# Indirect Cost Surge Prompts New Worries

*As indirect costs of research keep rising, two reports from Stanford spell out concern about remaining competitive with lower cost universities*

SO-CALLED INDIRECT COSTS assessed by universities to pay for general support of sponsored research are a chronically contentious subject. Government auditors grouse that the charges are unreasonably high. On campus, recipients of grants and contracts complain that funds from indirect costs are siphoned off to subsidize other activities in the university. What is acknowledged on both sides now, however, is that indirect costs, also known as overhead, have been rising at a rate that is giving a new twist to an old problem.

University researchers are becoming increasingly concerned that, in an effort to control indirect costs, research agencies may look more closely at total direct and indirect costs in making research awards. That would favor institutions with lower indirect costs. Some research universities are therefore getting worried about remaining competitive.

A case in point is a brace of reports from Stanford University that offer an analysis of the rise in indirect costs and its implications. Such discussions are often clouded by the arcanum of cost accounting, but to an unusual degree Stanford puts its cards on the table.

The main report, *1986–1987 Decanal Indirect Cost Study*,* commissioned 2 years ago by Stanford's provost, notes that research faculty believes that increases in the indirect cost rate reduce the funds available for "direct research activities" and erode their ability to compete with other major research institutions.

"The resulting tension between the research faculty, who in general would like a lower indirect cost rate, and the University budget planners, who struggle to find sufficient income to meet the ever increasing demands of the University community, is the primary motivation for this study," says the report.

The recovery of indirect costs—which cover the prorated cost of such things as lab space, library resources, and administrative support—is important to Stanford. It accounts for almost 30% of the operating budget; only tuition is a larger source of those funds. Between 1973 and 1986 the indirect cost rate at Stanford increased from 46 to 69%. In 1987, the rate made one of its periodic jumps, rising from 69 to 73%. Stanford has reason to expect the upward pressure on the rate to persist. The university has ambitious plans for a new science and engineering campus that would sharply boost indirect costs—13% by the report's estimate.

A key finding of the report is that facilities' costs have been the chief factor driving up the indirect cost rate over the past decade. In the postsputnik era through the mid-1960s, research facilities were mainly paid for by the federal government and did not figure in the indirect cost rate. Rick Biedenweg, director of the decanal study, observes that those buildings are 30 years old and need to be extensively renovated or replaced. In the intervening years, the federal government has told the universities to put up research facilities and recover the costs of construction and maintenance by charging depreciation through indirect costs.

***Indirect costs now account for almost 30% of Stanford's operating budget.***

The report asserts that in the funding of research facilities, private universities are at a marked disadvantage to public universities. It estimates that total indirect cost rates are 20% lower for public institutions, with facilities accounting for about three-quarters of the gap. States characteristically pay for both construction of facilities and for operating budgets. There are some balancing factors. Many states require that a portion of indirect costs be returned to the state. And private institutions have greater incentive to do special studies to authenticate claims for indirect costs. But the report suggests that the differential is a competitive plus for public institutions.

During the 18-month course of the study, a faculty task force on indirect costs was also in operation. It acted in an advisory capacity to the decanal study and ultimately decided to issue its own report. The task force described its views as having achieved a "convergence" with the decanal committee's, but its report reflects more clearly a faculty point of view.

The task force predicted that the indirect cost recovery rate will continue to increase indefinitely unless the process by which administrative decisions are made is changed. "The reason is simple: nothing now checks the enthusiasm of individual groups of faculty for new facilities and equipment for their own use, and of administrative and staff units for staff expansion and new programmatic initiatives. Yet all these increase direct costs."

Economics professor Roger Noll, who was a member of the task force, says this opens the prospect of two things happening. First, "the government will crack down on costs." Second, universities with lower indirect costs will begin to compete by making special deals to recruit Stanford faculty with large grants.

[Recently, free-electron laser researcher John M. J. Madey moved with his team and grants to Duke University (*Science*, 8 April, p. 139). Indirect cost considerations were mentioned as part of the rationale for moving, although they do not appear to have been a decisive factor.]

In respect to researchers with big programs, "There's a lot of concern that we're making ourselves vulnerable to two categories," says Noll. Universities "willing to make deals," and "state universities using different accounting practices" that give them an advantage.

A point that Noll does not feel was made strongly enough in the task force report bears on what he calls the "excluded middle"—faculty running research programs with annual costs ranging from $200,000 to $2 million or so. He says an institution like Stanford could be "left with SLAC [Stanford Linear Accelerator] on one hand, and Humanities on the other. Big research labs will be OK. Pork barrel will take care of them. Guys living off the subsidy will be OK. Guys in the middle are in a squeeze." Noll says the effect is already visible as some researchers in fields where small grants are the norm abandon the competition for grants and rely on university funds.

One source of controversy has been that

*The term decanal, pertaining to deans, echoes universities' original ecclesiastical ties and is apparently used to suggest the concern of the study with academic as well as financial issues.

indirect costs charged for facilities go into general funds of the university and are not set aside for replacement of the facilities being depreciated. The decanal study showed that over a 3-year period significantly more university funds were spent in support of research than were collected through indirect costs for depreciation. The report comments that "While the depreciation recovered is not being returned to those facilities for which the University is being reimbursed, the funds are being invested in research facilities."

Faculty are prone to note the apparent increase of administrative staff as a factor in the rise of costs. Biedenweg says costs of central administration have risen for all universities, reflecting increased cost of regulation to meet health and safety requirements, for example. Insurance and legal costs have also climbed.

So far, there are few signs of the erosion feared. Stanford's share of federal R&D funding has been stable over the years. Its position relative to its major competitors is largely unchanged. The university's indirect cost rates are typical of top research universities, although certainly in the upper ranges.

The report urges that Stanford continue to adhere "to a policy of full cost recovery," but take more active precautions to keep its competitive edge. A variety of accounting changes are suggested, but, according to Biedenweg, the report's most important recommendation is that the university be much more systematic in monitoring the indirect cost rate with a set of measures to be used "in a manner comparable to that used to determine tuition levels during the annual budget process." The reference would be peer institutions.

Apparently in response to the reports, Stanford's vice president and dean of research Robert Byer in April announced that indirect costs will be held at their present level during the 1988–1989 budget year. A new dean's subcommittee will work with the administration on indirect cost policy.

Stanford's anxiety, particularly in looking over its shoulder at potential rivals among low overhead universities, is prudent, but carries a slight irony. No university after World War II displayed more determination or a clearer strategy in making a place for itself in the front ranks of research universities. With Stanford, it was the symbiosis with the high-tech industry of Silicon Valley that mainly made it possible. And, as one observer put it, science and engineering research became a "profit center" for the university. Now that the requirements for those at the top may be changing, Stanford is showing some of the old drive in order to stay there. ■ **JOHN WALSH**

# IOM Names Committee to Study NIH

Several months ago, the White House Office of Management and Budget gave the biomedical research world a jolt when it proposed turning the National Institutes of Health into a private university. But any immediate thoughts of privatizing the intramural research programs of NIH were put on hold when OMB officials agreed to ask the Institute of Medicine to study the matter first (*Science*, 18 March, p. 1364).

Now, the IOM study is getting under way with the appointment of a 15-member committee that will examine the proposition that NIH is in danger of losing its luster because, as an agency bound by federal personnel rules, it can no longer compete successfully with private universities and industry for the country's best researchers. A public hearing is scheduled to be held in Washington on 13 June.

NIH officials hope that the IOM study will be taken seriously by the next Administration, particularly if it recommends ways to free institutes from bureaucratic strictures, such as salary caps.

The committee is being chaired by Princeton University president **Harold T. Shapiro**. Other members are: **Michael S. Brown**, University of Texas, Dallas; **John T. Dunlop**, Harvard; **Gerald D. Fischbach**, Washington University; **Marian E. Koshland**, University of California, Berkeley; **Charlotte V. Kuh**, Educational Testing Service; **Robert I. Levy**, Sandoz Research Institute; **Walter E. Massey**, University of Chicago; **Robert G. Petersdorf**, Association of American Medical Colleges; former congressman **Paul G. Rogers**, Washington, D.C.; **Benno C. Schmidt**, J. H. Whitney & Company, New York; **Lloyd H. Smith**, University of California, San Francisco; **Elmer B. Staats**, former Comptroller General, General Accounting Office; **P. Roy Vagelos**, Merck and Company; **Morton W. Weir**, University of Illinois, Champaign-Urbana. ■ **BARBARA J. CULLITON**

# Herbicide Refused for Coca Spraying

The generals of the Administration's war on drugs are trying to figure out a way to conscript Eli Lilly and Company to help its cause.

The State Department says that one of Lilly's herbicides is a leading candidate to eradicate coca plants in Peru. But in late May, Lilly announced it was not interested.

The company did not specify the reasons behind the decision, other than to say that there were "practical and policy considerations." Company spokesman Ted McKinney noted that Lilly has not tested the herbicide, tebuthiuron, in the tropical environment where the Administration wants to spray.

Tebuthiuron is highly effective in killing woody and grassy plants, but has a fairly low acute toxicity to fish, wildlife, and humans, according to Thomas Adamczyk of the Environmental Protection Agency (EPA). It is approved for use in the United States for treating areas including brushland and noncrop pasture. A single application can be effective for 1 to 3 years, McKinney says. The herbicide is applied in pellet form and is activated by water.

But because of its persistance in the environment, the chemical is not approved for use in cropland because food plants will not grow. In the northwest area in Peru that would be sprayed under the State Department proposal, acres of food crops are interspersed among the coca fields. That is going to make spraying of coca a real challenge so that food crops by local farmers are not killed, notes a staff aide to the House agriculture committee. "If I were a crop duster, knowing there were heavily armed guerrillas down there, I wouldn't get any closer than 2000 feet. But the higher you go, the more drift you get of herbicide into croplands."

Alexander Camino of the Peru Foundation for Conservation of Nature said in a telephone interview from Lima that in Peru, "there is absolutely no control of pesticide use."

An expert in Peruvian botany says that the area that would be treated contains remnants of unique tropical forest that has not been biologically characterized. Al Gentry of the Missouri Botanical Garden, who heads a project to catalog the flora of Peru, says that the Huallaga Valley contains "a lot of unique species" because it is fairly isolated by two mountain ranges to the east and west.

Meanwhile, State Department official Ann Wrobleski said at a congressional hearing that the department might try to compel Lilly by legal means to produce tebuthiuron for its eradication program, but she acknowledged such an approach would be novel. ■ **MARJORIE SUN**