great that unproved junior faculty will never be productive. But it must be granted to some core group, whose independence will protect others, so that the governance of academic affairs does not fall exclusively within the hands of a small but powerful band of university trustees or academic administrators. In its constitutional sense tenure should be understood as a system of separation of powers within universities that is designed to foster the spirit of inquiry in universities.

This system of tenure does not come without heavy costs, for there is no lockstep correlation between the protection of tenure and the independence of inquiry that it can, and often does, generate. Individual faculty members may become far less productive after tenure than they were before it was granted. Within the academic community, however, there are many hidden checks against this form of abuse that should not be ignored. Universities have some measure of freedom over salary increases, the allocation of office and laboratory space, committee assignments, and honors and awards to give tenured faculty members an incentive to continue to produce. Moreover, the hope of obtaining offers at other universities, publishing contracts, outside grants, fellowships, lecture engagements, and intellectual influence and prestige keep many faculty members, particularly the best members, working at a high level of productivity, even with the protection that tenure affords them. The system is thus one of many checks and balances that operates in a more subtly complex level than its critics often acknowledge.

All these well-wrought institutional arrangements will be to little avail, however, if the overall quality of the product within universities is allowed, or made, to deteriorate because of external influences. Although there are surely exceptions to this rule, the lifeblood of the university—its creativity and innovation—depend on the constant input of young faculty members. And it is just that process of periodic rejuvenation that uncapping mandatory retirement threatens. We believe, as a general matter, that productivity and creativity decline with age. The only unresolved empirical questions concern the onset and rate of these declines. Of course, there are many faculty members at age 70 who are more creative and innovative than some faculty members at age 40, but there are few people in any discipline who do their best work after age 70. The demands of scholarship are arduous, and intellectual capital depreciates in the face of the general advance of scholarship and the creation of new fields. People find it harder to retool and keep up as they get older. The system of mandatory retirement is an effort to cycle faculty members through the system of university governance on the strength, not of individual knowledge, but of statistical generalization about the effects of age that has proved sound and stable over time. Over an individual lifetime, tenure is an arrangement from which faculty members derive extensive benefits throughout most of their career and for which they then pay a price later on in life.

Our judgment about the relationship between age and productivity is reflected in the ADEA itself. All versions of the statute, from the earliest to the present, contain a provision that allows firms to retire at age 65 any person who is "employed in a bona fide executive or high policy position" so long as his pension exceeds a fixed amount, now set at \$44,000. That provision rests upon the clear sense that businesses must be able to make changes at the top to keep competitively trim, and that retirement by age is an effective and sensible way in which to implement that policy. Universities do not have the legislative clout of American businesses. Moreover, given the primary commitment to teaching and research, only a part of faculty time is devoted to management activities, such as hiring, promotion, and committee work. There is only a partial resemblance between faculty members and corporate executives. Nonetheless, the same underlying judgment should apply to both classes of individuals. Where exceptional demands are placed on certain individuals, a fixed age line may be the best way to handle retirement.

Finally, it is important to realize what is at stake with mandatory retirement. After retirement, faculty are, of course, free to find employment elsewhere or to continue with their research and writing. Mandatory retirement is not a ban against remaining in the labor force. Lawrence Friedman has

written: "It is a monstrous wrong to send into job oblivion men and women whose only crime is a willingness to work and too many candles on their birthday cake." But no one in favor of the policy wishes to restrain the freedom of persons of any age to find new employment with a willing employer. Indeed, many of the great universities in the United States made large strides to greatness by hiring recently retired faculty from other universities, on term contracts without tenure. And other retired faculty members teach part time, write textbooks, and continue to work in their fields. Mandatory retirement is an effort to secure an orderly transition from age to youth in both scholarship and governance within a university. It is sheer hyperbole to equate mandatory retirement with a criminal punishment.

Both tenure and mandatory retirement make sense within the context of the university. The major societal function of the university is the discovery and dissemination of original ideas and new understandings. Research provides discovery, and teaching supplies the dissemination of the newest findings. The synergy between research and teaching explains why both take place at the same institutions. In view of the rapid intellectual and technical advances, the access to the new is generally best provided by younger faculty members, full of energy and not weighted down with older ideas and ongoing projects. Their efforts are-and should be-balanced by the wisdom that age may sometimes bring. To

Mandatory retirement is an effort to secure an orderly transition from age to youth in both scholarship and governance within a university. It is sheer hyperbole to equate mandatory retirement with a criminal punishment.

achieve this balance of novelty and wisdom, the long experience in universities has developed the present arrangement of mandatory retirement at a specified age to make way for the appointment of younger new faculty. It is this arrangement that statutory uncapping will reverse by public decree.

A Tale of Two Systems

To understand the advantages of the present system, it is useful to contrast today's retirement process with that which may take place if mandatory

retirement is uncapped by legislation. At present, there is no discretion in the operation of the system. The rule is automatic in its operation, and falls uniformly on all faculty members. It is easy to operate, and it reduces the likelihood of favoritism and intrigue, both familiar threats in university life. Once the faculty member retires, there is typically a pension available under a defined contribution plan that will provide support that typically is at a level of at least 75 percent of his closing salary, and often at levels in excess of his salary at retirement. As calibrated, the benefits are in most cases sufficient to allow faculty members to continue to maintain the standard of living that they enjoyed before retirement. In most cases faculty members no longer have the obligation to save for their future: their home mortgage is paid off, the children have been educated, and some separate savings have usually been put aside. Disposable income thus falls by less than the difference between salary and pension, while the expenses of living decline as well. The system thus crafted by universities fits well with the permanent income hypothesis favored by labor economists. While money may be earned in bunches, the consumption of wealth takes place smoothly over time so that faculty members are able to avoid the cycle of feast and famine. Within the universities there is, as far as we are aware, very little internal dissatisfaction with the operation of this system. And it is hard to conceive of any coalition of political forces within any university that could change the current state of affairs, although some older faculty members may benefit from uncapping. The dominant pressures for the change have all been generated outside universities.

Sticks and Carrots

The uncapping of mandatory retirement thus excludes the contractual option that virtually all universities have chosen. Even with uncapping it seems clear that many universities will wish to have senior faculty members retire to make room for younger faculty members with newer ideas. There are two ways that may be used alone or in combination for universities to achieve this goal: the stick, that forces people out against their will, and the carrot, which buys them out. Both create severe administrative problems.

The stick is an effort to force senior faculty members to leave by showing that the dismissal is no longer called for by some rule based on age, but is warranted on a "for cause" basis. The initial

temptation will be to set up some system of peer review that will examine the performance of senior faculty members to see that they continue to work at the levels expected of them. But that simple response is misplaced under the ADEA, for such a system of peer review is flatly in violation of the statute if it applies only to senior faculty members. The only possible choice therefore is to extend the system of peer review to cover all cases or to find some clever surrogate for age that will trigger the review system on a selective basis.

At this point there is a clear dilemma. A system of selective review is not likely to withstand the pressures of litigation when it becomes apparent that most of the reviews are directed toward senior faculty members. The disparate impact of the process will itself be regarded as powerful evidence of discrimination under the ADEA. If review is to take place, therefore, it must be on a comprehensive basis, where it is an open invitation to departmental turmoil. Many universities have introduced systems of peer review on a limited basis, largely to decide whether to grant individual "merit raises." Even here the process is costly, and the composition of the panels and the criteria of judgment have been of concern, even to faculty members who have outstanding academic records. The anxiety level will increase a thousandfold if the consequence of receiving a bad peer review is termination from the university.

Even with uncapping universities will wish to have senior faculty retire to make room for younger faculty with newer ideas. Whether universities force people out against their will or buy them out, severe administrative problems will result.

We are confident that if universal peer review takes hold, it will keep academic departments in a state of permanent administrative turmoil. Consider, for example, a department with 25 members, who are subject to a five-year review cycle. The result is five full-dress internal reviews each year, each of which must be done by a committee of three or more members. Virtually every faculty member will be subject to, or involved in, one or both of these reviews during every year. All the while, an overtaxed department will need to make ordinary tenure

reviews and entry and lateral appointments decisions. In doubtful cases departments will have to resort to outside reports, if only for self-protection, and the entire process could be subject to attack in court on the ground that the composition of the committee or the evaluation of the work was done by persons who, perhaps even unconsciously, took age into account in making their decision. The procedures, in short, will be time-consuming and divisive to operate.

Worse still, these procedures are unlikely to provide any legally defensible grounds under the

Buyouts will entail protracted, expensive bargaining negotiations between universities and faculty that will divert money from much needed programs of research and teaching in times of general budgetary austerity.

ADEA to dismiss faculty members for cause. The implicit institutional judgment behind a mandatory retirement system is that general information about aging, energy, and creativity support the decision to terminate tenure at age 65 (not 70, a standard that was imposed externally by the 1978 amendments to the ADEA). To rely on that general form of information is therefore to guarantee an open-andshut case of discrimination under the ADEA. The evaluations that will be required under the statute are those that look to the content of an individual's past work and make them the sole basis for evaluating future performance. Yet that work will rarely be of a quality low enough to warrant the extreme sanction of dismissal for cause. As bad as the system of tenure with uncapped retirements is under the ADEA, it seems preferable to a system of periodic peer review that might be introduced in its stead. Universities will not, and should not, abandon tenure to cope with this external threat to their internal self-governance.

The stick then will fail. But what of the carrot? Here, it has been proposed that universities anxious to terminate senior faculty members can use a strategy of buyouts. The logic for the buyout is simplicity itself. Let us assume for illustrative purposes that the faculty member has a salary of \$100,000 and the university perceives that his services are only worth \$30,000 per year. It will be better off if it pays a lump sum to the faculty member for a release from that year's contract. By

the same token the faculty member perceives that he is better off if he is freed of his university obligations and can receive at least \$40,000 per year. It follows that both sides can be made better off by their own lights if there is a buyout that pays more than \$40,000 a year but less than \$70,000 per year. The exact figure between those extremes is indeterminate.

The arithmetic gets a little more complicated (one can add a zero to all the numbers) when one considers multiyear contracts, but the underlying logic is essentially the same. There will be a lumpsum equivalent that will allow the university and the faculty member to rearrange their affairs so that both sides are better off than they were under the indefinite continuation of the tenure contract. But serious obstacles confront this strategy. One difficulty is that there is still no unique sum at which the buyout will take place. For the simple single-year example above, the bargaining range was \$30,000 (between \$40,000 the minimum the professor will accept, and \$70,000, the maximum the university will pay). Where multiyear contracts are at stake, the scope of the bargaining range will be greater, perhaps ten times as much. We can expect therefore to see protracted and expensive bargaining negotiations between universities and faculty that will divert money from much needed programs of research and teaching in times of general budgetary austerity.

In addition, universities face a genuine quandary in deciding who should receive buyout offers. Normally universities wish to reward their ablest faculty members. But those are the same individuals who will add the most to university life if they remain on the faculty. It follows that offers may well be extended to the weakest faculty members, with an unfortunate inversion of incentives. Yet to make standard, across-the-board offers may prove unwise if the strong faculty members accept them and leave, while the weaker faculty members stay on.

In addition to these strategic complications, the entire matter carries with it a genuine institutional unfairness because the senior faculty member will (whether he retires or not) continue to receive the full level of pension benefits under his pension plan, so that whether the buyout succeeds or fails, there is a clear instance of double-dipping for senior faculty members that was no part of the original understanding in tenure. Nor should one expect senior faculty members to sell out cheaply, given the size of the benefits at stake and the difficulty of mounting a for-cause review. It is, of course, possible that universities will play hardball with senior

faculty and threaten to fill the record with evidence of manifest incompetence when and if a faculty member chooses to file an individual suit. But the damage to amicable relations will be great, and the costs, in both human and material terms, will be high. There is a certain genuine institutional need for universal and, yes, arbitrary rules that becomes apparent only when the alternatives are more concretely spelled out.

The Pension Muddle

Defined Contribution and Defined Benefit Plans.

Since neither the carrot nor the stick works, the internal response to uncapping will have to come from some other source. One obvious target for reexamination is the pension programs presently used by universities. As noted, these programs in virtually all private universities are defined contribution as opposed to defined benefit plans. The distinction between the two forms of plan is a bit technical, but critical to understanding the financial complications that face universities. A defined contribution plan is one in which the university pays over to the faculty member's account a fixed sum of money each period, which the faculty member is free to invest as he or she sees fit, along with any supplemental contribution the faculty member cares to make. A defined benefit plan is one whereby the university commits itself to paying a faculty member a pension calculated in accordance with some predetermined formula that keys

To make room for younger faculty in response to uncapping, universities may reexamine the pension programs they currently offer.

the level of compensation, for example, to the number of years served and the average salary over the last three years of employment.

Two differences between these schemes are of special relevance. First, with defined benefit plans it is extraordinarily difficult to use formulas that allow the pension to be carried from job to job. The new employer does not wish to pick up the full extent of the pension liability accrued on the previous job, and the former employer does not wish compensation to be keyed to service performed elsewhere for wages subsequently determined by other employers. This problem does not arise with



"I have the result of your cost-benefit analysis. You should have retired four years ago."

defined contribution plans because the money invested in the plan becomes the employee's the moment it is paid over, even if it can be drawn down without tax penalty only after the worker reaches retirement age. Since the origins of the TIAA-CREF plans for university faculty members, virtually all university plans have been defined contribution plans, designed to allow maximum mobility of faculty.

Second, during the years before age 70, at which time pension obligations are fixed and payout under all pension plans must begin, the value of a defined benefit plan decreases the longer the employee remains in service. In contrast, the value of the defined contribution plan increases in value over that same period. The source of this difference is as follows. With a defined contribution plan, the amount that the faculty member builds up in the pension account will always increase so long as additional contributions are made into the fund. Before age 70, therefore, the number of years over which the faculty member will draw down on the fund will decrease as retirement is postponed, but the amounts available for distribution do not. Accordingly, the value of the pension fund is not impaired by remaining on the job, and the annual payouts at age 70 increase. With a defined benefit plan, however, each year of additional service before the age of 70 will reduce the amount of money that the employer needs to fund his pension obligation, for there will be fewer years over which the employer's pension obligation will run. To the university and the employer the effective wage under a defined benefit in economic terms is the nominal salary less the reduction in the value of the pension. Given that reduction in wages, there is a stronger incentive to retire earlier with defined benefit plans than with defined contribution plans.

A numerical example should make the relationship clear. Suppose that the university pays a salary of \$100,000. Suppose, too, that at the beginning of the year it costs \$250,000 to fully fund the defined benefit plan. If it costs only \$225,000 to fund that pension benefit at the end of the year, then the effective salary is only \$75,000, for the \$25,000 reduction in the value of the pension plan is regarded by both the university and the faculty member as tantamount to a wage reduction. Defined benefit plans thus have very different incentive effects from defined contribution plans. The buildup in defined contribution plans continues unabated, for employers, under the ADEA, are obligated to contribute the same percentage of salary to faculty members over the age of 70 as they do to faculty members under that age.

Making the Switch. The difference in pension buildup for the two types of plans is of little consequence so long as the rules on mandatory retirement are in place, for faculty members do not have the option to remain on the faculty indefinitely. But once that limitation is removed, universities will find that their defined contribution plans will require them in effect to fund the estates of their senior faculty who increase their financial reserves while drawing full salary. The effort to respond to this situation by altering the terms of pension plans is one of nightmarish difficulty and expense. There is clearly nothing that can be done to undo the defined contribution funds of senior faculty that

The effectiveness of the current pension system is severely compromised once mandatory retirement limitations are removed. But finding a workable substitute is a daunting task.

have already accumulated, and there is little sense to switch to a defined benefit plan in the last years of service, if this change is allowable under present law. In addition, a long-term changeover to defined benefit plans (which are now less favored in industry than was once the case) hurts the very portability of pensions that is one of the key benefits of the current system.

Changing horses in midstream is always tricky. Complex proposals have been made to limit the number of years that universities will contribute to defined contribution plans (say 35 years), but the proposal is too little, too late, and may well run afoul of the ADEA if the contributions for individual faculty members always cease at age 70. In addition, the proposal reduces the level of pension benefits that faculty members can accumulate by cutting off the university's contribution before age 70.

To offset that difficulty, it has been suggested (in the Yale report) that the university might obligate itself to make up any shortfall in faculty contributions should the value of an individual pension fund go down, say because of a decline in the stock market. But that proposal too is fraught with difficulties because of the changes in the riskallocation structure. With a defined contribution plan, faculty members select the investment vehicle of their choice and take the corresponding risk. Their financial protection rests in their ability to mix risky (stock) investments with conservative (bond or money market) investments in whatever proportions they see fit. But faculty investment strategies will change (just as deposits in S&Ls changed) if the university provides a guarantee. Faculty members should not be given the incentive to make risky investments because they know that the university will bail them out when things go bad. But to determine some hypothetical level, based upon a "standard" or "normal" investment pattern that triggers the university's obligation, is a problem of such complexity that it requires a course in advanced finance theory for ordinary faculty members to understand it. The effectiveness of the current pension system is severely compromised once the mandatory retirement limitations are removed. But finding a workable substitute is a daunting task, to which many inventive minds have not yet proved equal. It is yet another situation of the proposition that legislative action often has unintended consequences-consequences that in this instance are now well understood.

Who Will Stay On?

The arguments that we have made thus far are sufficient, we believe, to show that any change in the current rules on mandatory retirement would work to the long-term detriment of universities and the ends they serve. But the magnitude of these effects are in a practical sense every bit as important as their direction. If the changes wrought within

universities result in only one or two faculty members' staying on after 70, then perhaps this debate is little more than a tempest in a teapot. But if substantial numbers of faculty members choose to stay on, or to demand buyouts before they resign, then the situation will be more serious. To get some handle on this question, it is critical to know something about the size of the cohort, as a percentage of the overall faculty size, that will turn 70 in the years after 1994. Gauging the impact raises a special measure of complexity because the impact of uncapping will not be felt all at once, but will

Any change in the current rules on mandatory retirement would work to the long-term detriment of universities and the ends they serve. But the magnitude of these effects are in a practical sense every bit as important as their direction.

increase year by year until the system is in steady state, probably some eight to ten years after the changes are introduced. Nonetheless, we think that it is necessary and broadly possible to calculate the claim on university resources that will be attributable to this one piece of external government regulation. To measure the total impact of the ADEA it is necessary to make two separate calculations. The first, and most important, is the change that uncapping will make over the existing policy, with the 70-year cap on employment. The second is the change that will be made over the preexisting policy in the unregulated market when mandatory retirement was set at age 65.

To make these calculations it is necessary to know both the number of faculty members who will reach 70 (or 65) in any given year, and the percentage of that group who will choose to stay on for the next year. The aggregate data for all universities is not available to us. We shall therefore concentrate on the University of Chicago, where we have access to raw data, which have also been furnished to the NAS. From these data the distribution of tenured faculty members is roughly uniform over the ages from 40 to 70, with a few tenured faculty under age 40. The University's experience is that virtually none of these faculty members retired voluntarily before age 70 when the mandatory retirement age was raised from 65 to 70. These low retirement rates may have been influenced by the relatively light

teaching loads at major research universities that may not be duplicated elsewhere, or by the right to continue teaching in specialized areas that comes with seniority. So long as teaching and research are to the faculty member's liking, there is little reason to retire voluntarily. Any survey evidence about the average willingness of faculty to retire at all universities must be taken with caution, for it will be misleading if applied uncritically to research universities where the effects of uncapping are apt to be largest. Accordingly, with the change in policy, we assume that few voluntary retirements would take place, although there will be some reduction in faculty size due to either death or disability. We estimate that the shrinkage in this cohort is about 5 percent per year.

Estimations of the rate of retirement for faculty in the over-70 group are harder to make because there is no historical guidance. The following rough assumption is not perfect, but we believe that it captures the essentials of the situation. We assume that of the cohort of faculty members who reach the age of 70, 10 percent of that group would retire or die in each year. There would be thus 90 percent of the original group left after one year, 80 percent after two years, and none at age 80. On this assumption, the rate of retirement increases with each passing year—a plausible assumption—and the average faculty member therefore retires or dies at age 75.

The upshot of these assumptions is that 2.5 percent of the tenured faculty reaches age 70 each year, so that in steady state roughly 12.5 percent of the tenured faculty of the University of Chicago can be expected to be over 70, with about the same percentage in the 65 to 70 group. Using somewhat more conservative assumptions, Stephen Stigler in his report on mandatory retirement at the University concluded that if the system had been put into effect in 1990, then about 10 percent of the tenured faculty as of the year 2000 would be over 70, leading to "cither a more severe cut in the number of newly tenured positions (perhaps 20 percent), or perhaps into a 10 percent cut in faculty salaries coupled with a 10 percent reduction in newly tenured faculty." The differences between our two estimates are relatively small, and both contrast strongly with observed changes in retirement ages in the few state and private universities that have for various reasons already uncapped mandatory retirement. Thus, Albert Rees and Sharon P. Smith in their study, "Faculty Retirement in the Arts and Sciences." have concluded that on average in the institutions where

uncapping has taken place, it has resulted in only a .2 year increase in the average age of faculty retirement. Both their findings and our projections may be correct, for the incentives and behavior of faculty members may vary enormously across institutions. Indeed, one of the great dangers of regulation is that its heavy hand rides roughshod over vital variations in the class of regulated institutions. Most universities may not care about the issue one way or the other, but those for which it is a vital issue are left defenseless in the political arena.

The losses that do result can assume many forms. At the University of Chicago, the increased presence of faculty over 70 cannot but help to influence the percentage of untenured faculty members. At the University of Chicago, the percentage of untenured faculty has shrunk from 30 percent in 1974-75 (the first year for which we have accurate data) to about 20 percent today, doubtless in part because of the increased length of service for faculty members between 65 and 70 years old. In addition, on average, the salaries for professors in the 65- or 70-year-old group are about twice those of assistant professors. So long as there is a budget constraint, we should expect the number of nontenured faculty to shrink further, perhaps to about 15 percent once uncapping takes place, and the total size of the instructional faculty to shrink as well. The overall situations will differ across departments and universities, so that one has to be cautious about the magnitude of the effects. Still, as a first approximation, the legislative system of mandatory retirement then could require universities to spend on the order of 10 to 15 percent of instructional budgets on faculty over 70, and perhaps twice that amount on faculty over 65. The exact figures will vary from university to university, for in some the incentives to retire early may be far greater than in others. But for the major research universities at least, the impact of the change in rules should be substantial.

These numbers, moreover, represent only the *lower* bound on the resulting changes. The numbers make no allowance for the large costs associated with the difficult reorganization of pension programs; they do not take into account the transaction costs of possible buyouts; they do not take into account the added difficulties in covering curriculum, given the greater specialization of older faculty; they do not take into account the reduced ability to foster research and scholarship in new fields that younger scholars invent and develop; and they do not take into account the increased power of senior faculty on hiring and governance committees. Nor, iron-

ically, do these numbers take into account the benefits that mandatory retirement offers to faculty members who wish to retire at age 70 under the old system. Faculty salaries should be expected to drop across the board in consequence of uncapping, and universities, faced with severe budgetary pressures, will be forced to trim back their pension contributions. Faculty members who prefer the existing system will thus be rendered worse off under the new regime. The imposition of public regulation thus works an unintended redistribution of wealth within the class of ostensibly protected members. The full range of these indirect effects is hard to identify and even harder to measure, but taken as a whole, they surely explain why universities have hewed so uniformly to their mandatory retirement policies. But they are hard to communicate in a legislative setting and tend therefore to be all too easily ignored by lawmakers.

Exploitation and Stereotypes

Given the magnitude and uncertainty of the changes wrought by uncapping, it is fair to ask what is the affirmative case for making the change. At one level the question is one of pure interest group politics. With the aging of the American public, groups such as the American Association of Retired People are able to obtain through legislation the type of institutional reforms that they could not obtain

Faculty members have uniformly accepted mandatory retirement provisions because they knew that these contracts provided them with the advantages of greater opportunity for advancement when younger and ensured an orderly transition of authority within the university that would allow it to flourish over the long run.

from the universities themselves. But the changes here also involve an intellectual, or ideological, base to the dominant public position that rests on two separate concepts: exploitation and stereotypes.

The argument from exploitation is that there should be a social prohibition of private contracts that allow large institutions to take advantage of their individual employees. We acknowledge that

there may be some cases in which sharp practice or monopoly practices require some judicial or legislative response. But we find it hard to believe that all tenure contracts should be considered so unfair that they have to be modified by legislative action. Tenured faculty members are among the most sophisticated and knowledgeable individuals in our society. Do we want to say that every faculty member who has entered into this contract (including our professional economists) was misguided and exploited? The far more sensible explanation is that faculty members have uniformly accepted mandatory retirement provisions because they knew that these contracts provided them with the advantages of greater opportunity for advancement when vounger and ensured an orderly transition of authority within the university that would allow it to continue to flourish over the long run. The charge of exploitation really should be lodged the other way. The individuals who benefitted when young from the existing system now receive an enormous financial windfall when they command maximum wages and complete pension benefits in periods of declining productivity. There is exploitation of the university not by the university.

The argument about stereotypes strikes us as equally unconvincing. It is, of course, true that some generalizations about productivity and age are implicit in the standard retirement practices of all universities. But these judgments are made about all persons, and in general they are true. The universal and automatic nature of the termination rule is designed to avoid the hard feelings and bruised egos that are sure to arise (as they have arisen in times past) when some faculty members pass muster and others are passed over. We recognize and indeed insist that there are enormous variations in the talents and abilities of older faculty members. But mandatory retirement does not mean that these differences must be socially ignored. It only means that they will be taken into account in other settings, where there are no special ties and political intrigues to raise fears of favoritism and abuse. General age judgments are implicit in virtually every area of American life from the draft to Medicare. Age-based rules permeate the current law on pensions and taxes. Age is an objective piece of information that is easy to obtain and verify. It should not be regarded as an invidious stereotype when put to sensible use. Instead, it should be welcomed as the most painless way to effect transitions that will never be painless, no matter how conducted.

The Breakdown of Autonomy and Political Coordination

If the case for uncapping mandatory retirement is so weak, then why does it have so much current appeal. Answering this question takes us far beyond the particulars of this controversy to broader issues of political and social will. At one level the culprit is, as we have stated, the constant public suspicion that is directed toward the operation of simple and general rules. There is a grand illusion that perfect justice is only obtainable through case-by-case examinations, as though a hiring decision had to conform to the rigors of a criminal trial. In addition, there is a declining respect for the autonomy of private institutions, so that there is no longer today any presumption that government regulation, and the dislocations and expenditures that it entails. are a bad until they are shown to be a good. Instead, universities, like other private organizations, are regarded as disembodied entities, operating at public sufferance, that should be made to yield their prerogatives to the claims of flesh-and-blood individuals. No longer is it understood that university policies do not only disadvantage some people, but

If Congress adheres to its present course, it will commit us to a statutory regime that not only favors the past over the future, and the old over the young, but also reduces the effectiveness and vitality of universities.

help others as well, such as younger faculty or students. It is all too easy to insist on reform when it is believed that no one loses when novel duties are imposed upon established institutions.

Finally, there is a regrettable lack in the coordination of many separate programs for the public regulation of private institutions. The federal government has grown so vast that no one person, no one bureau, speaks for it in all contexts. The net effect is that one agency can impose one set of requirements in the name of the disabled; another in the name of animal rights; a third in the name of privacy, or, perhaps, open access; and still another in the name of mandatory retirement. In most cases the private budgetary implications are ignored because these measures are said to be concerned with rights and not with dollars. But compliance in all cases takes a substantial part of the scarce resources of the university and requires that they be devoted to purposes that are no part of their primary mission. That is what is now happening with mandatory retirement. If Congress adheres to its present course, then it will commit us to a statutory regime that not only favors the past over

the future, and the old over the young, but reduces the effectiveness and vitality of universities as well. There is still time to prevent this needless selfinflicted wound upon the intellectual capital of this nation.