work was of poor quality. The study was criticized by some Delaware faculty members, but an outside reviewer, Edwin Mills, chairman of the department of political economy at Johns Hopkins University, told *Science* it was "basically a good, professional piece of work" which "should have been published." Campus opinion of the study is split; the author of the study believes his chief sin was to reach an anti-du Pont conclusion.

Another indication of the university's timidity can be found in a policy statement, approved by the trustees, warning that "members of the faculty are expected to refrain from partisan political activity, especially at the state level." University officials say the rule is meant to avoid conflicts of interest and the possibility of antagonizing legislators.

Despite the criticisms of the university—or perhaps because of them—there are signs that the university may be entering what one faculty member calls a period of "de-Stalinization." The traditionally apathetic student body has been swept by the same virus of discontent that is affecting other campuses. Students have formed an SDS chapter, have established competing left- and right-wing newspapers, and are demonstrating on issues ranging from Vietnam to campus regulations. Moreover, some campus rules have been eased, most notably a long-standing policy that political candidates could not speak on campus. And the faculty is pushing hard for ever greater freedom during the interregnum period that has followed Perkins' departure last summer. "We're in a race against time," explained one faculty member. "We hope to establish a lot of precedents while they're still looking for a new president."

In many communities the repressive atmosphere at the university would long ago have been investigated by the newspapers and given the thorough discussion it deserves. But such is not likely in Delaware, for the newspapers suffer from much the same malady as the university—they are dominated by the du Ponts. The two largest daily papers in the state are both owned by Christiana Securities Company, a du Pont family holding company, while the top executive of these papers was formerly a high-ranking public relations official for the Du Pont Company. As a result, the papers are perhaps even more timid and muzzled than the university. An analysis published in the *Columbia* [University] *Journalism Review* in 1964 asserts that a prominent du Pont who sits on the boards of both the newspapers and the university "ordered the papers to suppress a number of items involving the university." Editors and reporters interviewed by *Science* frankly acknowledge that the university is a "sacred cow" that is largely immune from probing editorial scrutiny.

Henry B. du Pont, president of Christiana Securities, told *Science* the owners want the paper to be "a constructive influence" and would regard it as "unfortunate if they were sold and got into the hands of some wild-eyed owner." But an outside observer can't help feeling that Delaware might actually benefit if the university and the newspapers were free to generate a few more wild ideas.—PHILIP M. BOFFEY

AAUP: Focus on Financial Crisis of Private Higher Education

Some university administrators and trustees view faculty members as a money-hungry group intent on raising salaries, regardless of the other monetary strains on their institutions. There may be some truth in this characterization, but it is also true that some professors are greatly concerned about the overall financial health of higher education. Such a concern could be termed enlightened self-interest, and correctly so; if universities have severe financial troubles, they will soon find it necessary to minimize pay raises, demand more work from the faculty, or cut down on professorial amenities.

Still, it is a little surprising to have Committee Z, the American Association of University Professors (AAUP) group specially charged with seeing that professors are increasingly well paid, divert its attention, in its annual report on faculty salaries, to the more general problem of "the massive financial crisis" which threatens the nation's private universities. (The report was prepared by Committee Z's chairman, William J. Baumol, a Princeton University economist, and by Peggy Heim, an economist on the AAUP staff. The report will be generally available when it is reprinted both in the *AAUP Bulletin* and as a separate document, in August.)

The data which have helped the AAUP group focus on the problems of private colleges and universities are those which indicate, once again, that academic salaries at private institutions are not rising as fast as those at public colleges and universities. "For several years now," the group commented, "compensation levels at the private institutions, which started out well ahead of their public counterparts, have been rising at a slower rate. . . . For the current academic year, for both liberal arts colleges and universities, and for every [teaching] rank, . . . the rate of increase in compensations and in salaries has been lower (and generally substantially lower) in private independent than in public institutions."

The tendency for private institutions to falter in raising salaries, the committee noted, is indicative of the more widespread financial problems which these institutions face. Such a crisis disturbs the committee because it threatens the dual system of control, private and governmental, which has characterized American higher education. "The critical advantage of the dual system of control in our higher education structure is that it has made for healthy competition, for significant diversity, for two separate sources of leadership in which each group has helped to indicate its responsibilities to the other." The report noted that public institutions have taken the lead in meeting the pressure of growing numbers of people wanting education, while private institutions "served as bastions of academic freedom in the period not so long ago when it was so seriously threatened, and it was they who took the first steps toward rectification of the extreme loss in real faculty compensation levels which occurred during World War II and the period right after it." An obvious worry on the part of the committee is that the private sector will reduce its willingness to raise faculty salaries and that public colleges will follow suit.

The report comments in some detail on the extent of higher-education's financial crisis, its causes, and possible remedies. "An air of crisis hangs over private institutions of higher learning," the report asserts; it is easy, it says, "to compile an impressive list of private institutions which can make ends meet only by constant recourse to emergency measures, by the cutting of corners, by beginning once again to pass the effective burden of financing on to their faculties (and their administrative staffs) in the form of lagging salary levels."

The reason for this financial crisis is that the cost of running universities is rapidly escalating. The AAUP group indicates that the discussion of these rising costs has been confused by those who attribute them primarily to inflation and to the increase in number of students. The report notes that, in the decade from 1956 to 1966, the expenditures *per student* rose from $1875 to $3102 (both figures are calculated in 1966 dollars). Thus, the committee pointed out, the costs per full-time student had risen "about 65 percent more rapidly than prices in the economy as a whole over the course of the decade!"

The costs of public education are also rising rapidly, but not as rapidly as those for private institutions. The report indicated that costs at public institutions rose "about 19 percent more than the general price level" for the decade ending in the academic year 1965–66. The committee said this lesser increase in cost per student at public institutions was presumably the result "of factors such as increased use of teaching assistants, faster growth in class sizes, and a slower rate of increase in outlays for organized research relative to enrollment."

The major cause of the rapidly increasing costs at private institutions, Committee Z makes clear, is the increasing burden imposed by faculty salaries, always a principal part of a university's budget. The report notes that the increase in cost per student at private institutions is "quite close to the rate of growth in remuneration level."

While the educational "industry" operates in the same expanding, inflationary economy in which other industries operate, the report notes, it does not operate in the same way. While the workers in many industries can cite a rapidly increasing productivity, aided by mechanical labor-saving devices, as a basis for demanding increases in wages, the "productivity" of the education industry tends to be static. In fact, with the general tendency to reduce faculty teaching loads, the number of students taught per professor tends to decline at many institutions. In the "better" situations, in terms of educational productivity, a relatively constant number of students is being taught by an increasingly well-paid professor. As the report indicates, "where education differs from a very substantial portion of economic activity is the role played by direct human effort in its provision."

A Pessimistic Prophecy

The committee's forecast is gloomy: "But with no real prospects as yet in sight for increases in productivity in the technology of higher education the consequences are inescapable. Costs of higher education will continue to outstrip at a compounded rate the costs that are typical of the economy as a whole." If expenses per student continue to multiply at current rates of increase, the committee states, the cost per student at private institutions would rise to "nearly 16 times its present level" within 40 years.

The committee suggests three possible ways to help meet the financial crisis but cautions that "the basic problem, embedded as it is in the technology of the educational process, offers no trick solutions, no easy remedies."

More Private Giving

The first possibility is to expand contributions from the private sector. The committee notes, however, that private contributions have increased "at an enormous pace" in the last few years but not nearly fast enough to keep up with the rate of cost increase. In fact, the committee cautions that private contributions "cannot be expanded at a rate sufficient to keep up with the needs of private institutions." The committee does argue, however, that private givers will have to be made aware of the constant need for increasing contributions, rather than approached only for periodic fund drives.

A second possible road to solvency, the committee suggests, is to obtain more governmental—especially federal—assistance for private universities. The committee does caution, however, that careful attention needs to be paid to the form in which this assistance is given, so as not to jeopardize the independence of action which has characterized private institutions. The committee thinks that scholarship help for students is a valuable form of governmental aid which does not intrude on the vital academic questions of what is taught and who is doing the teaching.

A third way to meet the problem of rising costs is to increase educational productivity. The committee cautions that "it is possible for our profession, as for any profession, to grow conservative in its methods, mistaking tradition to be synonymous with virtue." Committee Z argues that college faculties should make the decisions about new methods and devices but that it is imperative for them to take the initiative lest cost pressures "force others to take the initiative away from us."

Of course, another possible solution—one not proposed by the committee—is for professors to be satisfied with the salaries they now have. This is probably an unrealistic suggestion. As the committee points out: "In a world in which standards of living rise continuously, no occupation is willing to be singled out as the recipient of stationary levels of remuneration. . . . [college faculties] are by no means unique."

Although Committee Z expressed alarm about the future, it had encouraging words for professors about the present. The committee reported that, in 1967–68, faculty compensation levels had risen "at what may well be an unprecedented rate."

The committee reported that five institutions—the University of California, the University of Virginia, Rutgers State University, the New School for Social Research, and Case Institute of Technology—moved into "the select group with grades of A or higher in both the minimum and average scales" for faculty salaries. The committee gave special praise to Rutgers for moving up two grades, from a C rating to an A. The top institutions for average compensations for full-time faculty members this year are, in descending order: Harvard, Chicago, Caltech, Stanford, Claremont Graduate School, and M.I.T.

But despite current salary gains, the committee cautions that "even more astronomical costs" will afflict private institutions in the future, thus threatening the viability of the private sector and eventually the remuneration and living conditions of professors. The committee warns AAUP members not to hope blithely that the requisite funds for private education will automatically appear.—BRYCE NELSON