Faculty Retirement Policies after the End of Mandatory Retirement

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As the average age of faculty members at colleges and universities in the United States continues to increase, retirement policies and programs in higher education are playing an increasingly important role in maintaining and enhancing the productivity of faculty members of all ages. This issue of Research Dialogue summarizes the results of a 2000 survey of higher education institutions regarding their programs and policies that affect faculty retirement. In addition to analyzing survey data regarding early retirement incentive arrangements and other programs designed to help faculty make the transition to retirement, the authors also review and discuss the experiences of the surveyed institutions following the elimination of mandatory retirement.
INTRODUCTION

When the elimination of mandatory retirement for tenured faculty members became effective in January 1994, some in the academic community feared that voluntary faculty retirements would slow. This would decrease opportunities for academic institutions to make new faculty appointments and simultaneously increase the institutions’ salary costs.

Recent studies of the experiences of Cornell, Duke, North Carolina State and the University of North Carolina since the end of mandatory retirement found that there has been little effect on the probability that faculty retire prior to age 70. However, these studies also found that a substantial fraction of faculty members who would have been constrained by the law to retire at age 70 now appear to be postponing their retirements until later ages. In addition, a recent comprehensive faculty retirement study undertaken at a randomly selected sample of 104 institutions nationwide found that postponement of retirement for faculty that otherwise would have been constrained to retire at age 70 has not been confined to major research universities.

While some institutions are concerned about how they should alter their retirement policies in response to the elimination of mandatory retirement, others are more concerned about the large fraction of their faculty nearing retirement ages. For example, the study of 104 institutions described above indicated that 14 percent of all faculty members at the institutions were between the ages of 60 and 69 in 1996, and that this percentage was likely to rise over the next 5 to 10 years. As retirements increase in the years ahead, institutions will have the opportunity to reconstitute their faculty. Institutions that anticipate replacing a large fraction of their faculty members may well worry about what the loss of so much institution-specific “human capital” in a relatively short time period will mean for their educational and research programs. Many institutions will search for ways to ameliorate these losses. Put simply, retirement of faculty provides both benefits and costs to academic institutions. Each institution needs to decide how it should best address the process.

A 1998 TIAA-CREF Research Dialogue summarized the results of several of the studies cited above, along with a number of other papers relating to mandatory retirement. However, at the time that this Research Dialogue was written, there was little systematic information available regarding how institutions were altering their retirement policies in response to the end of mandatory retirement and how academic institutions treated retired faculty members.

To fill these gaps in our knowledge, the Committee on Retirement of the American Association of University Professors (AAUP) conducted a Survey of Changes in Faculty Retirement Policies at a large national sample of colleges and universities during the spring and summer of 2000. The survey was designed to obtain information on several topics, including:

1. the characteristics of regular retirement programs for tenured faculty,
2. the existence of retirement incentive and phased retirement programs for tenured faculty members,
3. institutional policies relating to the treatment of retired faculty members, and
4. institutions’ perceptions of the impact of the end of mandatory retirement on their faculty members’ retirement behavior.

Financial support for the survey was provided by the TIAA-CREF Institute. The American Council on Education, the College and University Professional Association for Human Resources, and the National Association of College and University Business Officers cosponsored the survey.

The survey’s results have been summarized in several publications that were directed towards AAUP members and the trustees of academic institutions and have also been posted on the AAUP web site. The goal of this Research Dialogue is to disseminate the survey results to a wider audience, and to report some new findings on the characteristics of institutions that reported in the survey that a greater share of their senior faculty members are now postponing retirement until after age 70.
THE INSTITUTIONS AND THEIR REGULAR RETIREMENT PROGRAMS

The universe of institutions surveyed consisted of the 1,447 public and independent colleges and universities with 75 or more full-time faculty in the United States. The survey sought to obtain responses from 150 institutions in each of three institutional categories: doctoral-, masters-, and bachelors-granting colleges and universities. It also aimed for 75 responses from two-year colleges with faculty ranks, and 75 responses from two-year colleges without faculty ranks. Ultimately, 608 institutions responded to the survey.

An initial set of survey questions asked about the characteristics of the institutions’ regular faculty retirement plans. Defined contribution (“DC”) plans were by far the most prevalent type of retirement programs at private institutions. Under DC plans, the employer contributes a specified percentage of a faculty member’s salary each year into a fund, which is then invested, in some cases along with a required faculty member contribution, to provide benefits for the faculty member in retirement. The fund belongs to the faculty member, and as long as the return on assets in the fund is positive, it increases in value each year. As a result, DC pension plans do not provide faculty members with strong economic incentives that influence retirement decisions.

The plans at public institutions were more varied. Some institutions had DC plans, some had state-sponsored defined benefit plans, some offered faculty members a choice of the two options, and some offered combinations of the two types of plans. Defined benefit (“DB”) plans provide retired faculty members with an annual retirement benefit that usually depends upon their salary, years of service, and often, age at retirement. When the latter occurs, the adjustment in the annual pension benefit paid when a faculty member retires early may be, but is not necessarily, actuarially fair. DB plans can offer incentives for retiring both by the way the annual benefit adjustment for age is computed and because a “normal” retirement age can be specified in the plan after which there is no actuarial adjustment in the annual benefit received. (Once one reaches this age, the later one retires the fewer the number of years that the benefits will be paid out.) In addition, these plans also often specify maximum benefit percentages (as a share of final salary), which after some point eliminate much of the increase in annual benefits that comes from working an extra year.

In a 1999 article, one of us (see Ronald G. Ehrenberg, 1999) pointed out that it is easy to build retirement incentives into DB pension programs by offering individuals credit for additional years of service if they retire before a specified age. The University of California system did exactly that in several recent programs.

It is much more difficult and expensive, however, to build effective retirement incentives into a DC pension plan. One reason is that these typically take the form of additional contributions made by employers to individuals’ retirement accounts, and such additional contributions are subject to federal and state income taxes in the year the contributions are made. At the same time, it is well known that it is easier to create phased retirement programs under DC systems, because phased retirements can be structured in a way that does not reduce the retirement benefits of faculty members who take advantage of phased retirement. For example, an employer can continue to make contributions into a faculty member’s retirement account that are based upon the faculty member’s full-time salary, not the partial salary that he or she is receiving for part-time employment under the phased retirement agreement. As such, it should not be surprising that we later report that programs to encourage phased retirement are more prevalent at private institutions, which are more likely than public institutions to have defined contribution plans.

Among the institutions with DC retirement plans, the most typical institutional contribution rate is 10 percent of a faculty member’s salary. However, a substantial number of the institutions have contribution rates that range between 5 and 9 percent, and a smaller number contribute more than 10 percent. A number of the institutions with DC retirement plans have contribution rates that vary across faculty members and that depend upon a faculty member’s age, years of service, or salary. Faculty members are not required to make contributions to their retirement account at a number of the institutions that have DC retirement plans. The required faculty contribution rate varies widely across institu-
tions that do require faculty contributions, with the modal faculty contribution rate being 5 percent.

Among those institutions with DB retirement plans, there is considerable variation in the increment in the annual retirement benefit that a faculty member receives per year of service. The typical DB plan provides retiring faculty members with an annual retirement benefit that is a multiple of their years of service times a measure of their “final” average salaries. For example, if a faculty member had worked at the institution for 30 years and the multiple (or “benefit-accrual rate”) was 2 percent, the faculty member would receive a retirement benefit equal to 60 percent of his or her final average salary. Often the final average salary is specified to be the average of the faculty members’ last three or five, or highest three or five, years’ salary. Under some plans, if the faculty member retires prior to age 65, the annual retirement benefit is actuarially reduced. Similarly, if the faculty member chooses an option that guarantees a spouse or other survivors continuation of some fraction of the annual benefit when the faculty member dies, the annual benefit paid out is similarly reduced.

The annual retirement benefit per year of service offered by surveyed institutions’ DB plans varies between 1.0 and 2.5 percent of final average salary per year of service, with the most frequent multiple being 2.0 percent. For about one-third of the institutions that provided us with information on the nature of their DB system, the generosity of the system cannot be easily summarized in a single number. In many of these cases, the multiple varies with final average salary or with the date of hire. For example, the generosity of the DB retirement system in which State University of New York faculty members may choose to enroll differs across a number of “tiers.” The tier in which a faculty member is placed depends upon his or her hire date.

Almost half of the institutions with DB plans have limits on the maximum retirement benefit that a faculty member may receive. In about a third of the institutions with limits, the limit is based upon the number of years of service at the institution that faculty members can get credit for in the computation of their annual pension benefits. The modal limit is 40 years; however, institutions report limits that vary between 25 and 50 years, with their responses being concentrated in the 30- to 40-year range. In slightly over half of the institutions that report limits, the limit is specified as a cap on the percentage of the faculty member’s annual salary that may be received in the form of an annual pension benefit. In most of these cases, the limit falls in the 65 percent to 100 percent range.

In addition to providing a retirement benefit program, over 80 percent of the respondents to the survey indicate that their institution offers seminars, or other programs to encourage and/or assist their faculty in planning for retirement. Two-year colleges are less likely to provide such programs than their bachelors-granting, masters-granting and doctoral-granting counterparts.

### RETIREMENT INCENTIVE PROGRAMS

As the top panel of Table 1 indicates, slightly less than half of the respondents to the survey, 46.2 percent, reported that their institutions have had one or more financial incentive programs since 1995 that encouraged tenured faculty members to retire prior to age 70. These incentive programs often take the form of increments to annual retirement benefits or lump sum cash payments. The California programs described above are examples of programs that increased annual retirement benefits. Retirement incentive programs were most likely to be reported at institutions in the “public 2-year with faculty ranks” category; 67 percent of these institutions reported having such a program. Among the 4-year institutions, private institutions were more likely to have such programs than public institutions. Doctoral-granting institutions were more likely to have such programs than masters-granting institutions, which in turn were about as likely to have such programs as bachelors-granting institutions. Among the private doctoral institutions, 60 percent reported having had a retirement incentive program.

The bottom panel of Table 1 indicates that slightly more than one-third of the institutions (34.6 percent) reported that their financial incentive programs provided for negotiated buyouts (cash payments), or other special arrangements, on a college-by-college or case-by-case basis. Buyouts were again more prevalent among private than public institutions. Doctoral-granting institutions were more likely to have such programs
than masters-granting institutions, which in turn were more likely to have them than bachelors-granting institutions. At the doctoral institution level, 72 percent of the private institutions, but only 38 percent of the public institutions, reported such arrangements.

In slightly over half of the cases in which buyouts were made available, all tenured faculty members were automatically eligible to take advantage of the buyout if they met the institution’s age and/or years of service and/or age plus years of service requirement for eligibility. At the remaining institutions, approval by department chairs, deans and/or central administrators was required to ensure that a buyout made sense from the perspective of a faculty member’s department and college. Similarly, in slightly over half of the cases in which buyouts were available, they were offered on an ongoing basis, while in the remaining cases eligibility for the special buyout only took place if a faculty member made a commitment to retire within a specified time period (or “window”).

Among those institutions with more than one buyout plan since 1995, the plans prior to the current one tended to be window plans. A reasonable conjecture is that once a window plan is adopted and then expires, faculty believe that future window plans will be adopted and threaten to delay their retirements until a subsequent plan is adopted. This puts pressure on institutions to adopt a subsequent plan if they want to encourage their older faculty members to retire. Given this behavior, it may make sense for institutions to focus on the long-run implications of the end of mandatory retirement for their faculty demographics and adopt ongoing plans in the future.

Table 1: Use of Financial Retirement Incentives at Responding Institutions

<table>
<thead>
<tr>
<th>TYPE OF INCENTIVE</th>
<th>INSTITUTIONAL CATEGORY</th>
<th>PRIVATE</th>
<th>PUBLIC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage with Financial Incentive(s) for Early Retirement (before age 70) Since 1995</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I (Doctoral)</td>
<td>60% (25)</td>
<td>42% (97)</td>
<td>46% (122)</td>
<td></td>
</tr>
<tr>
<td>II A (Masters)</td>
<td>42% (69)</td>
<td>41% (114)</td>
<td>41% (183)</td>
<td></td>
</tr>
<tr>
<td>II B (Baccalaureate)</td>
<td>45% (115)</td>
<td>37% (38)</td>
<td>43% (153)</td>
<td></td>
</tr>
<tr>
<td>III (2 yr. w/Faculty Ranks)</td>
<td>0% (1)</td>
<td>67% (70)</td>
<td>66% (71)</td>
<td></td>
</tr>
<tr>
<td>IV (2 yr. w/o Faculty Ranks)</td>
<td>0% (4)</td>
<td>44% (73)</td>
<td>42% (77)</td>
<td></td>
</tr>
<tr>
<td>OVERALL</td>
<td>46% (214)</td>
<td>46% (392)</td>
<td>46.2% (606)</td>
<td></td>
</tr>
</tbody>
</table>

| Percentage with “Buyouts” Since 1995 |
| I (Doctoral)      | 72% (25)               | 38% (95) | 45% (120) |
| II A (Masters)    | 57% (68)               | 18% (113) | 33% (181) |
| II B (Baccalaureate) | 49% (113)             | 17% (36) | 41% (149) |
| III (2 yr. w/Faculty Ranks) | 0% (1)                | 32% (69) | 31% (70) |
| IV (2 yr. w/o Faculty Ranks) | 0% (4)                | 13% (71) | 12% (75) |
| OVERALL           | 53% (211)              | 24% (384) | 34.6% (595) |

Note: Two institutions did not respond to the question in the top panel; 13 institutions did not respond in the bottom panel.
The survey asked respondents about the size of cash payments that they offered to faculty members to encourage them to retire. Of those institutions offering lump sum payments, 55 percent offered less than 9 months salary, 28 percent offered 9 to 18 months salary, and only 16 percent offered payments equivalent to more than 18 months salary. In a relatively small number of cases, the magnitude of the payment declined with the age at which the faculty member retired. That is, in those plans larger payments were given to faculty who retired at younger ages. The relatively small proportion of plans in which the generosity of the buyout declines with the age of retirement may reflect the legal uncertainty associated with such plans until the passage of the Higher Education Act Amendments of 1998. This uncertainty had arisen because it was unclear before then whether having buyouts in which the generosity varied with a faculty member’s age at retirement would violate the Age Discrimination in Employment Act.

At about 90 institutions, the financial incentive to retire took the form of an increase in the faculty member’s annual retirement benefit, rather than a one-time cash payment. As noted above, under current tax laws, in most cases additional employer contributions to enhance DC pensions are treated as cash payments and therefore subject to federal income tax in the year that they are made. As a result, financial incentives in the form of increments in retirement benefits will be adopted primarily when the institution’s retirement plan is of the DB type. Often these increments take the form of crediting the faculty member with a specified number of months of additional service credit towards retirement for each year that he or she was actually employed at the institution. For example, in New York State, one recent retirement incentive program provided SUNY faculty members with one month’s additional service credit for each year they had been employed, up to a maximum of 36 months (three years) of additional service credit.

In a small number of cases (15 in total) the financial incentive for retirement took the form of provision of a terminal leave. From the perspective of faculty members, the advantage of a terminal leave over a cash payment is that employee benefits, such as health insurance and pension accruals, often continue while a faculty member is on terminal leave. For example, if the leave were a year long under a DB system, the faculty member would get credit for an additional year of service towards retirement. Under a DC system, the faculty member would receive an additional year’s contributions to his or her retirement account. In 60 percent of the cases when terminal leaves were present, they were nine months or less; the leave was more than 18 months at only one institution.

**PHASED RETIREMENT PROGRAMS**

Some faculty members find the prospect of abruptly ending their academic careers very distasteful, and this is likely to induce them to postpone retirement. Two ways that transitions into retirement can be made more gradual for faculty are to permit faculty to phase into retirement by working part-time for a specified number of years before they retire, or to permit them to teach part-time after they have formally retired.

As Table 2 indicates, only 27 percent of the institutions that responded to our survey have formal programs that permit tenured faculty members to gradually transition into retirement by working part-time for a number of years before they retire. In almost two-thirds of the cases where such programs exist, administrative approval is required for an individual to take advantage of the program, while in the remaining cases all faculty members who meet the eligibility criteria are automatically eligible to take advantage of the program.

Institutions with DC retirement systems are twice as likely as institutions with DB retirement systems to have such programs. As noted above, this finding was expected, because an individual’s annual benefit level under a DB pension system is typically based upon some average of his or her earnings during the individual’s years of highest earnings. Working part-time for a few years before retirement may substantially reduce the annual DB pension benefit. This is because salary increases received during the last few years of employment will typically not raise the faculty member’s part-time salary above his or her previous full-time salary. Hence, choosing to receive a part-time salary just before retirement may serve to lower the measure of average salary that is used in calculating the DB retirement benefit.
In contrast, annual pension benefits received under a DC system are based upon the lifetime of contributions made to the faculty member’s retirement account and the rate of return on these contributions over time. Contributions made near the end of an individual’s career will have a relatively small effect on the individual’s annual retirement benefit. Moreover, as we shall see shortly, institutions with DC pensions and phased retirement arrangements often continue to make payments to the individual’s retirement account based upon the individual’s full-time salary. Thus, phased retirement programs under DC retirement systems often result in no reduction in the faculty member’s annual retirement benefit relative to what the faculty member would have received if he or she had continued to work full-time for the same number of years.

About 75 percent of the institutions that have formal phased retirement programs have established minimum ages that faculty members must attain to be eligible to participate in the program. The most common minimum age for eligibility is 55. Similarly, three quarters of these programs also require that a faculty member must have been employed at the institution for a specified number of years. The majority of these require at least 10 years of service, with significant numbers of the programs also requiring 15 and 20 years of service.

Almost a quarter of the institutions that have such programs (35 institutions in the survey) also specify a maximum age that a faculty member may attain and still remain eligible to participate in the program. The most common ages specified here are 65 and 70. Placing a cap on the age at which a faculty member is eligible to participate in the phased retirement program provides an incentive for faculty members who are near that age to seriously think about whether they want to take advantage of the program and begin the process leading to retirement. Cornell University has a maximum age for eligibility of 70 in its phased retirement program for exactly this reason.

Faculty members who enroll in such plans typically must agree to relinquish their tenure at a specified point, and formally agree to retire within a specified number of years. Nineteen institutions, representing 16.5 percent of the institutions with such plans, allow tenured faculty members to remain in part-time status for as long as they want. Most other institutions with phased retirement programs specify a maximum number of years that individuals can remain in this part-time status before relinquishing tenure; typically this is specified to be 3 to 5 years.

Table 2: Percentage of Institutions in Each Category that Currently Have a Formal Phased Retirement Program

<table>
<thead>
<tr>
<th>Institutional Category</th>
<th>Private</th>
<th>Public</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Doctoral)</td>
<td>50% (26)</td>
<td>31% (97)</td>
<td>35% (123)</td>
</tr>
<tr>
<td>IIA (Masters)</td>
<td>33% (69)</td>
<td>23% (115)</td>
<td>29% (184)</td>
</tr>
<tr>
<td>IIB (Baccalaureate)</td>
<td>31% (114)</td>
<td>24% (38)</td>
<td>29% (152)</td>
</tr>
<tr>
<td>III (2 yr. w/Faculty Ranks)</td>
<td>0% (1)</td>
<td>14% (70)</td>
<td>14% (71)</td>
</tr>
<tr>
<td>IV (2 yr. w/o Faculty Ranks)</td>
<td>0% (4)</td>
<td>19% (73)</td>
<td>18% (77)</td>
</tr>
<tr>
<td>OVERALL</td>
<td>35% (214)</td>
<td>23% (393)</td>
<td>27% (607)</td>
</tr>
</tbody>
</table>

Note: One institution did not respond to this question.
HEALTH INSURANCE AND TREATMENT OF RETIRED FACULTY MEMBERS

Health insurance is very important to retirees. About 80 percent of the respondents indicated that their institution provided continued eligibility to retirees for group health insurance. However, only 58 percent of the institutions contributed to the cost of retirees’ health insurance. The failure of institutions to contribute to retiree health insurance costs may provide an incentive for faculty members to delay their retirements. Institutions concerned about retirement rates among older faculty members might consider whether the benefits of being able to hire new faculty at more rapid rates would offset the costs of providing retiree health insurance.

Some faculty members approaching ages when they might consider retirement worry about “being put out to pasture” and about retirement meaning the end of their professional careers. Thus, actions that colleges and universities take to assure their faculty members that they value retired faculty and do not view retirement as the end of the faculty members’ careers may influence their tenured faculty members’ willingness to retire. As such, the survey also asked the institutions questions about their treatment of retired faculty members.

Many faculty members contemplating retirement would like to be able to continue to teach on a part-time basis after they retire. Virtually all the institutions permit their retired faculty to teach on a part-time basis, although in about half of the cases, the institutions indicated that only some retired faculty were permitted to teach. In about 30 percent of the institutions, tenured faculty may formally negotiate continued part-time teaching as a condition for their retirement. For example, under a program that currently exists in the University of North Carolina system, faculty members can negotiate an arrangement in which they formally retire and start drawing retirement benefits from the state retirement system, while simultaneously being rehired to teach for a fixed number of years to teach part-time. About half of public and private doctoral institutions engage in such negotiations with their faculty members. Retired faculty members teaching part-time are paid similarly to other part-time faculty in about 73 percent of the institutions, while in 21 percent they are paid more. In a small fraction of cases, they are paid less than other part-time faculty.

In almost 85 percent of the institutions, faculty members who retire are eligible to have the title emeritus professor conferred upon them. In about half of these institutions it is fairly routine for all retiring tenured faculty to have the title conferred upon them, while in the remaining half the title is subject to the discretion of the university administration.

About 35 percent of the institutions allow their retired faculty to continue to advise or supervise students’ honors thesis or dissertations, and another 12 percent allow retirees to chair pertinent committees. These percentages are much higher at doctoral institutions.

The survey also obtained information about a set of benefits that many faculty members may feel are important to have if they want to continue their professional involvement once they have retired. Slightly less than half of institutions indicated that they provided office space to retirees, although the vast majority of doctoral institutions indicated that they did. Two-thirds of the institutions indicated that they provided retirees with access to institutional computer systems and parking, while about two-fifths indicated that they provided retirees with access to telephones. However, only 11 percent of all the institutions, including only slightly more than 20 percent of the doctoral institutions, provided their retired faculty with any funds for professional travel.

Access to laboratory space is of particular concern to active research scientists who are contemplating retirement. Only 11 percent of the institutions indicated that they assign lab space to retired professors who are scientists using the same criteria that are used for tenured faculty members (such as volume of sponsored research grants generated over a specified number of years). In the doctoral institutions, where scientists contemplating retirement are much more likely to be concerned about their access to laboratory space, this percentage is much higher, but it is still less than half. The vast majority of doctoral institutions allow their retired faculty members to continue to submit external research grants through the institutions; other types of colleges and universities are less likely to allow their retired faculty to do so.
THE END OF MANDATORY RETIREMENT

The federal law mandating the end of mandatory retirement was passed in 1987, even though it did not become effective for tenured faculty members at academic institutions until 1994. Only 27 percent of the institutions in the sample reported that mandatory retirement of tenured faculty ceased at their institution as late as 1994. Another 29 percent reported that it ceased between 1987 and 1994; these institutions acted to end mandatory retirement before they were required to by the change in the law. The remaining 44 percent of institutions in the sample ceased to have mandatory retirement for faculty prior to 1987. These are institutions in states in which state laws prohibited mandatory retirement at an earlier date, or institutions that had never had, or had decided at an earlier date, to eliminate mandatory retirement.

The survey asked each institution if the fraction of its tenured faculty members that continued in full-time employment after age 69 was greater in recent years than it was prior to the institution’s having eliminated mandatory retirement. As Table 3 indicates, only 22 percent of the 420 institutions that responded to this question indicated that it was. Most respondents do not believe that the abolition of mandatory retirement has caused more tenured faculty members to remain in their positions at their institution beyond age 69. However, the responses to this question varied widely across institutional types. Doctoral-granting institutions were more likely to report that a greater proportion of faculty were staying on beyond age 70 than were masters-granting institutions, which in turn were more likely to report this than bachelors-granting institutions. Within each of these categories, private institutions were more likely to report this than were public institutions. Hence, consistent with the earlier research, it is the doctoral institutions that need to worry the most about the end of mandatory retirement leading to a postponement in the ages at which some of their faculty members retire, which in turn will increase their faculty salary bills and slow down their rates of new faculty hiring.

To probe deeper into the characteristics of the institutions that reported a greater proportion of their faculty staying on beyond age 70, we conducted a multivariate regression analysis. In the analysis, we estimated the relationship between whether an institution reported a greater proportion of its faculty staying on beyond age 70 and several factors of interest. We included the following variables in the regression model: (1) whether the institution reported having a retirement incentive program; (2) whether it reported having a phased retirement program; (3) whether it contributed to faculty retirees’ health insurance; (4) the type of institution (doctoral, masters, bachelors, two-year); (5) its type of retirement program (DC, DB, choice of DC or DB, both); and (6) its endowment per full-time student. We estimated separate equations for the private and public institutions in our sample.

It is important to note that the relationships we estimated should not be interpreted as behavioral relationships, because potential simultaneity problems exist. For example, an increased proportion of faculty staying on beyond age 70 may cause an institution to create a phased retirement program. At the same time, the existence of a phased retirement program may influence the proportion of faculty who stay on beyond age 70. The relationship that we observe is therefore the net effect of these two causal relationships. Thus, readers should view the findings that follow as descriptive only. With this caveat in mind, we found the following:

<table>
<thead>
<tr>
<th>Institutional Category</th>
<th>Private</th>
<th>Public</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Doctoral)</td>
<td>53% (17)</td>
<td>42% (74)</td>
<td>44% (91)</td>
</tr>
<tr>
<td>IIA (Masters)</td>
<td>23% (48)</td>
<td>13% (82)</td>
<td>17% (130)</td>
</tr>
<tr>
<td>IIB (Baccalaureate)</td>
<td>15% (86)</td>
<td>6% (31)</td>
<td>13% (117)</td>
</tr>
<tr>
<td>III (2 yr. w/Faculty Ranks)</td>
<td>26% (42)</td>
<td>26% (42)</td>
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</tr>
<tr>
<td>IV (2 yr. w/o Faculty Ranks)</td>
<td>0% (2)</td>
<td>8% (38)</td>
<td>8% (40)</td>
</tr>
<tr>
<td>OVERALL</td>
<td>22% (153)</td>
<td>22% (267)</td>
<td>22% (420)</td>
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Note: 188 institutions did not respond to this question.
As the two-way tabulations presented in Table 3 and the articles previously cited suggest, in both the public and private sectors, the proportion of faculty staying on beyond age 70 was most likely to have increased at doctoral institutions.

At private institutions, the only other variable that appeared to be associated with a change in the proportion of faculty staying on beyond age 70 was the institution’s endowment per faculty member. Higher endowments per faculty member were correlated, other factors held constant, with an increased proportion of faculty staying on past age 70. This result is not surprising, because the academic institutions with higher endowments per student tend to be the most selective in terms of their student bodies, have the highest faculty salaries, have the lowest teaching loads and provide the most research support to faculty. In short, they are places where faculty members are very happy with their work environment.

For public institutions, those that made contributions to retired faculty members’ health insurance and/or have a phased retirement program, other variables held constant, were more likely to have answered that an increasing share of their faculty are now staying on beyond age 70. The signs of these relationships suggest that the direction of causation runs primarily from an increasing proportion of faculty staying on beyond age 70 to the establishment of a phased retirement program or to the institution’s contributing to retirees’ health insurance rather than vice versa.

One might also hypothesize that the generosity of an academic institution’s retirement plan (as measured either by the employer contribution rate in a DC plan, or the generosity of a DB plan’s benefit multiple per year of service) might influence whether faculty members increasingly stayed on beyond age 70 after mandatory retirement was abolished. However, when we added the employer contribution rate under the institution’s DC plan to the private institution equation and the generosity of the DB plan (for those public institutions for which we had such information) to the public institution equation, we found no evidence that either variable significantly influenced the increase in the proportion of faculty staying on beyond age 70.

CONCLUDING REMARKS

The findings we report above have implications for both institutions and their faculty members. In some states, rapidly growing college age cohorts will require academic institutions to hire large numbers of new faculty in the years ahead to fill positions created to meet the expanding demand for enrollments. Nationally, institutions will have to replace a large number of retiring faculty members in the years ahead. This suggests that most institutions’ concern in upcoming years will not be how to encourage their faculty members to retire. Rather, their concern will be how to continue to draw on the skills of faculty nearing retirement ages to provide stability to their institutions during a time of rapid change.

In the years ahead, it is likely that more and more institutions will consider developing programs to permit phased retirements, or to encourage retired faculty to teach part-time, as a way of meeting their teaching needs. Similarly, faculty groups at institutions may well want to contrast the regular retirement programs, retirement incentive programs, and programs relating to emeritus faculty that their institutions offer with the programs that we indicate are being offered at other institutions and use this information in discussion with their administrations.

To facilitate both administrative and faculty groups making use of the survey data, the AAUP web site (www.aaup.org) contains some additional tabulations. It also contains web addresses for sites that contain the details of institutions’ faculty retirement related programs for about 40 percent of the institutions that responded to the survey. Readers interested in information about the details of the programs at any of these institutions can directly download that information from the appropriate web sites. Finally, approximately 50 percent of the institutions that responded to the survey indicated that they were willing to have their responses shared with others and these institutions names are also listed on the AAUP web site. Information is also found there about whom at the AAUP to contact to obtain special tabulations for any subset of these institutions.
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ENDNOTES

2 Orley Ashenfelter and David Card (2001). Some studies undertaken prior to the abolition of mandatory retirement had concluded that the change in the law would likely affect only major research universities. See P. Brett Hammond and Harriet Morgan eds. (1991) and Albert Rees and Sharon P. Smith (1991).
4 The papers are Ronald G. Ehrenberg (2001a) and (2001b). The AAUP web site address is www.aaup.org
5 Ehrenberg (2000), appendix, provides a fuller discussion of this point.
6 John Pencavel (2001) found evidence of such behavior.
7 Despite the service credit, a faculty member undertaking phased retirement under a DB retirement system usually still suffers a reduction in pension benefits, because the higher salary he or she would have received as a full-time employee will not be included in the measure of average salary used to calculate the retirement benefit.
8 Jay L. Chronister, Roger G. Baldwin and Valerie M. Conley (1997) found that 46% of respondents to the 1993 National Study of Postsecondary Faculty indicated that they would be interested in teaching part-time at their former institutions in retirement.
9 Linda S. Ghent, Steven G. Allen and Robert L. Clark (2001) describe this plan and discuss its impact on faculty retirement decisions.

BIBLIOGRAPHY
