

## Indirect Costs: Round II

*HHS audits reveal persistent, though low-level, abuses by major research universities, which means that the issue isn't about to go away*

AFTER FLARING INTO PUBLIC PROMINENCE early this year, then sputtering into quiescence since early summer, the subject of indirect costs appears to be firing up again. Representative John Dingell (D-MI), who lit the fuse under the issue when he publicly humbled Stanford University last spring, has planned another hearing for 12 December. It will focus on audits of 18 major research universities conducted by the General Accounting Office (GAO) and the inspector general of the Department of Health and Human Services (HHS). But several executive branch agencies aren't waiting for Dingell to set the agenda for reform. The Office of Management and Budget (OMB) has already issued some interim rules designed to address the worst abuses of the existing system, and two newly appointed teams—one at HHS and one a joint task force of officials from OMB and the White House Office of Science and Technology Policy (OSTP)—are gearing up massive studies aimed at examining the basic precepts of the system. With more and more officials elbowing their way into the fight, the battle over indirect costs isn't about to die down.

While no Stanford-style abuses turned up in the 14 HHS audits—GAO doesn't plan to make its report public until the hearing—nearly all the universities examined had engaged in what can charitably be called low-level but persistent abuse of the indirect cost system. The alleged infractions, which total \$13.4 million, include a \$1-million database for tracking alumni charged as research overhead by the University of Chicago; Rose Bowl tickets and travel expenses charged by the University of Michigan; and expenditures such as entertainment, flowers, public relations, lobby-

ing expenses, and association dues charged by all but two of the 13 universities whose reports had been made public as *Science* went to press. And it could have been worse: These 13 universities voluntarily withdrew an additional \$12.5 million in unallowable and "inappropriate" expenses before the auditors' reports were complete.

These results can be interpreted two ways. For instance, they have revealed inappropriate charges to the government of about the same magnitude as charges voluntarily withdrawn by other major universities that have fallen under the federal spotlight (Stanford excepted), such as the California Institute of Technology and the Harvard Medical School. On the other hand, the problematic charges make up much less than 1% of the total amount these universities asked to recover from the federal government in overhead, even including the \$12.5 million pre-audit withdrawals. "It seems to me the system is extraordinarily clean," says Howard Gobstein, vice president of the Association of American Universities (AAU). "I'd like to see another system that's this clean."

Still, these audits are unlikely to dispel the

image of universities charging caviar and champagne receptions to tight federal research budgets. The government's first salvo in what is likely to be a protracted firefight with the universities landed on 3 October, when the new OMB interim rules were made final. In part to head off reform proposals that gathered steam in Congress over the summer, OMB capped the portion of administrative expenses that can be assigned to indirect costs at 26%, a move that will adversely affect about half the major research universities. Then it outlined a list of "unallowable" expenses that can no longer be used in figuring indirect cost rates, such as purchases of alcoholic beverages and lobbying. While universities say they disagree with the cap on administrative expenses, they are grateful that OMB relented on two other points: a proposed \$120,000 limit on salaries that can be charged to indirect costs, and a requirement that universities establish a dedicated "facilities fund" to track building expenses. As Gobstein says, "It could have been much worse."

Gobstein, whose association represents 54 major research universities in the United States and Canada, may be right. But such



**Science and circuses.** Academia's public image has taken a beating over indirect costs.

### Results of the HHS Audits

University	Total Annual Research	Questioned Costs	Questioned Costs Allocated to Research
University of Michigan	\$177m	\$2.29m <sup>1</sup>	\$197,000
University of Miami	\$46m	\$1.09m	\$94,420
Duke University	\$99m	\$122,516 <sup>2</sup>	\$20,718
Dartmouth University	\$28.6m	\$1.1m	\$176,679
Emory University	\$50.6m	\$699,280	\$125,619
University of Pittsburgh	\$107m	\$528,681	\$75,178
University of Pennsylvania	\$137m	\$1.25m	\$307,000
Johns Hopkins University	\$536m	\$805,696	\$282,707
University of Chicago	\$62.9m	\$1.03m <sup>3</sup>	-n.a.-
Yale University	\$205.3m	\$1.06m <sup>4</sup>	\$262,295
Washington University	\$93.5m	\$3.42m <sup>5</sup>	-n.a.-
Univ. Southern California	\$110m	\$8,913 <sup>6</sup>	-n.a.-
Univ. Texas Medical Ctr	\$80m	\$32,537 <sup>7</sup>	-n.a.-

- 1 HHS negotiators struck an additional \$5.9 million of unallowable costs in January 1991.
- 2 An additional \$795,672 was eliminated in negotiations.
- 3 The university voluntarily withdrew \$479,659 in administrative expenses.
- 4 Yale agreed to withdraw \$992,823 of this amount.
- 5 University officials voluntarily withdrew an additional \$2.2m.
- 6 USC voluntarily eliminated \$3.1 million in administrative costs from its 1992 indirect cost proposal, of which \$530,000 would have been allocated to research.
- 7 HHS negotiators slashed the university's proposed indirect cost rate from 57.11% to 48%, although this reduction was not due to specific unallowable costs.

SOURCE: HHS

sentiments are unlikely to comfort administrators at institutions like the Harvard Medical School, whose administrative cost rate last year was 35%. High rates like these, says one Harvard official, arise because the medical school does relatively little research on campus, instead arranging for its faculty members to carry out much of their work at 15 local hospitals. As a result, Harvard spreads the cost of administering the medical school over the direct costs of the research done solely on campus—a process

that tends to inflate the administrative cost rate. The 26% cap, the official says, “is going to be very expensive to Harvard....We’re very concerned about the federal government moving away from its promise to reimburse fully the costs of research.”

Other administrators grumble that the intense scrutiny to which they’ve been subjected has created problems in handling entirely legitimate expenses. Like many universities, the Massachusetts Institute of Technology pays tuition for graduate stu-

dents who work as research or teaching assistants. But James Culliton, MIT’s vice president for financial operations, complains that the hostile “policy climate” is forcing the Office of Naval Research (ONR)—which audits MIT’s indirect costs—to back away from an agreement that he says keeps graduate student labor affordable.

This agreement has allowed MIT and a handful of other universities to spread these tuition costs across a variety of programs by factoring them into the university’s “em-

## A Tour Through the Indirect Cost Labyrinth

Most faculty members probably didn’t know whether to cheer or jeer last spring when Stanford, MIT, Caltech, and Harvard Medical School announced that they were withdrawing a total of \$2.7 million in questioned expenses from their indirect cost proposals. To researchers anxious to see lower indirect cost rates, the news seemed pretty good. But what they almost surely didn’t know was that the government didn’t save anywhere near \$2.7 million in the process. As it turns out, only a fraction of such expenses get reimbursed as indirect costs. This illustrates one of the obstacles to making any sense of the indirect costs scandal: an array of dollar figures bandied about freely by universities, Congress, and the press. Figuring out what such numbers really mean is further complicated by such issues as timing: In the case of the “withdrawn” expenses, the government hadn’t actually paid for them yet—rather, the universities had merely used them to argue for future indirect cost rates. Thoroughly confused? Welcome to the arcane game played by universities and the federal government in setting indirect cost rates.

To get a sense of how the process works in practice, consider the fictitious Scientific College of Arts and Medicine (SCAM). SCAM’s accountants have spent the past 6 months totting up numbers in the university’s financial statements, trying to figure out just how much money SCAM spent to support research in the 1990-91 fiscal year. Like most universities, SCAM lumps its overhead expenses—utilities, depreciation, libraries, and administration costs—into “cost pools” with mind-numbing names like General and Administrative (G&A) Expenses, Building Use and Depreciation Allowances, and so forth. Following guidelines set by the federal government, SCAM’s accountants have determined the fraction of each cost pool associated with research. Nearly 31% of SCAM’s G&A account, for instance, was spent on such activities.

These percentages readily yield a total dollar figure for overhead costs for research. This year, according to SCAM calculations, that total is \$151 million. Since various sponsors—primarily the federal government—shelled out \$248 million to cover the direct costs of this research, the university’s indirect cost rate would appear to be  $151 \div 248$ , or 61%. But all direct costs aren’t created equal. Some expenses—a \$10,000 electron microscope charged to a researcher’s grant, for instance—require relatively little overhead, and certainly not \$6,100 worth. Under rules set by the Office of Management and Budget, therefore, SCAM excludes capital equipment, subcontract costs greater than \$25,000, and similar expenses from its total direct costs. That process leaves \$162 million in “modified direct costs.” When these costs are divided into the overhead

figure, out pops SCAM’s proposed indirect cost rate: 93%.

That’s the easy part. Now SCAM administrators must fight for that rate in a series of meetings with negotiators from the Department of Health and Human Services (HHS), the university’s financial overseer. First, SCAM notes that various costs, particularly some new construction planned for the next several years, will push up the school’s costs by 1992, so the actual indirect rate for the 1992-93 year will be 95%. That’s fine by HHS. But its team then turns to SCAM’s cost accounting, and the blood begins to flow. First up is a campus-wide meal plan SCAM has included in its G&A cost pool. Although SCAM argues that researchers frequently eat at the university cafeteria, HHS insists that the plan exists primarily for students and strikes it. In a similar fashion, HHS disallows a 20th anniversary party for SCAM’s longtime president, a trustees meeting held on the French Riviera, and travel costs to an annual meeting of the Association of Paper Shufflers. By the time HHS has finished striking such items, the portion of the G&A pool devoted to research has shrunk to 28%, and the indirect cost rate is down to 89%.

But HHS isn’t done: Its negotiators point out that new OMB rules cap administrative indirect costs—that G&A percentage again—at 26%. Lopping two more points off G&A reduces the full indirect rate to 85%. The HHS reps still aren’t satisfied. Eighty-five percent is still the highest rate in the nation—higher even than Stanford in its heyday. “We’ll cut you a deal,” they tell the shell-shocked SCAM administrators. “We can drag out this negotiation for 3 or 4 months while our accountants go over your figures line by line. Or you can accept a rate of 78%, and we’ll close the books.” After some hedging, SCAM accepts. The new 78% rate will be applied to all ordinary grants in the 1992-93 fiscal year. But the universities’ actual cost recovery will be even smaller if they accept competitive agricultural research grants or the National Institutes of Health Shannon awards, which come with capped indirect cost rates of 14% and 25%, respectively.

In some cases, the negotiations wouldn’t end there. SCAM negotiated a “predetermined” rate, so if its actual indirect costs in 1992-93 are higher than 78% of its modified direct costs, it will eat the difference. Had they negotiated a “fixed rate with carryforward,” SCAM administrators would meet again with HHS at the end of the fiscal year so they could adjust future rates to account for any shortfall. In either case, HHS is also supposed to carry out a “compliance audit” intended to reveal the university’s actual indirect costs in a given year. If this audit turns up additional unallowable costs, SCAM’s 1992-93 indirect cost rate will be adjusted downward, and the university will be forced to repay the excess overhead money it received that year. ■ D.P.H.

ployee benefits rate," a surcharge applied to university salaries. Since MIT recovers only a fraction of the tuition charges from the government (through the direct cost of research salaries), Culliton argues, the present arrangement saves the government money—some \$6 million to \$10 million every year. To charge these tuition reimbursements as direct costs, he says, would change "the whole nature of MIT as a research university" by making graduate students more expensive to principal investigators than professional technicians. MIT and ONR are still negotiating the matter. But Phil Roger, executive officer of the agency that does audits for ONR, takes a hard line, and says the cost of research assistants should be charged to specific projects wherever possible.

The tuition reimbursement question is one of several major issues a joint OMB-OSTP task force aims to address over the next year, as it attempts to lay a foundation for long-term reform of the indirect cost system. "There's a recognition that something has to be done beyond [the 3 October revisions]," says one OSTP official. In particular, the task force intends to address the perennial complaints from the scientific community that the existing overhead system doesn't provide enough money for the

renewal of aging research facilities and to study ways in which universities could standardize their accounting procedures for overhead costs. (A similar proposal on accounting standards has been floated by Representative Rick Boucher (D-VA), who argues that devices such as the administrative cost cap will be ineffective and unfair if some universities are able to shift administrative expenses into other cost pools.)

But the OMB-OSTP group may find its thunder stolen long before it issues its report. An HHS task force, jointly chaired by inspector general Richard Kusserow, assistant secretary for management and budget Kevin Moley, and NIH director Bernadine Healy, is hoping to produce some recommendations for reducing the cost of research in the biomedical sciences—including indirect costs—by mid-November. While officials are reluctant to specify what they're considering, task force secretary Jack Mahoney, associate director for administration at NIH, says that the group is considering a wide variety of options, including several that go beyond A-21 itself. One such proposal, advanced by University of Southern California provost Cornelius Pings, would allow universities to claim a certain fixed level of overhead expenses without

further documentation, similar to the standard deduction for personal income taxes. In addition, Mahoney says, the HHS group—which includes representatives from academia and industry—has a powerful tool at its disposal: an up-to-date database of university indirect cost expenditures broken down into detailed categories. "For the first time, we have a much better capability to predict what the outcome of proposals will be for various universities," he says.

University advocates like Gobstein note that the chaos now engulfing the system will inevitably lead administrators to be more cautious—perhaps overcautious. For instance, universities could be more reluctant to enter cost-sharing agreements, such as the National Science Foundation's science and technology centers, he notes. Given the possible repercussions for research and academic bottom lines, it's clearly in everyone's best interest to settle on a system that both government and universities can live with as soon as possible.

Until then, those on the receiving end of the government's attention are going to have to learn to live with the Stanford legacy. As one university administrator puts it: "I'm sick of explaining at parties that we're not crooks." ■ DAVID P. HAMILTON

## Famine: Blame Policy, Not Nature

Only one region of the world still suffers from widespread famine: Africa. Why is that? After all, many poor countries, including India and China, have staved off famine in recent decades, even though starvation was common there earlier in the century. The conventional wisdom holds that the answer is a combination of droughts, deforestation, and war. But the results of a new 4-year study released last week by the International Food Policy Research Institute (IFPRI) suggest that even in the presence of those events, famine is far from inevitable. Indeed, the report concludes, the responsibility for pushing poor people over the edge into starvation lies largely with a network of social and political factors that could be corrected—but only at a cost.

"There is no excuse for famines in the 20th century," says Joachim von Braun, director of the IFPRI Food Consumption and Nutrition Division. "They are not just due to bad luck. They are an accumulation of events and policies that progressively erode the capacity of the poor to deal with short-term shocks (such as droughts)." The report, "A Policy Agenda for Famine Prevention in Africa," is based on two countries worst hit by food shortages in the 1980s: Ethiopia and Sudan (where 1.5 million people died of starvation in the mid 1980s).

The vicious downward cycles in those two countries were initially touched off by drought, apparently confirming the conventional wisdom. In addition, armed conflicts made it difficult to get food to those who were starving. But the authors of the report note that other African countries—including Botswana and Zimbabwe—have experienced even worse bouts of drought, but managed to avoid famine. And it was by comparing policy

responses in those nations to the ones in Ethiopia and Sudan that the report concludes that social and political factors provide the final steps in the downward cycle toward death by famine.

Among those interlocking factors are failures on the part of the Ethiopian and Sudanese governments to give farmers hardy seeds or fertilizers intended for crops that can survive drought. That failure is exacerbated by the fact that most people in both countries are dependent on farming. What's more, because there are few roads to bring their crops to larger markets, the farmers tend to grow only a single crop and are therefore more vulnerable to any changes in the environment. To top it all off, banks in these countries are not set up to lend money to the poor, who lack collateral, and they also fail to promote savings, so farmers have no reserve funds to buy food when their own crops fail.

The bottom line, says the report, is to overhaul national policies. Botswana and Zimbabwe, for example, have avoided famine during droughts by providing rural public works projects that pay the poor in wages or food, while improving transportation and irrigation systems. Zimbabwe also aided farmers by giving them improved seeds, fertilizers, and agricultural extension services. Early drought warning systems also should be put in place, the IFPRI report concludes, so that international food aid and agricultural advice can be targeted to the most needy. "A few tricks won't do the job," says von Braun. "Famine prevention costs money." Although the report doesn't say where that money should come from, von Braun points out that Sudan is at least as rich as Botswana and should be able to mobilize its own resources, while Ethiopia will continue to need foreign aid. ■ ANN GIBBONS